RCRA ENFORCEMENT AND COMPLIANCE

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1. INTRODUCTION

The effective implementation of the RCRA program depends on whether the regulated community complies with the various RCRA requirements. The goals of the RCRA enforcement program are to ensure that the regulatory and statutory provisions of RCRA are met, and to compel necessary action to correct violations. To achieve these goals, EPA and the states closely monitor hazardous waste handlers, taking expeditious legal action when noncompliance is detected. EPA also has various programs to provide compliance incentives and assistance.

Many of the questions the Hotline receives on enforcement are purely legal and beyond our purview. We do not interpret the law or legal concepts; we only answer questions relating to statutory and regulatory programs and how enforcement and compliance tools are used as part of the RCRA process.

When you have completed this module you will be able to explain RCRA enforcement and describe the enforcement mechanisms. Specifically, you will be able to:

- Describe enforcement procedures and mechanisms and cite the statutory authorities
- Describe the three different types of enforcement actions, administrative, civil, and criminal
- Explain when and how EPA can enforce the RCRA regulations in authorized states
- State the differences between enforcement at interim status and permitted facilities and describe enforcement at federal facilities
- Describe some of EPA's compliance incentive and assistance policies.

Use this list of objectives to check your understanding of this topic after completing the training session.

2. STATUTORY SUMMARY

The success of the RCRA program depends on the regulated community's compliance with the regulations. To ensure compliance with the program, Congress gave EPA certain distinct powers, or authorities, for enforcement. EPA has the authority to inspect and collect information from facilities and, if a violation is discovered, employ any one of several enforcement actions to bring facilities into compliance. EPA uses a combination of monitoring, administrative actions, and civil actions to reduce the number of waste handlers that are out of compliance and to deter future violators. EPA works with the Regional offices, the states, and, where appropriate, the Department of Justice (DOJ) to implement the RCRA enforcement program.

2.1 ENFORCEMENT AUTHORITIES

EPA's hazardous waste enforcement program is designed to promote compliance with statutory and regulatory requirements and to abate imminent hazards. Enforcement provides EPA and citizens with mechanisms for carrying out the RCRA program and promotes the protection of human health and the environment. Since EPA has not codified regulations covering enforcement, with the exception of some administrative procedures found in 40 CFR Parts 22 and 24, RCRA enforcement personnel rely on the following statutory authorities to enforce the RCRA program:

- Section 3007 - Inspections and Information Gathering
- Section 3008
  (a) Compliance Orders
  (b) Public Hearings
  (c) Violation of Compliance Orders
  (d) Criminal Penalties
  (e) Knowing Endangerment
  (g) Civil Penalties
  (h) Interim Status Corrective Action Orders
- Section 3013 - Monitoring, Analysis, and Testing
- Section 7002 - Citizen Suits
- Section 7003 - Imminent Hazards.

2.2 INSPECTIONS AND INFORMATION GATHERING

An important component of the enforcement process is the authority to monitor facilities for verification of compliance with the regulations. The Agency collects compliance monitoring information primarily through facility inspections and

information requests. An inspection is a formal visit by an EPA or state representative to a facility to review records, take samples, and observe facility operations. Congress granted EPA the authority to conduct such inspections and collect necessary information to determine compliance under RCRA §3007.

Section 3007 gives EPA the authority to inspect facilities that handle or have handled hazardous wastes. In addition, the inspection authority is applicable to facilities that handle mixtures of hazardous wastes and domestic sewage (§3018(d)). Furthermore, §4005(c)(2)(B) extends EPA's §3007 authority to facilities that handle wastes from households and conditionally exempt small quantity generators.

A number of different types of inspections are conducted under RCRA authority. Inspections are conducted by EPA, authorized states, or both, or authorized representatives of either EPA or authorized states. Typically, either the state or EPA has overall responsibility, or the lead, for conducting the inspection. The inspector's role is to gather information that will then be used by the Region and/or state to determine compliance status. Some of the different kinds of inspections are described below.

COMPLIANCE EVALUATION INSPECTION

The compliance evaluation inspection (CEI) is an on-site evaluation of a hazardous waste handler's compliance with RCRA regulations and permit standards. The purpose of the CEI is to gather information necessary to determine compliance and support enforcement actions. The inspection may include a characterization of the handler's activities, identification of the types of hazardous wastes managed on-site, a record review of reports, documents, and on-site plans, and the identification of any units that generate, treat, store, or dispose of hazardous waste. Treatment, storage, and disposal facilities (TSDFs) must be inspected every two years, except facilities owned or operated by a federal or state agency, which must be inspected every year (§§3007(c), (d), and (e)).

COMPLIANCE SAMPLING INSPECTION

EPA sometimes finds it necessary to inspect a facility in order to collect samples for laboratory analysis. These sampling inspections are very resource-intensive because they require advanced planning for the sampling scheme and laboratory analysis. A sampling inspection may be conducted in conjunction with a CEI or any other inspection.

COMPREHENSIVE GROUNDWATER MONITORING EVALUATION

During the comprehensive groundwater monitoring evaluation (CME), enforcement officials evaluate the adequacy of the design and operation of a facility's groundwater

monitoring system. This evaluation should be completed by a hydrogeologist and includes a review of the owner and operator's characterization of the hydrogeology underlying the hazardous waste management units; monitoring well placement, depth, and spacing; and well design and construction. The CME is used to determine whether a facility implementing detection monitoring should instead be using compliance or assessment monitoring. CMEs at compliance or assessment monitoring facilities include a detailed examination of the assessment monitoring plan and implementation of the plan.

CASE DEVELOPMENT INSPECTION

The case development inspection (CDI) is an intensive investigation that is conducted to gather sufficient information to support an enforcement action. The CDI can be used to collect supplemental data to support a forthcoming enforcement action identified through a CEI, a CME, or a record review.

OPERATION AND MAINTENANCE INSPECTION

The operation and maintenance inspection (OMI) occurs periodically, evaluating whether a groundwater monitoring system is continuing to function as designed. The OMI focuses on the condition of the wells and their associated sampling devices. The findings from an OMI will indicate whether case development is warranted or will serve to focus future CMEs.

INFORMATION GATHERING

In addition to authorizing EPA to conduct inspections, §3007 allows the Agency to request specific information from "...any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous wastes." This means EPA may request information from past generators as well as those parties who may not have been subject to the RCRA regulations, but who have actually handled hazardous waste.

Normally the public has access to the information obtained under §3007 authority. The facility owner and operator may, however, claim records or other information gathered by EPA as confidential business information by submitting the information with a cover sheet stamped "confidential," "trade secret," or "proprietary information" (§3007(b)). EPA will then determine whether or not the material is confidential.

In addition to obtaining information for enforcement proceedings, EPA may use §3007 authority to gather data to assist in the development of regulations and to track program progress and accomplishments.

The information in this document is not by any means a complete representation of EPA's regulations or policies, but is an introduction to the topic used for Hotline training purposes.

2.3 MONITORING, ANALYSIS, TESTING, AND REPORTING

When EPA receives information showing that hazardous waste is present or has been released at a facility or site, or that the release of any such waste may present a hazard, the Agency may issue an administrative order or obtain a judicial injunction requiring the owner and operator to conduct monitoring, analysis, or testing to ascertain the extent and nature of the hazard (§3013). Information means some reliable data upon which a reasonable person would base a decision to take action, and may include citizen complaints and inspection reports. With respect to §3013 orders, the statutory definition of hazardous waste is used, rather than the regulatory definition (§1004(5)).

EPA has the authority to issue administrative orders to any past or present owner and operator who would reasonably have knowledge of the presence of hazardous waste and potential releases (§§3013(b) and (c)). The orders may compel him or her to perform monitoring, testing, analysis, and reporting. The Agency also retains the option of performing the work and recovering costs from the owner and operator. EPA may sue anyone who fails to comply with a §3013 administrative order for up to $5,500 per day of noncompliance.

The mere presence of hazardous waste at a site or facility is sufficient cause to issue a §3013 order, provided that the information indicates that the presence of the waste may present a substantial hazard. Only the potential for harm, as opposed to actual harm, to human health and the environment must be ascertained to determine whether a substantial hazard exists.

2.4 ENFORCEMENT MECHANISMS

When the Agency determines that a facility is in noncompliance with the hazardous waste regulations, an enforcement action may be taken. Under RCRA, EPA uses three types of enforcement mechanisms: administrative, civil, and criminal actions. The Agency has substantial latitude in deciding which action or combination of actions to pursue, depending on the nature and severity of the problem.

ADMINISTRATIVE ACTIONS

An administrative action is a nonjudicial enforcement action taken by EPA or a state under its own authority. These actions can be broken down into two general categories: informal and formal. Both of these actions provide for enforcement response outside the court system. This means the Agency takes direct enforcement action against the violator based on its authority granted by the statute, and does not rely on a court of law for enforcement authority.

Informal Actions

Once a decision is made to utilize an informal enforcement mechanism, the facility owner and operator should be given notice of its noncompliance and the steps to take to correct the violations. Examples of informal actions are letters or phone calls to the facility. For informal actions, EPA or the state notifies the facility owner and operator that the facility is out of compliance with hazardous waste regulations. Informal actions are most appropriate where the violation is a minor threat to human health and the environment. A warning letter, sometimes referred to as a Notice of Violation (NOV), may be sent, which lays out the specific actions that need to be taken by the facility owner and operator to correct the violation(s). The letter should require demonstration of a facility's return to compliance within an appropriate timeframe, not to exceed 90 days, to ensure that enforcement is escalated appropriately should the facility fail to return to full physical compliance by the established date.

Formal Actions (Administrative Orders)

In cases where a facility has been classified as a significant non-complier or the facility owner and operator have failed to respond to an informal action, EPA can issue an administrative order. Administrative orders impose enforceable legal duties. For example, orders can be used to compel the facility owner and operator to comply with specific regulations, to take corrective action, to perform testing, monitoring, or analysis, or to pay fines.

The four authorities for issuing administrative orders under RCRA are:

- Section 3013 Orders to conduct monitoring, analysis, and testing
- Corrective Action Orders under §3008(h)
- Compliance Orders under §3008(a), including revocation of permits
- Section 7003 Orders for imminent hazards.

Each of these authorities is discussed in detail elsewhere in this module.

CIVIL ACTIONS

A civil action is a formal lawsuit filed in a federal district court by DOJ against a person who has either failed to comply with a statutory or regulatory requirement or administrative order, or who has contributed to a release of hazardous wastes or hazardous constituents. The statutory authorities for judicial actions under RCRA are:

- Section 3013 - injunctions to conduct monitoring, testing, and analysis
- Section 3008 – compliance orders and criminal penalties
- Section 7003 - injunctions to address violations which pose an imminent and substantial endangerment to health or the environment.

For example, §3008(a) gives EPA the right to take administrative or judicial action for violations of RCRA that have transpired since November 19, 1980. If the facility owner and operator violate a compliance order, §3008(c) gives EPA the authority to issue a civil penalty of up to $27,500 per day per violation or to revoke or suspend the facility permit. Civil penalties are described in §3008(g). Specifically, each violation of a Subtitle C requirement is subject to a fine of up to $27,500 per day per violation. This means that each day of noncompliance is considered a separate violation. For detailed information on penalties, refer to the RCRA Civil Penalty Policy (OSWER Directive 9900.1A). This contains information on the classes of violations, and possible injunctive relief and other fines and penalties that may be assessed.

CRIMINAL ACTIONS

A criminal action is an action by EPA or the state pursuant to §3008(d) that can result in the imposition of fines and/or imprisonment. The key to criminal liability is that a person knowingly violated RCRA requirements. Seven actions identified in §3008 carry criminal penalties. Six of these seven actions carry a penalty of up to $50,000 per day of violation and up to 5 years in jail. These acts are:

- Knowingly transporting waste to a nonpermitted facility
- Knowingly treating, storing, or disposing of waste without a permit or in violation of a permit or interim status standards
- Knowingly omitting information from or making a false statement on a label, manifest, report, permit, or compliance document
- Knowingly generating, storing, treating, or disposing of waste without complying with recordkeeping and reporting requirements
- Knowingly transporting waste without a manifest
- Knowingly exporting waste without the consent of the receiving country.

The seventh criminal act is knowingly transporting, treating, storing, disposing, or exporting waste in a way that places another person in imminent danger of death or serious bodily injury. This act carries a possible penalty of up to $250,000 and 15 years in prison for an individual, and a $1 million dollar fine for a corporation (§3008(e)).

2.5 COMPLIANCE ORDERS AND PENALTIES

EPA may issue a compliance order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period, or both (§3008). A "person" is defined in §1004(15) as an "...individual, trust, firm, joint stock company, corporation, partnership, association, state, municipality, commission, political subdivision of a state, or any interstate body...."

2.6 CORRECTIVE ACTION

Just as the Agency can request or obtain information and can require a facility to conduct testing and analysis, it can also require a facility to perform a cleanup. The corrective action program is one of the primary mechanisms to facilitate cleanup of contamination at TSDFs. EPA can issue an administrative order to compel the owner and operator to undertake corrective action, or EPA can sue (i.e., bring a civil action) to have the court order the owner and operator to clean up. The authority for requiring corrective action at permitted facilities is found in §§3004(u) and (v); EPA uses §3008(a) to enforce the corrective action requirements found in §§3004(u) and (v).

Interim status corrective action authority is found in §3008(h). The opening clause of §3008(h) authorizes the Agency to make the determination that there is or has been a release on the basis of "any information." In practice, EPA will obtain appropriate information from a variety of sources, including lab analyses, inspection reports, and photographs. For the purposes of §3008(h), actual sampling is not needed to verify a release. An inspector may find other evidence that a release has occurred, such as a broken dike at a surface impoundment or stressed vegetation. Less obvious indications might also be adequate to make the determination. For example, EPA might have sufficient information on the hydrogeology of the site to conclude that there may have been a release.

2.7 IMMINENT HAZARD

Section 7003 gives EPA a broad and powerful enforcement tool to use in abating imminent hazards caused by hazardous or solid wastes. RCRA §7003 states that upon receipt of evidence that the past or present handling, storage, treatment, transportation, or disposal of any solid waste or hazardous waste may present imminent and substantial endangerment to human health or the environment, EPA may bring suit against any person who has contributed or who is contributing to the handling of the waste to restrain the person, order the person to take any action that may be necessary, or both.

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The action taken by EPA may be administrative or civil. To issue a §7003 order, EPA must possess evidence that the waste handling may present an imminent and substantial endangerment to human health or the environment. Evidence may be documentary, testimonial, or physical and may be obtained from a variety of sources, including inspections, investigations, or requests for production of documents or other data pursuant to §§3007, 3013, or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §104. This evidence must be reliable enough to enable a reasonable person to conclude that the action is appropriate. The phrase "may present" indicates that the standard of proof does not require certainty. That is, an order may be issued if there is sound reason to believe that an endangerment exists; evidence of actual harm is not required.

2.8 CITIZEN SUITS

Administrative or civil actions are mechanisms that EPA can employ against violators, but RCRA also offers a course of action for citizens. Section 7002 provides that any person may sue any past or present generator, transporter, treater, storer, or disposer who has contributed or who is contributing to the past or present handling of waste which may present an imminent and substantial endangerment, or may be in violation of a permit, standard, regulation, condition, requirement, or order. Prior to HSWA, the only actions allowed under §7002 were suits brought by any person on his or her own behalf against any person who was alleged to be in violation of any permit, standard, regulation, condition, requirement, prohibition, or order. HSWA broadened this provision significantly.

Pursuant to §7002(a)(1)(B), suits may be undertaken by any person against any person, including the United States or any governmental instrumentality, when that person has in the past or present handled any solid or hazardous waste in a way so as to present an imminent or substantial endangerment to health or the environment.

Citizens may sue EPA where the Agency fails to perform any action or duty that is not discretionary (§7002(a)(2)). Section 7002(a) also gives the courts the power to restrain any person who is out of compliance or whose actions in handling solid or hazardous waste present an imminent or substantial endangerment to human health or the environment. Section §7002(e) allows the court to award, when appropriate, court costs to the prevailing or substantially prevailing party in the citizen suit.

Some legal actions by citizens are prohibited. According to §7002(b), if the Administrator of EPA or a state has begun an action to bring the violator into compliance, no citizen suit will be allowed. Section 7002(d) gives EPA the right to participate, or intervene, in any action brought under this section as long as EPA is not a party to the original suit.

3. SPECIAL ISSUES

Because the majority of enforcement issues are determined on a case-by-case basis depending on the factual details of a given situation, enforcement is full of anomalies. Three situations require particular attention.

ENFORCEMENT IN AUTHORIZED STATES

Determining which agency, either EPA or the state, will take the enforcement lead in an authorized state generally depends on whether the state is fully authorized to enforce the applicable provisions (state authorization is discussed in detail in the module entitled State Programs). If the provision being enforced was promulgated as a pre-HSWA provision, the authorized state has the primary responsibility for ensuring compliance. As states become authorized for all aspects of HSWA, they will assume enforcement authority for HSWA enforcement actions. In authorized states, EPA maintains the authority to take independent enforcement actions. It is EPA's policy to take enforcement actions in authorized states when (1) the state requests EPA to do so and provides information on the case-specific circumstances; (2) the state fails to take timely and/or appropriate action; (3) a case could establish a legal precedent or federal involvement is needed to ensure national consistency; or (4) it is a federal lead action.

According to §3008(a)(2), in order to enforce a provision for which a particular state has authorization, EPA shall notify the state prior to issuing an order or starting a civil action. For provisions promulgated pursuant to HSWA, EPA has the sole authority for enforcement until the state either becomes fully authorized for that provision (§3006(g)), or receives interim authority for that provision.

ENFORCEMENT AT INTERIM STATUS VS. PERMITTED FACILITIES

The applicable regulations for interim status facilities are directly enforceable pursuant to §3008(a). This means that if a facility is not in compliance with a specific regulation, enforcement actions of any kind may be taken against that facility. For permitted facilities, however, the site-specific conditions of the written permit are enforceable. Even if the permit is poorly written or does not conform to the regulations, the owner and operator need only comply with the requirements detailed in the permit. This is an example of the "permit as a shield" provision, codified at §270.4(a). This section states that compliance with a RCRA permit constitutes compliance for purpose of enforcement. The exceptions to this provision are those requirements that are not included in the permit; those provisions that become effective by statute subsequent to the issuance of the permit; and those provisions that are promulgated under the land disposal restrictions, land disposal unit leak detection requirements, or the air emission standards.

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ENFORCEMENT AT FEDERAL FACILITIES

Many federal agencies (e.g., Department of Energy, Department of Defense) are hazardous waste handlers subject to RCRA. Initially in the RCRA program, there was some question whether sovereign immunity protected federal agencies from some EPA and state enforcement actions. In the Federal Facility Compliance Act of 1992 (FFCA), Congress amended RCRA to explicitly waive sovereign immunity for purposes of RCRA enforcement. RCRA now specifically states that all RCRA penalties or fines "...punitive or coercive in nature or ... imposed for isolated, intermittent, or continuing violations" apply to the federal government. Therefore, EPA and authorized states can issue orders and penalties against federal facilities in the same manner as against private parties.

4. COMPLIANCE INCENTIVES AND ASSISTANCE

Given the complexity of the various federal environmental regulatory programs and the size of the regulated community, EPA's task of enforcing RCRA and other federal environmental laws is enormous. In reality, EPA can only accomplish the ultimate goal of ensuring protection of public health and the environment by supplementing a strong enforcement program with programs designed to encourage and assist compliance.

The Office of Enforcement and Compliance Assurance (OECA) has produced several policies and programs designed to encourage and assist compliance. While EPA is aggressively pursuing compliance assistance and incentive programs, a strong, formal enforcement program is still the best tool to ensure compliance. Therefore, EPA's compliance incentive and assistance programs are only a complement to, and not a replacement of, the enforcement tools described elsewhere in this module. Some of the incentive and assistance programs are described below.

SMALL BUSINESS COMPLIANCE CENTERS

EPA has established four Small Business Compliance Centers (SBCCs) (62 FR 18115; April 14, 1997). These are information centers where businesses with less than 10 employees can get regulatory compliance assistance. In cooperation with states, universities, and trade groups, EPA has established centers for the metal finishing, printing, auto services, and agriculture industries. EPA plans to establish centers for transportation, local governments, chemical manufacturers, and printed wiring board manufacturers.

COMPLIANCE INCENTIVES FOR SMALL BUSINESSES

EPA has also established a policy to encourage businesses to use the SBCCs. Under the Interim Policy on Compliance Incentives for Small Businesses (61 FR 27894; June 3, 1996), when businesses make a good faith effort to comply with environmental regulatory programs by utilizing SBCCs or other nonconfidential governmental or government-supported compliance assistance programs, the businesses can qualify for reduced civil penalties for violations.

COMPLIANCE INCENTIVES FOR SMALL COMMUNITIES

The EPA Policy on Flexible State Enforcement Responses to Small Community Violations describes the circumstances in which the EPA will generally defer to a state's efforts to return small communities to environmental compliance. This deference will be based on an assessment of the adequacy of the process a state uses to address small community noncompliance.

AUDIT POLICY

On December 22, 1995, EPA issued the Incentives for Self-Policing: Discovery, Disclosure, Correction, and Prevention of Violations Policy (60 FR 66706). This EPA-wide policy (commonly knows as the "Audit Policy") contains incentives for the regulated community to voluntarily identify, evaluate, disclose, and correct violations. Incentives include substantially reduced or eliminated penalties and deferral of criminal enforcement in settlements for violations disclosed and corrected pursuant to the policy.

5. SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT

The Small Business Regulatory Enforcement Fairness Act (SBREFA, P.L. 104-121) addresses the enforcement of environmental regulations against small businesses and small entities, and amends the rulemaking process to ensure that environmental regulations do not unreasonably impact small businesses.

For purposes of SBREFA, "small entity" includes small businesses, small governmental jurisdictions, and not-for-profit organizations that are not dominant in their field. U.S. Small Business Administration (SBA) defines "small business" in terms of the number of persons employed and in some case by annual revenues as well. In general, businesses employing 500 persons of less are considered small, however, businesses with as many as 1500 employees or up to $25 million in annual receipts may be defined as small (see 13 CFR §121). Small governmental jurisdictions include towns, cities, and counties of 50,000 persons or less.

SBREFA was signed into law on March 29, 1996, and consists of five subtitles. These subtitles are:

- Subtitle A - Regulatory Compliance Simplification - EPA requirements for providing assistance to small entities

- Subtitle B - Regulatory Enforcement Reforms - process for small businesses to comment on agency enforcement and compliance activities;

- Subtitle C - Equal Access to Justice Act - the award of attorney fees and costs to prevailing and non-prevailing parties in administrative or civil judicial enforcement actions

- Subtitle D - Regulatory Flexibility Act Amendments - requirement that any final rule promulgated after June 26, 1996 that will have a significant economic impact on a substantial number of small entities be supported by a final "regulatory flexibility analysis."

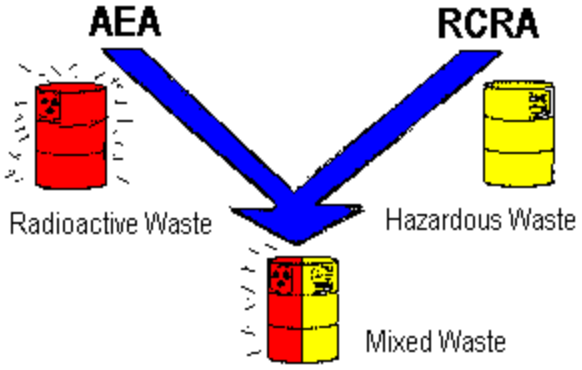
- Subtitle E - Congressional Review of Agency Rulemaking - Congress has the opportunity to review and potentially disapprove rules promulgated on or after March 1996.

Overview of EPA's Final Rule on Storage, Treatment, Transportation and Disposal of Mixed Waste

What is Mixed Waste?

Mixed Waste, defined in Federal Facility Compliance Act, refers to a waste that contains both the Resource Conservation Recovery Act (RCRA) hazardous waste, regulated by EPA or authorized States, and radioactive waste subject to the Atomic Energy Act (AEA), regulated by the Nuclear Regulatory Commission (NRC), NRC Agreement States, or the Department of Energy (DOE).

- Mixed waste can be process waste, laboratory waste, environmental media, or debris.
- Mixed waste generators include hospitals, universities, research institutions, industry, pharmaceutical companies, nuclear power plants, and the federal government.



Why Were Changes Made to the Mixed Waste Rule?

The regulated community raised several issues regarding the management of low level mixed waste (LLMW):

- Dual regulation under RCRA and Atomic Energy Act was duplicative and cumbersome
- Limited Mixed Waste treatment and disposal was causing some Mixed Waste to be kept in storage
- Other concerns such as decay-in-storage and safety issues

RCRA Mixed Waste Rulemaking: Objectives

- Address mixed waste management issues under RCRA Subtitle C raised by the regulated community.
- Maintain overall protectiveness of Mixed Waste management.
- Provide relief from dual regulation where appropriate for the storage, treatment, transportation and disposal of LLMW.

40 CFR 266 Subpart N Storage, Treatment, Transportation, and Disposal of Mixed Waste as incorporated by reference in Pennsylvania regulations at 25 Pa. Code §266a.20

- Provides increased flexibility to generators and facilities that manage low-level mixed waste (LLMW) and technologically enhanced naturally occurring and/or accelerator-produced radioactive material (NARM) containing hazardous waste.
- Exempts LLMW from some RCRA storage and treatment regulations, and LLMW or eligible NARM from RCRA hazardous waste transportation and disposal regulations.
- Exempts these wastes from RCRA Subtitle C requirements, including permitting, provided they meet specific conditions.
- The exempt wastes must then be managed as radioactive waste in accordance with NRC or NRC Agreement State regulations.
- The storage and treatment exemption applies to LLMW which is generated under a single NRC or NRC Agreement State license and which meets the specified conditions.
- The transportation and disposal conditional exemption applies to LLMW or eligible NARM which meets the specified conditions, including treatment to Land Disposal Restriction treatment standards.
- The exemption allows disposal at a low-level radioactive waste disposal facility, if the facility has a disposal license from NRC or an NRC Agreement State. (Note that DOE disposal facilities are not eligible to accept the exempt waste since they are not subject to NRC regulation.)
- Additional flexibility is provided for manifesting LLMW or eligible NARM.

Impact of Mixed Waste Rule in Pennsylvania

- Effective November 27, 2000 Pennsylvania's hazardous waste program was authorized to implement the mixed waste program in lieu of EPA
- Pennsylvania hazardous waste regulations prospectively incorporate federal hazardous waste regulations
- The incorporated regulations at 40 CFR Part 266, Subpart N – Conditional Exemption for Low-Level Mixed Waste Storage and Disposal will become effective in Pennsylvania on November 13, 2001 (60 days after publication in the *Federal Register* on May 16, 2001)
- The federal provisions were incorporated with no exceptions, modifications, deletions or additions, therefore all conditional exemptions will be effective in Pennsylvania at the same time they become effective at the federal level (November 13, 2001)
- There is at least one facility that has been operating in violation of Pennsylvania hazardous waste regulations by storing Mixed Wastes in excess of one year due to a lack of treatment or disposal options. PADEP has used enforcement discretion at this facility and has not pursued penalties or sanctions against the company. This regulation change will moot that situation by providing regulatory relief.
- Generators of Mixed Waste in Pennsylvania will not have to rely on commercial treatment facilities to eliminate the hazardous constituents or meet the Land Disposal Restriction standards as they will be able to treat their own wastes at substantial savings.
- The regulation provides new options for generators of Mixed Waste to properly dispose of Mixed Waste and avoid added expenses of manifesting and using a Pennsylvania licensed hazardous waste transporter.

Hazardous Waste Generator Regulations

A User-Friendly Reference Document

Version 2: May 2007

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Introduction

This web-based document serves as a user-friendly reference to assist Environmental Protection Agency (EPA) and state staff, industrial facilities generating and managing hazardous wastes as well as the general public, in locating and understanding the current RCRA hazardous waste generator regulatory "requirements."[1] These requirements are located primarily in Title 40 of the Code of Federal Regulations (CFR) at Part 262. The requirements as laid out in this reference document are organized by generator status—that is, conditionally exempt small quantity generators (CESQGs), small quantity generators (SQGs), and large quantity generators (LQGs). Please note that this reference document is designed to be web-based, so the usefulness of the document is maximized when it is viewed on a computer that is connected to the internet.

This web-based document is not a substitute for the CFR itself or the requirements contained in the CFR. This document is also not a rulemaking in any way. Additionally, this reference document presents only the federal requirements for hazardous waste generators. Most States are authorized to manage their hazardous waste generator regulatory program. Therefore, States may have their own set of regulations that apply in lieu of federal regulations, and while most state hazardous waste regulations are based on the federal requirements, some states have developed regulations more stringent than the federal program. We direct you to the following website to determine if the state regulatory program is different from the federal program: http://www.epa.gov/epaoswer/osw/stateweb.htm

This web-based document grows out of an evaluation of the hazardous waste generator program conducted in the spring of 2004 where EPA solicited input from its various stakeholders through the issuance of an Advanced Notice of Proposed Rulemaking (ANPRM). (Please see FR Volume 69, No.78, April 22, 2004, pages 21800-21804.) EPA received over 500 individual comments from numerous organizations identifying issues and areas of confusion with the current RCRA generator regulations, and offering suggestions for resolving those issues. (Please see www.regulations.gov and search for docket number RCRA-2003-0014.) The most frequently mentioned comment from stakeholders was the need for EPA to improve the user-friendliness of the existing regulations. Commenters noted that the applicable hazardous waste generator regulations currently are scattered throughout the CFR and can be difficult to follow due to the large number of cross-references. As a result, hazardous waste generators have difficulty in understanding which regulations they must comply with.

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[1] Please note that hazardous waste generators are technically not subject solely to "requirements" in the sense of mandatory "demands," but are also subject to requirements in the sense of "conditions" or "prerequisites" that they must satisfy in order to qualify for optional exemptions from the requirement to obtain a RCRA treatment, storage or disposal permit. Specifically, 40 CFR 262.34 provides conditions that generators must satisfy in order to be excluded from RCRA permit and TSDF requirements. They are not mandatory requirements per se since a generator may choose not to come under 262.34 and choose to seek a RCRA permit instead. However, for convenience and simplicity, we use the term "requirements" throughout this reference document.

The objective of this document is to address some of the commenters' concerns by consolidating and streamlining the generator regulatory requirements into a helpful reference tool that features a user-friendly format, including references to EPA FAQs (Frequently Asked Questions), letters, memoranda, and guidance documents that EPA has provided to the public through the years to help hazardous waste generators interpret the existing hazardous waste regulations. This document does not change any of the existing generator regulatory requirements.

This document is organized by hazardous waste generator status (e.g, CESQG, SQG and LQG), and, within those categories, by regulatory requirement as found in the CFR. The Summary Table provides a summary of regulatory requirements for each class of generator status. Also identified is the specific CFR citation for a particular regulatory requirement. In some cases, a particular regulatory requirement will be applicable to all classes of generators; in other cases to one or two classes.

This document is navigable in several ways. First, generators can use the Summary Table to link directly to the regulatory citation of interest in the Government Printing Office's Electronic Code of Federal Register website (e-CFR) EXIT Disclaimer by left-clicking the mouse on the hyperlinks in the table. Clicking on the hyperlink will open the e-CFR in a new web-browser window, so the original document will also remain open.

Secondly, generators can take advantage of the Table of Contents (page 2 of the document) or the bookmarks (located on the left-hand side of the screen) to navigate through the body of the document. The Table of Contents and bookmarks are organized by hazardous waste generator status ("Conditionally Exempt Small Quantity Generators", "Small Quantity Generators" and "Large Quantity Generators"). As a subset to each category of generator status, the user will find additional bookmarks linking to the regulatory requirements for each class of generator. In some cases, a particular regulatory requirement will be applicable to all classes of generators; in others cases, to one or two classes. As above, generators can use the Table of Contents and bookmarks to navigate by clicking the left side of the mouse on the link of interest in order to move within the document.

To help stakeholders better understand specific requirements, we also have provided, where applicable, hyperlinks to FAQs, letters, and memoranda issued by EPA, as well as guidance documents developed by EPA that provide further clarification of the hazardous waste generator regulations. We have attempted to identify the relevant related FAQs, letters, memoranda, etc. on a particular subject (miscellaneous resources can be found at the end of the document). However, please note that it is possible that EPA could have inadvertently overlooked a relevant document and did not include it in this reference document. Therefore we cannot guarantee that we captured every relevant document in each and every instance. Additionally, once a generator has navigated to the regulatory "requirement" of interest, we have provided hyperlinks to the e-CFR website when the generator regulations cross-reference themselves or other regulations.

Because regulations are promulgated throughout the year, EPA intends to update this reference document periodically to remain up-to-date with the hazardous waste generator regulatory requirements. However, as noted previously, this web-based reference document is not a substitute for the CFR itself or the requirements in the CFR. Additionally, the Government Printing Office frequently updates the e-CFR website to which the document is linked.

This reference document assumes that a solid and hazardous waste has been generated. Therefore, we have not included the applicable regulatory citations for determining if a solid waste (See 40 CFR 261.2) or a hazardous waste (See 40 CFR 261.3) has been generated. Similarly, we have not included the regulatory citations for specific exclusions from either the definition of solid waste and definition of hazardous waste found in 40 CFR 261.4, or the requirements for recyclable materials found in 40 CFR 261.6. However, based on stakeholder comments, EPA is considering whether to prepare similar reference documents for other hazardous waste regulations.

Please contact EPA's Office of Solid Waste with any questions or comments concerning this document:

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Version 2 Updates

1. Clarified requirements under Purpose, Scope and Applicability for CESQGs to include **only** 262.10 (a) and (b).

2. Added link to Definitions at 40 CFR 260.10 found under the General Hazardous Waste Generator Resources, as well as general resource documents found at the beginning of the CESQG, SQG and LQG sections.

3. Clarified regulatory requirements under satellite accumulation. Clarifications found at end of Summary Table (Footnote) and at beginning of Satellite Accumulation sections for SQGs and LQGs.

4. Corrected regulatory citation for Preparedness and Prevention (Subpart C of Part 265) for both SQGs and LQGs.

5. Corrected regulatory citation for Emergency Response (40 CFR 265 Subpart D) for LQGs.

Summary Chart

Hazardous Waste Generator Regulatory Requirements

	REQUIREMENT	CESQG	SQG	LQG
1	Purpose, Scope and Applicability	See 40 CFR 262.10 (a) and (b)	See 40 CFR 262.10	See 40 CFR 262.10
2	Generator Status Determination	See 40 CFR 261.5(c) and (d)	See 40 CFR 261.5(c) and (d)	See 40 CFR 261.5(c) and (d)
3	Hazardous Waste Determination	See 40 CFR 262.11	See 40 CFR 262.11	See 40 CFR 262.11
4	Acute Hazardous Wastes	See 40 CFR 261.5(e) and (f)	See 40 CFR 262.34 (c) (1) and (c) (2)	See 40 CFR 262.34 (c) (1) and (c) (2)
5	Mixing	See 40 CFR 261.5 (h)-(j)	**N/A***	**N/A**
6	On-site Accumulation Time Limits	**N/A**	See 40 CFR 262.34 (d)-(f)	See 40 CFR 262.34 (a)
7	On-Site Accumulation Quantity Limits	See 261.5 (a)	See 40 CFR 262.34 (d)	**N/A**
8	Consequences of Exceeding Quantity Limits	See 261.5 (g)	See 40 CFR 262.34 (f)	**N/A**
9	Management Requirements	See 40 CFR 261.5 (g)	**See 10-25**	**See 10-31**
10	EPA ID Number	**N/A**	See 40 CFR 262.12	See 40 CFR 262.12
11	Accumulation Requirements for Storage Units: Containers	**N/A**	See 40 CFR 265.170-174 and 177	See 40 CFR 265.170-178
12	Accumulation Requirements for Storage Units: Tanks	**N/A**	See 40 CFR 265.201	See 40 CFR 265.190-200 and 202
13	Satellite Accumulation	**N/A**	See 40 CFR 262.34 (c)	See 40 CFR 262.34 (c)

	REQUIREMENT	CESQG	SQG	LQG
14	Marking and Labeling	**N/A**	See 40 CFR 262.34 (a)(2) and (a)(3)	See 40 CFR 262.34 (a)(2) and (a)(3)
15	Personnel Training	**N/A**	See 40 CFR 262.34 (d)(5)(iii)	See 40 CFR 265.16
16	Recordkeeping	**N/A**	See 40 CFR 262.44	See 40 CFR 262.40-43
17	Emergency Procedures and Response	**N/A**	See 40 CFR 262.34 (d)(5)(iv)	See 40 CFR 265.50-56
18	Preparedness and Prevention	**N/A**	See 40 CFR 262.34 (d)(5)(i)-(ii)	See 40 CFR 265.30-37
19	Land Disposal Restrictions	**N/A**	See 40 CFR 268	See 40 CFR 268
20	Pre-transport Requirements	**N/A**	See 40 CFR 262.30-33	See 40 CFR 262.30-33
21	Manifests	**N/A**	See 40 CFR 262.20-27	See 40 CFR 262.20-27
22	Exports	**N/A**	See 40 CFR 262.50-58	See 40 CFR 262.50-58
23	Imports	**N/A**	See 40 CFR 262.60	See 40 CFR 262.60
24	Transfrontier Shipments of Hazardous Waste for Recovery within the OECD	**N/A**	See 40 CFR 262.80-89	See 40 CFR 262.80-89
25	Farmers	**N/A**	See 40 CFR 262.70	See 40 CFR 262.70
26	Accumulation Requirements for Storage Units: Containment Buildings	**N/A**	**N/A**	See 40 CFR 265.1100-1102
27	Accumulation Requirements for Storage Units: Drip Pads	**N/A**	**N/A**	See 40 CFR 265.440-445

	REQUIREMENT	CESQG	SQG	LQG
28	Air Emissions Subpart AA Subpart BB Subpart CC	**N/A**	**N/A**	 See 40 CFR 265.1030-1035 See 40 CFR 265.1050- 1064 See 40 CFR 265.1080-1090
29	Closure and Post-Closure	**N/A**	**N/A**	See 40 CFR 265.111 and 114
30	Special Requirements for Generators of F006	**N/A**	**N/A**	See 40 CFR 262.34 (d)-(i)
31	Special Requirements for Performance Track Members	**N/A**	**N/A**	See 40 CFR 262.34 (j) and (k)

*** N/A** = not applicable

General Hazardous Waste Generator Resources

- Hazardous Waste Management System: Definitions
- Resource Conservation and Recovery Act: 2006 Orientation Manual
- RCRA Training Modules
    - RCRA Hazardous Waste Generator Training Module
    - RCRA Hazardous Waste Identification Training Module
- EPA Office of Enforcement and Compliance Assurance: Compliance Assistance Centers
- Small Quantity Generator Handbook on Managing Hazardous Waste
- Frequently Asked Questions on Waste

CESQG Requirements

- General Resources for Conditionally Exempt Small Quantity Generators
- Frequently Asked Questions on Waste
- Hazardous Waste Management System: Definitions

Applicability

§ 262.10: Purpose, scope, and applicability

(a) These regulations establish standards for generators of hazardous waste.

(b) 40 CFR 261.5(c) and (d) must be used to determine the applicability of provisions of this part that are dependent on calculations of the quantity of hazardous waste generated per month.

Generator Status Determination

§261.5 (c) and (d): Generator status determination

(c) When making the quantity determinations of this part and 40 CFR part 262, the generator must include all hazardous waste that it generates, except hazardous waste that:
(1) Is exempt from regulation under 40 CFR 261.4(c) through (f), 261.6(a)(3), 261.7(a)(1), or 261.8; or
(2) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10; or
(3) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under 40 CFR 261.6(c)(2); or
(4) Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and 40 CFR part 279; or
(5) Is spent lead-acid batteries managed under the requirements of 40 CFR part 266, subpart G; or
(6) Is universal waste managed under 40 CFR 261.9 and 40 CFR part 273.

(d) In determining the quantity of hazardous waste generated, a generator need not include:
(1) Hazardous waste when it is removed from on-site storage; or
(2) Hazardous waste produced by on- site treatment (including reclamation) of his hazardous waste, so long as the hazardous waste that is treated was counted once; or
(3) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.

Related Resources:

- Amount of Waste Generated Per Month Determines Generator Status
- Management of Hazardous Waste Generated in Quantities Less Than 100 kg and Those That Are Thrown Away With Ordinary Garbage
- Generator Quantity Determination for Mixtures
- Generator Quantity Determinations for F006 Listed Sludge (8/16/2002)
- Elementary Neutralization Units
- Generator Counting Requirement for Solvent Stills

Hazardous Waste Determination

§ 262.11: Hazardous waste determination.

A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous waste using the following method:

(a) He should first determine if the waste is excluded from regulation under 40 CFR 261.4.

(b) He must then determine if the waste is listed as a hazardous waste in subpart D of 40 CFR part 261.

NOTE: Even if the waste is listed, the generator still has an opportunity under 40 CFR 260.22 to demonstrate to the Administrator that the waste from his particular facility or operation is not a hazardous waste.

(c) For purposes of compliance with 40 CFR part 268, or if the waste is not listed in subpart D of 40 CFR part 261, the generator must then determine whether the waste is identified in subpart C of 40 CFR part 261 by either:
(1) Testing the waste according to the methods set forth in subpart C of 40 CFR part 261, or according to an equivalent method approved by the Administrator under 40 CFR 260.21; or
(2) Applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used.
(d) If the waste is determined to be hazardous, the generator must refer to parts 261, 264, 265, 266, 268, and 273 of this chapter for possible exclusions or restrictions pertaining to management of the specific waste. [45 FR 33142, May 19, 1980, as amended at 45 FR 76624, Nov. 19, 1980; 51 FR 40637, Nov. 7, 1986; 55 FR 22684, June 1, 1990; 56 FR 3877, Jan. 31, 1991; 60 FR 25541, May 11, 1995]

Related Resources:

- What Makes a Waste Hazardous?
- Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste: A Guidance Manual
- Policies Regarding Self-Certification of Non-Hazardous Waste

- Analytes to Look For When Performing RCRA Analysis

Scope of Regulation

§ 261.5: Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

(b) Except for those wastes identified in paragraphs (e), (f), (g), and (j) of this section, a conditionally exempt small quantity generator's hazardous wastes are not subject to regulation under parts 262 through 266, 268, and parts 270 and 124 of this chapter, and the notification requirements of section 3010 of RCRA, provided the generator complies with the requirements of paragraphs (f), (g), and (j) of this section

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Acute Hazardous Wastes

§ 261.5: Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

(e) If a generator generates acute hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acute hazardous waste are subject to full regulation under parts 262 through 266, 268, and parts 270 and 124 of this chapter, and the notification requirements of section 3010 of RCRA:
(1) A total of one kilogram of acute hazardous wastes listed in §§ 261.31, 261.32, or 261.33(e).
(2) A total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean- up of a spill, into or on any land or water, of any acute hazardous wastes listed in §§ 261.31, 261.32, or 261.33(e).
[Comment: ''Full regulation'' means those regulations applicable to generators of greater than 1,000 kg of non-acutely hazardous waste in a calendar month.]

(f) In order for acute hazardous wastes generated by a generator of acute hazardous wastes in quantities equal to or less than those set forth in paragraph (e)(1) or (2) of this section to be excluded from full regulation under this section, the generator must comply with the following requirements:
(1) Section 262.11 of this chapter;
(2) The generator may accumulate acute hazardous waste on-site. If he accumulates at any time acute hazardous wastes in quantities greater than those set forth in paragraph (e)(1) or (e)(2) of this section, all of those accumulated wastes are subject to regulation under parts 262 through 266, 268, and parts 270 and 124 of this chapter, and the applicable notification requirements of section 3010 of RCRA. The time period of § 262.34(a) of this chapter, for accumulation of wastes on-site, begins when the accumulated wastes exceed the applicable exclusion limit;

(3) A conditionally exempt small quantity generator may either treat or dispose of his acute hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage, or disposal facility, either of which, if located in the U.S., is:
(i) Permitted under part 270 of this chapter;
(ii) In interim status under parts 270 and 265 of this chapter;
(iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under part 271 of this chapter;
(iv) Permitted, licensed, or registered by a State to manage municipal solid waste and, if managed in a municipal solid waste landfill is subject to Part 258 of this chapter;
(v) Permitted, licensed, or registered by a State to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit after January 1, 1998, is subject to the requirements in §§ 257.5 through 257.30 of this chapter; or
(vi) A facility which:
(A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or
(B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or (vii) For universal waste managed under part 273 of this chapter, a universal waste handler or destination facility subject to the requirements of part 273 of this chapter.

Related Resources:

- Conditionally Exempt Small Quantity Generators Treating in Elementary Neutralization Units
- Accumulation Time for Acute and Non-Acute Hazardous Wastes

Management Requirements

§ 261.5: Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

(g) In order for hazardous waste generated by a conditionally exempt small quantity generator in quantities of less than 100 kilograms of hazardous waste during a calendar month to be excluded from full regulation under this section, the generator must comply with the following requirements:

(1) Section 262.11 of this chapter;

(3) A conditionally exempt small quantity generator may either treat or dispose of his hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage or disposal facility, either of which, if located in the U.S., is:
(i) Permitted under part 270 of this chapter;
(ii) In interim status under parts 270 and 265 of this chapter;
(iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under part 271 of this chapter;

(iv) Permitted, licensed, or registered by a State to manage municipal solid waste and, if managed in a municipal solid waste landfill is subject to Part 258 of this chapter;
(v) Permitted, licensed, or registered by a State to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit after January 1, 1998, is subject to the requirements in §§ 257.5 through 257.30 of this chapter; or
(vi) A facility which:
(A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or
(B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or (vii) For universal waste managed under part 273 of this chapter, a universal waste handler or destination facility subject to the requirements of part 273 of this chapter.

Related Resources:

- Clarification of §261.5(g)(3)(iv)
- Conditionally Exempt Small Quantity Generator Provisions

Mixing

§ 261.5: Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

(h) Hazardous waste subject to the reduced requirements of this section may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this section, unless the mixture meets any of the characteristics of hazardous waste identified in subpart C.
(i) If any person mixes a solid waste with a hazardous waste that exceeds a quantity exclusion level of this section, the mixture is subject to full regulation.
(j) If a conditionally exempt small quantity generator's wastes are mixed with used oil, the mixture is subject to part 279 of this chapter. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated.

[51 FR 10174, Mar. 24, 1986, as amended at 51 FR 28682, Aug. 8, 1986; 51 FR 40637, Nov. 7, 1986; 53 FR 27163, July 19, 1988; 58 FR 26424 May 3, 1993; 60 FR 25541, May 11, 1995; 61 FR 34278, July 1, 1996; 63 FR 24968, May 6, 1998; 63 FR 37782, July 14, 1998; 68 FR 44665, July 30, 2003]

Relates Resources:

- Generator Quantity Determination for Mixtures

On-site Accumulation Quantity Limits

§ 261.5: Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

(a) A generator is a conditionally exempt small quantity generator in a calendar month if he generates no more than 100 kilograms of hazardous waste in that month.

Related Resources:

- Conditionally Exempt Small Quantity Generator Provisions
- Amount of Waste Generated per Month Determines Generator Status

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Consequences of Exceeding Quantity Limits

§ 261.5: Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

(g) In order for hazardous waste generated by a conditionally exempt small quantity generator in quantities less than 100 kilograms of hazardous waste during a calendar month to be excluded from full regulation under this section, the generator must comply with the following:
(2) The conditionally exempt small quantity generator may accumulate hazardous waste on-site. If he accumulates at any time more than a total of 1000 kilograms of his hazardous wastes, all of those accumulated wastes are subject to regulation under the special provisions of part 262 applicable to generators of between 100 kg and 1000 kg of hazardous waste in a calendar month as well as the requirements of parts 263 through 266, 268, and parts 270 and 124 of this chapter, and the applicable notification requirements of section 3010 of RCRA. The time period of § 262.34(d) for accumulation of wastes on-site begins for a conditionally exempt small quantity generator when the accumulated wastes exceed 1000 kilograms;

Related Resources:

- Amount of Waste Generated per Month Determines Generator Status

SQG Requirements

- Resources for Small Quantity Generators
- Frequently Asked Questions on Waste
- Hazardous Waste Management System: Definitions

Applicability

§ 262.10: Purpose, scope, and applicability

(a) These regulations establish standards for generators of hazardous waste.

(b) 40 CFR 261.5(c) and (d) must be used to determine the applicability of provisions of this part that are dependent on calculations of the quantity of hazardous waste generated per month.

(c) A generator who treats, stores, or disposes of hazardous waste on-site must only comply with the following sections of this part with respect to that waste: Section 262.11 for determining whether or not he has a hazardous waste, § 262.12 for obtaining an EPA identification number, § 262.34 for accumulation of hazardous waste, § 262.40 (c) and (d) for recordkeeping, § 262.43 for additional reporting, and if applicable, § 262.70 for farmers.

(d) Any person who exports or imports hazardous waste subject to the Federal manifesting requirements of part 262, or subject to the universal waste management standards of 40 CFR Part 273, or subject to State requirements analogous to 40 CFR Part 273, to or from the countries listed in § 262.58(a)(1) for recovery must comply with subpart H of this part.

(e) Any person who imports hazardous waste into the United States must comply with the standards applicable to generators established in this part.

(f) A farmer who generates waste pesticides which are hazardous waste and who complies with all of the requirements of § 262.70 is not required to comply with other standards in this part or 40 CFR parts 270, 264, 265, or 268 with respect to such pesticides.

(g) A person who generates a hazardous waste as defined by 40 CFR part 261 is subject to the compliance requirements and penalties prescribed in section 3008 of the Act if he does not comply with the requirements of this part.

(h) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility must comply with the generator standards established in this part.

(i) Persons responding to an explosives or munitions emergency in accordance with 40 CFR 264.1(g)(8)(i)(D) or (iv) or 265.1(c)(11)(i)(D) or (iv), and 270.1(c)(3)(i)(D) or (iii) are not required to comply with the standards of this part.

(j) (1) Universities that are participating in the Laboratory XL project are the University of Massachusetts in Boston, Massachusetts, Boston College in Chestnut Hill, Massachusetts, and the University of Vermont in Burlington, Vermont (''Universities''). The Universities generate laboratory wastes (as defined in § 262.102), some of which will be hazardous wastes. As long as the Universities comply with all the requirements of subpart J of this part the Universities' laboratories that are participating in the University Laboratories XL Project as identified in Table 1 of this section, are not subject to the provisions of §§ 262.11, 262.34(c), 40 CFR Parts 264 and 265, and the permit requirements of 40 CFR Part 270 with respect to said laboratory wastes.

(2) Each University shall have the right to change its respective departments or the on-site location of its hazardous waste accumulation areas listed in Table 1 of this section upon written notice to the Regional Administrator for EPA-Region I and the appropriate state agency. Such written notice will be provided at least ten days prior to the effective date of any such changes.

(k) Generators in the Commonwealth of Massachusetts may comply with the State regulations regarding Class A recyclable materials in 310 C.M.R. 30.200, when authorized by the EPA under 40 CFR part 271, with respect to those recyclable materials and matters covered by the authorization, instead of complying with the hazardous waste accumulation requirements of § 262.34, the reporting requirements of § 262.41, the storage facility operator requirements of 40 CFR parts 264 and 265 and the permitting requirements of 40 CFR part 270. Such generators must also comply with any other applicable requirements, including any applicable authorized State regulations governing hazardous wastes not being recycled and any applicable Federal requirements which are being directly implemented by the EPA within Massachusetts pursuant to the Hazardous and Solid Waste Amendments of 1984.

NOTE 1: The provisions of § 262.34 are applicable to the on-site accumulation of hazardous waste by generators. Therefore, the provisions of § 262.34 only apply to owners or operators who are shipping hazardous waste which they generated at that facility.

NOTE 2: A generator who treats, stores, or disposes of hazardous waste on-site must comply with the applicable standards and permit requirements set forth in 40 CFR parts 264, 265, 266, 268, and 270. [45 FR 33142, May 19, 1980, as amended at 45 FR 86970, Dec. 31, 1980; 47 FR 1251, Jan. 11, 1982; 48 FR 14294, Apr. 1, 1983; 53 FR 27164, July 19, 1988; 56 FR 3877, Jan. 31, 1991; 60 FR 25541, May 11, 1995; 61 FR 16309, Apr. 12, 1996; 62 FR 6651, Feb. 12, 1997; 64 FR 52392, Sept. 28,1999; 69 FR 11813, Mar. 12, 2004]

Generator Status Determination

§261.5 (c) and (d): Generator status determination

(c) When making the quantity determinations of this part and 40 CFR part 262, the generator must include all hazardous waste that it generates, except hazardous waste that:
(1) Is exempt from regulation under 40 CFR 261.4(c) through (f), 261.6(a)(3), 261.7(a)(1), or 261.8; or
(2) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10; or
(3) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under 40 CFR 261.6(c)(2); or
(4) Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and 40 CFR part 279; or
(5) Is spent lead-acid batteries managed under the requirements of 40 CFR part 266, subpart G; or
(6) Is universal waste managed under 40 CFR 261.9 and 40 CFR part 273.

(d) In determining the quantity of hazardous waste generated, a generator need not include:
(1) Hazardous waste when it is removed from on-site storage; or
(2) Hazardous waste produced by on- site treatment (including reclamation) of his hazardous waste, so long as the hazardous waste that is treated was counted once; or
(3) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.

Related Resources:

- Amount of Waste Generated Per Month Determines Generator Status
- Determining Generator Status By Including Wastes Collected at Satellite Accumulation Areas
- Generator Quantity Determination for Mixtures
- Generator Quantity Determinations for F006 Listed Sludge (8/16/2002)
- Weight of Container for Quantity Determinations (6/1/1994)
- Elementary Neutralization Units
- Generator Counting Requirement for Solvent Stills
- Containment Buildings as Generator Accumulation Units

Hazardous Waste Determination

§ 262.11: Hazardous waste determination.

A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous waste using the following method:

(a) He should first determine if the waste is excluded from regulation under 40 CFR 261.4.

(b) He must then determine if the waste is listed as a hazardous waste in subpart D of 40 CFR part 261.

NOTE: Even if the waste is listed, the generator still has an opportunity under 40 CFR 260.22 to demonstrate to the Administrator that the waste from his particular facility or operation is not a hazardous waste.

(c) For purposes of compliance with 40 CFR part 268, or if the waste is not listed in subpart D of 40 CFR part 261, the generator must then determine whether the waste is identified in subpart C of 40 CFR part 261 by either:
(1) Testing the waste according to the methods set forth in subpart C of 40 CFR part 261, or according to an equivalent method approved by the Administrator under 40 CFR 260.21; or
(2) Applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used.
(d) If the waste is determined to be hazardous, the generator must refer to parts 261, 264, 265, 266, 268, and 273 of this chapter for possible exclusions or restrictions pertaining to management of the specific waste. [45 FR 33142, May 19, 1980, as amended at 45 FR 76624, Nov. 19, 1980; 51 FR 40637, Nov. 7, 1986; 55 FR 22684, June 1, 1990; 56 FR 3877, Jan. 31, 1991; 60 FR 25541, May 11, 1995]

Related Resources:

- What Makes a Waste Hazardous?
- Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste: A Guidance Manual
- Policies Regarding Self-Certification of Non-Hazardous Waste
- Analytes to Look For When Performing RCRA Analysis

On-site Accumulation Time Limits

§ 262.34: Accumulation time.

(d) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that:

(1) The quantity of waste accumulated on-site never exceeds 6000 kilograms;

(2) The generator complies with the requirements of subpart I of part 265 of this chapter, except for §§265.176 and 265.178;

(3) The generator complies with the requirements of §265.201 in subpart J of part 265;

(4) The generator complies with the requirements of paragraphs (a)(2) and (a)(3) of this section, the requirements of subpart C of part 265, the requirements of 40 CFR 268.7(a)(5);

(e) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more for off-site treatment, storage or disposal may accumulate hazardous waste on-site for 270 days or less without a permit or without having interim status provided that he complies with the requirements of paragraph (d) of this section.
(f) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who accumulates hazardous waste in quantities exceeding 6000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if he must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 40 CFR parts 264 and 265 and the permit requirements of 40 CFR part 270 unless he has been granted an extension to the 180-day (or 270-day if applicable) period. Such extension may be granted by EPA if hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

Note: Subsequently this citation discusses several management requirements (e.g. (d)(2)-(d)(5)). They are found in this reference document under the following topics:
262.34(d)(2) references 265 Subpart I, found in "Accumulation Requirements for Storage Units: Containers"
262.34(d)(3) references 265.201, found in "Accumulation Requirements for Storage Units: Tanks"
262.34(d)(4) references 262.34(a)(2) and (a)(3), 265 Subpart C, and 268.7(a)(5)
262.34(d)(5) is found under "Emergency Response"

Related Resources:

- 100-1000 kg/mo Generators
- Classification and Possible Modification of the 90-Day Generator Rule
- Small Quantity Generator Accumulation
- Frequently Asked Questions on Generator Treatment
- Generator Treatment in Accumulation Tanks and Containers
- Treatment in Accumulation Tanks and Containers Allowed for All Generators Subject to 262.34

On-site Accumulation Quantity Limits

§ 262.34: Accumulation time.

(d) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that:
(1) The quantity of waste accumulated on-site never exceeds 6000 kilograms;

Related Resources:

- Management of Hazardous Waste Generated in Quantities Less Than 100 kg and those that are Thrown Away with Ordinary Garbage
- Frequently Asked Questions on Hazardous Waste Generator Requirements
- Generator Quantity Determinations for F006 Listed Sludge
- Weight of Container for Quantity Determinations
- Amount of Waste Generated per Month Determines Generator Status

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Consequences of Exceeding Quantity Limits

§ 262.34: Accumulation time.

(f) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who accumulates hazardous waste in quantities exceeding 6000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if he must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 40 CFR parts 264 and 265 and the permit requirements of 40 CFR part 270 unless he has been granted an extension to the 180-day (or 270-day if applicable) period. Such extension may be granted by EPA if hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

EPA ID Number

§ 262.12: EPA identification numbers.

(a) A generator must not treat, store, dispose of, transport, or offer for transportation, hazardous waste without having received an EPA identification number from the Administrator.
(b) A generator who has not received an EPA identification number may obtain one by applying to the Administrator using EPA form 8700–12. Upon receiving the request the Administrator will assign an EPA identification number to the generator.
(c) A generator must not offer his hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received an EPA identification number.

Related Resources:

- Managing Your Hazardous Waste: A Guide for Small Businesses

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Accumulation Requirements for Storage Units: Containers

Subpart I—Use and Management of Containers

§ 265.170: Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities that store containers of hazardous waste, except as§ 265.1 provides otherwise.

§ 265.171: Condition of containers.

If a container holding hazardous waste is not in good condition, or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part.

§ 265.172: Compatibility of waste with container.

The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

§ 265.173: Management of containers.

(a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.
(b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
[*Comment:* Re-use of containers in transportation is governed by U.S. Department of Transportation regulations, including those set forth in 49 CFR 173.28.]
[45 FR 33232, May 19, 1980, as amended at 45 FR 78529, Nov. 25, 1980]

§ 265.174: Inspections.

At least weekly, the owner or operator must inspect areas where containers are stored, except for Performance Track member facilities, that must conduct inspections at least once each month, upon approval by the Director. To apply for reduced inspection frequency, the Performance Track member facility must follow the procedures described in §265.15(b)(5) of this part. The owner or operator must look for leaking containers and for deterioration of containers caused by corrosion or other factors.

[Comment: See §265.171 for remedial action required if deterioration or leaks are detected.]

[71 FR 16910, Apr. 4, 2006, as amended at 71 FR 40275, July 14, 2006]

§ 265.175: [Reserved]

§ 265.177: Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, (see appendix V for examples) must not be placed in the same container, unless § 265.17(b) is complied with.
(b) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material (see appendix V for examples), unless § 265.17(b) is complied with.
(c) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.
[*Comment:* The purpose of this is to prevent fires, explosions, gaseous emissions, leaching, or other discharge of hazardous waste or hazardous waste constituents which could result from the mixing of incompatible wastes or materials if containers break or leak.]

Related Resources:

- Hazardous Waste Container Storage Requirements
- Treating Wastes in Generators Accumulation Tanks and Containers
- Containers Storing Hazardous Waste, Requirements
- Containers for Safe and Economical Storage, Transport, and Disposal of Hazardous Waste
- Frequently Asked Questions on Generator Treatment

Accumulation Requirements for Storage Units: Tanks

Subpart J- Tank Systems

Source: 51 FR 25479, July 14, 1986, unless otherwise noted.

§ 265.201: Special requirements for generators of between 100 and 1,000 kg/mo that accumulate hazardous waste in tanks.

(a) The requirements of this section apply to small quantity generators of more than 100 kg but less than 1,000 kg of hazardous waste in a calendar month, that accumulate hazardous waste in tanks for less than 180 days (or 270 days if the generator must ship the waste greater than 200 miles), and do not accumulate over 6,000 kg on-site at any

time.
(b) Generators of between 100 and 1,000 kg/mo hazardous waste must comply with the following general operating requirements:
(1) Treatment or storage of hazardous waste in tanks must comply with § 265.17(b).
(2) Hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life.
(3) Uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard, unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank.
(4) Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow (e.g., waste feed cutoff system or by-pass system to a stand-by tank).

NOTE: These systems are intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., a malfunction in the treatment process, a crack in the tank, etc.).

(c) Except as noted in paragraph (d) of this section, generators who accumulate between 100 and 1,000 kg/mo of hazardous waste in tanks must inspect, where present:

(1) Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that it is in good working order;

(2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design;

(3) The level of waste in the tank at least once each operating day to ensure compliance with § 265.201(b)(3);
(4) The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams; and
(5) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

NOTE: As required by § 265.15(c), the owner or operator must remedy any deterioration or malfunction he finds.

(d) Generators who accumulate between 100 and 1,000 kg/mo of hazardous waste in tanks or tank systems that have full secondary containment and that either use leak detection equipment to alert facility personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, must inspect at least weekly, where applicable, the areas identified in paragraphs (c)(1) through (5) of this section. Use

of the alternate inspection schedule must be documented in the facility's operating record. This documentation must include a description of the established workplace practices at the facility.

(e) Performance Track member facilities may inspect on a less frequent basis, upon approval by the Director, but must inspect at least once each month. To apply for a less than weekly inspection frequency, the Performance Track member facility must follow the procedures described in §265.15(b)(5).

(f) Generators of between 100 and 1,000 kg/mo accumulating hazardous waste in tanks must, upon closure of the facility, remove all hazardous waste from tanks, discharge control equipment, and discharge confinement structures.

Note: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with §261.3(c) or (d) of this chapter, that any solid waste removed from his tank is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, and 265 of this chapter.

(g) Generators of between 100 and 1,000 kg/mo must comply with the following special requirements for ignitable or reactive waste:

(1) Ignitable or reactive waste must not be placed in a tank, unless:

(i) The waste is treated, rendered, or mixed before or immediately after placement in a tank so that (A) the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under §261.21 or §261.23 of this chapter, and (B) §265.17(b) is complied with; or

(ii) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

(iii) The tank is used solely for emergencies.

(2) The owner or operator of a facility which treats or stores ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained in Tables 2–1 through 2–6 of the National Fire Protection Association's “Flammable and Combustible Liquids Code,” (1977 or 1981) (incorporated by reference, see §260.11).

(h) Generators of between 100 and 1,000 kg/mo must comply with the following special requirements for incompatible wastes:

(1) Incompatible wastes, or incompatible wastes and materials, (see appendix V for examples) must not be placed in the same tank, unless §265.17(b) is complied with.

(2) Hazardous waste must not be placed in an unwashed tank which previously held an incompatible waste or material, unless §265.17(b) is complied with.

[51 FR 25479, July 14, 1986, as amended at 53 FR 34087, Sept. 2, 1988; 71 FR 16911, Apr. 4, 2006; 71 FR 40275, July 14, 2006]

Related Resources:

- Hazardous Waste Tanks Inspection Manual
- Hazardous Waste Tanks
- Hazardous Waste Tanks - Installation/Certification of Secondary Containment
- Hazardous Waste Tanks/Containers – Capacity of Secondary Containment
- Releases From 90 Day Accumulation Tanks
- Secondary Containment for Hazardous Waste Tanks
- Secondary Containment Systems for Hazardous Waste Tanks
- Hazardous Waste Tank - Leak Detection
- Tank Integrity Assessments
- Tanks Holding Hazardous Waste
- Integrity Assessment for Hazardous Waste Tanks and Post-Closure Requirements
- Accumulation of Hazardous Waste in Tanks (90-Day)
- Inspections Requirements for Hazardous Waste Tanks
- Tank Replacement
- Start Dates on Large Quantity Generator Tanks
- Clarification of Requirements for Secondary Containment Systems Associated With Hazardous Waste Tanks
- Turnover of Hazardous Wastes Stored in Generator Accumulation Tanks

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Satellite Accumulation

Note: Hazardous wastes stored in satellite accumulation areas have fewer regulatory requirements than wastes stored in central accumulation areas by small and large quantity generators. For a discussion of these reduced requirements, please see the following memorandum: Frequently Asked Questions about Satellite Accumulation Areas

§262.34: Accumulation time.

(c)(1) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in § 261.33(e) in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with paragraph (a) of this section provided he:
(i) Complies with §§ 265.171, 265.172, and 265.173(a) of this chapter; and

(ii) Marks his containers either with the words ‘‘Hazardous Waste’’ or with other words that identify the contents of the containers.
(2) A generator who accumulates either hazardous waste or acutely hazardous waste listed in § 261.33(e) in excess of the amounts listed in paragraph (c)(1) of this section at or near any point of generation must, with respect to that amount of excess waste, comply within three days with paragraph (a) of this section or other applicable provisions of this chapter. During the three day period the generator must continue to comply with paragraphs (c)(1)(i) through (ii) of this section. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

Related Resources:

- Clarification of Section 262.34(A) Accumulation Time for Excess of 55-Gallon Limit in Satellite Accumulation Areas
- Frequently Asked Questions about Satellite Accumulation Areas
- Satellite Accumulation
- Satellite Accumulation Area and Regulations
- Cabinets as Satellite Accumulation Areas
- Clarification: Satellite Accumulation Provision
- Determining Generator Status by Including Wastes Collected at Satellite Accumulation Areas
- Clarification of the Satellite Accumulation Provision for Hazardous Waste Generators
- Clarification of Section 262.34(a) Accumulation Time for Excess of 55-Gallon Limit in Satellite Accumulation Areas
- Generator Satellite Accumulation/Counting Requirements
- Satellite Accumulation Area Regulations
- Regulations That Apply to Generators Who Accumulate Waste in Containers At Or Near the Point of Generation

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Marking and Labeling

§ 262.34: Accumulation time.

(a)(2) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;
(a)(3) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, ‘‘Hazardous Waste’’; and… **(Note: End of discussion on labeling and marking)**

Related Resources:

- Small Quantity Generator Accumulation
- Hazardous Waste Container Labeling Requirements

Personnel Training

§ 262.34: Accumulation time.

(d)(5)(iii) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

Related Resources:

- Episodic Generators and Personnel Training
- Clarification on the Amount, Type, and Frequency of Training Required for Personnel Handling Hazardous Waste at Facilities
- Interpretation of the Annual Training Requirements
- Training Employees
- Generator Personnel Training Requirements
- Hazardous Waste Training Under 40 CFR 262.34
- Training and Manifest Signature Requirements for Generators

Recordkeeping and Reporting

§ 262.44: Special requirements for generators of between 100 and 1000 kg/ mo.

A generator of greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month is subject only to the following requirements in this subpart:
(a) Section 262.40(a), (c), and (d), recordkeeping;
(b) Section 262.42(b), exception reporting; and
(c) Section 262.43, additional reporting.
[52 FR 35899, Sept. 23, 1987]

Related Resources:

- Recordkeeping Requirements for Owners or Operators Assuming Generator Responsibilities
- Recordkeeping Requirements for Small Quantity Generators Subject to Land Disposal Restrictions
- Interpretation of 40 CFR 268.7 Requirements
- Amendments to Part 262 Hazardous Waste Determination and Recordkeeping Requirements of Part 262 and 268

Preparedness and Prevention

Subpart C—Preparedness and Prevention

§ 265.30 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 265.1 provides otherwise.

§ 265.31 Maintenance and operation of facility.

Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

§ 265.32 Required equipment.

All facilities must be equipped with the following, *unless* none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:
(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
(b) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;
(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and
(d) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

§ 265.33 Testing and maintenance of equipment.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

§ 265.34 Access to communications or alarm system

(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, *unless* such a device is not required under § 265.32.
(b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, *unless* such a device is not required under § 265.32.

§ 265.35 Required aisle space

The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, *unless* aisle space is not needed for any of these purposes.

§ 265.36 [Reserved]

§ 265.37 Arrangements with local authorities

(a) The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:
(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;
(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;
(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and
(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.
(b) Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

Emergency Procedures and Response

§262.34: Accumulation time.

(d) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that:
(5) The generator complies with the following requirements:
(i) At all times there must be at least one employee either on the premises or on call (*i.e.* available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in paragraph (d)(5)(iv) of this section. This employee is the emergency coordinator.
(ii) The generator must post the following information next to the telephone:
(A) The name and telephone number of the emergency coordinator;
(B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and
(C) The telephone number of the fire department unless the facility has a direct alarm.

(iii) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;
(iv) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:
(A) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;
(B) In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;
(C) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424–8802). The report must include the following information:
(*1*) The name, address, and U.S. EPA Identification Number of the generator;
(*2*) Date, time, and type of incident (*e.g.*, spill or fire);
(*3*) Quantity and type of hazardous waste involved in the incident;
(*4*) Extent of injuries, if any; and
(*5*) Estimated quantity and disposition of recovered materials, if any.

Related Resources:

- Interpretation of Generator Requirements as Applied to Various On-Site and Off-Site Scenarios
- Interpretation of RCRA Regulations Pertaining to the Remediation of Contamination

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Land Disposal Restrictions

§ 268.1: Purpose, scope, and applicability.

(a) This part identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.

(b) Except as specifically provided otherwise in this part or part 261 of this chapter, the requirements of this part apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities.

(c) Restricted wastes may continue to be land disposed as follows:

(1) Where persons have been granted an extension to the effective date of a prohibition under subpart C of this part or pursuant to §268.5, with respect to those wastes covered by the extension;

(2) Where persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under this part, or part 148 of this chapter, are not prohibited if the wastes:

(i) Are disposed into a nonhazardous or hazardous injection well as defined under 40 CFR 146.6(a); and

(ii) Do not exhibit any prohibited characteristic of hazardous waste identified in 40 CFR part 261, subpart C at the point of injection.

(4) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under this part, are not prohibited if the wastes meet any of the following criteria, unless the wastes are subject to a specified method of treatment other than DEACT in §268.40, or are D003 reactive cyanide:

(i) The wastes are managed in a treatment system which subsequently discharges to waters of the U.S. pursuant to a permit issued under section 402 of the Clean Water Act; or

(ii) The wastes are treated for purposes of the pretreatment requirements of section 307 of the Clean Water Act; or

(iii) The wastes are managed in a zero discharge system engaged in Clean Water Act-equivalent treatment as defined in §268.37(a); and

(iv) The wastes no longer exhibit a prohibited characteristic at the point of land disposal (i.e., placement in a surface impoundment).

(d) The requirements of this part shall not affect the availability of a waiver under section 121(d)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

(e) The following hazardous wastes are not subject to any provision of part 268:

(1) Waste generated by small quantity generators of less than 100 kilograms of non-acute hazardous waste or less than 1 kilogram of acute hazardous waste per month, as defined in §261.5 of this chapter;

(2) Waste pesticides that a farmer disposes of pursuant to §262.70;

(3) Wastes identified or listed as hazardous after November 8, 1984 for which EPA has not promulgated land disposal prohibitions or treatment standards;

(4) *De minimis* losses of characteristic wastes to wastewaters are not considered to be prohibited wastes and are defined as losses from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; and relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; rinsate from empty containers or from containers that are rendered empty by that rinsing; and laboratory wastes not exceeding one per cent of the total flow of wastewater into the facility's headworks on an annual basis, or with a combined annualized average concentration not exceeding one part per million in the headworks of the facility's wastewater treatment or pretreatment facility.

(f) Universal waste handlers and universal waste transporters (as defined in 40 CFR 260.10) are exempt from 40 CFR 268.7 and 268.50 for the hazardous wastes listed below. These handlers are subject to regulation under 40 CFR part 273.

(1) Batteries as described in 40 CFR 273.2;

(2) Pesticides as described in §273.3 of this chapter;

(3) Mercury-containing equipment as described in §273.4 of this chapter; and

(4) Lamps as described in 40 CFR 273.5.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987, as amended at 53 FR 27165, July 19, 1988; 53 FR 31212, Aug. 17, 1988; 54 FR 36970, Sept. 6, 1989; 55 FR 22686, June 1, 1990; 58 FR 29884, May 24, 1993; 59 FR 48043, Sept. 19, 1994; 60 FR 25542, May 11, 1995; 61 FR 15663, Apr. 8, 1996; 61 FR 33682, June 28, 1996; 62 FR 26019, May 12, 1997; 64 FR 36488, July 6, 1999; 70 FR 45520, Aug. 5, 2005]

§ 268.2: Definitions applicable in this part.

When used in this part the following terms have the meanings given below:

(a) *Halogenated organic compounds* or *HOCs* means those compounds having a carbon-halogen bond which are listed under appendix III to this part.

(b) *Hazardous constituent or constituents* means those constituents listed in appendix VIII to part 261 of this chapter.

(c) *Land disposal* means placement in or on the land, except in a corrective action management unit or staging pile, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

(d) *Nonwastewaters* are wastes that do not meet the criteria for wastewaters in paragraph (f) of this section.

(e) *Polychlorinated biphenyls* or *PCBs* are halogenated organic compounds defined in accordance with 40 CFR 761.3.

(f) *Wastewaters* are wastes that contain less than 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS).

(g) *Debris* means solid material exceeding a 60 mm particle size that is intended for disposal and that is: a manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in Subpart D, Part 268, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by §268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

(h) *Hazardous debris* means debris that contains a hazardous waste listed in subpart D of part 261 of this chapter, or that exhibits a characteristic of hazardous waste identified in subpart C of part 261 of this chapter. Any deliberate mixing of prohibited hazardous waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in §268.3.

(i) *Underlying hazardous constituent* means any constituent listed in §268.48, Table UTS—Universal Treatment Standards, except fluoride, selenium, sulfides, vanadium, and zinc, which can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standards.

(j) *Inorganic metal-bearing waste* is one for which EPA has established treatment standards for metal hazardous constituents, and which does not otherwise contain significant organic or cyanide content as described in §268.3(c)(1), and is specifically listed in appendix XI of this part.

(k) *Soil* means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles as classified by the U.S. Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification (i.e., from waste to contaminated soil) is not allowed under the dilution prohibition in §268.3.

[55 FR 22686, June 1, 1990, as amended at 56 FR 3877, Jan. 31, 1991; 57 FR 37270, Aug. 18, 1992; 58 FR 8685, Feb. 16, 1993; 58 FR 29884, May 24, 1993; 59 FR 48043, Sept. 19, 1994; 60 FR 244, Jan. 3, 1995; 61 FR 15597, 15662, Apr. 8, 1996; 61 FR 33682, June 28, 1996; 63 FR 28639, May 26, 1998; 63 FR 65940, Nov. 30, 1998; 64 FR 25414, May 11, 1999; 71 FR 40278, July 14, 2006]

§ 268.3: Dilution prohibited as a substitute for treatment.

(a) Except as provided in paragraph (b) of this section, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with subpart D of this part, to circumvent the effective date of a prohibition in subpart C of this part, to otherwise avoid a prohibition in subpart C of this part, or to circumvent a land disposal prohibition imposed by RCRA section 3004.

(b) Dilution of wastes that are hazardous only because they exhibit a characteristic in treatment systems which include land- based units which treat wastes subsequently discharged to a water of the United States pursuant to a permit issued under section 402 of the Clean Water Act (CWA), or which treat wastes in a CWA-equivalent treatment system, or which treat wastes for the purposes of pretreatment requirements under section 307 of the CWA is not impermissible dilution for purposes of this section unless a method other than DEACT has been specified in §268.40 as the treatment standard, or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.

(c) Combustion of the hazardous waste codes listed in Appendix XI of this part is prohibited, unless the waste, at the point of generation, or after any bona fide treatment such as cyanide destruction prior to combustion, can be demonstrated to comply with one or more of the following criteria (unless otherwise specifically prohibited from combustion):

(1) The waste contains hazardous organic constituents or cyanide at levels exceeding the constituent-specific treatment standard found in §268.48;

(2) The waste consists of organic, debris-like materials (e.g., wood, paper, plastic, or cloth) contaminated with an inorganic metal-bearing hazardous waste;

(3) The waste, at point of generation, has reasonable heating value such as greater than or equal to 5000 BTU per pound;

(4) The waste is co-generated with wastes for which combustion is a required method of treatment;

(5) The waste is subject to Federal and/or State requirements necessitating reduction of organics (including biological agents); or

(6) The waste contains greater than 1% Total Organic Carbon (TOC).

(d) It is a form of impermissible dilution, and therefore prohibited, to add iron filings or other metallic forms of iron to lead-containing hazardous wastes in order to achieve any land disposal restriction treatment standard for lead. Lead-containing wastes include D008 wastes (wastes exhibiting a characteristic due to the presence of lead), all characteristic wastes containing lead as an underlying hazardous constituent, listed wastes containing lead as a regulated constituent, and hazardous media containing any of the aforementioned lead-containing wastes.

[61 FR 15663, Apr. 8, 1996, as amended at 61 FR 33682, June 28, 1996; 63 FR 28639, May 26, 1998]

§ 268.4: Treatment surface impoundment exemption.

(a) Wastes which are otherwise prohibited from land disposal under this part may be treated in a surface impoundment or series of impoundments provided that:

(1) Treatment of such wastes occurs in the impoundments;

(2) The following conditions are met:

(i) *Sampling and testing.* For wastes with treatment standards in subpart D of this part and/or prohibition levels in subpart C of this part or RCRA section 3004(d), the residues from treatment are analyzed, as specified in §268.7 or §268.32, to determine if they meet the applicable treatment standards or where no treatment standards have been established for the waste, the applicable prohibition levels. The sampling method, specified in the waste analysis plan under §264.13 or §265.13, must be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.

(ii) *Removal*. The following treatment residues (including any liquid waste) must be removed at least annually; residues which do not meet the treatment standards promulgated under subpart D of this part; residues which do not meet the prohibition levels established under subpart C of this part or imposed by statute (where no treatment standards have been established); residues which are from the treatment of wastes prohibited from land disposal under subpart C of this part (where no treatment standards have been established and no prohibition levels apply); or residues from managing listed wastes which are not delisted under §260.22 of this chapter. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, this flow-through constitutes removal of the supernatant for the purpose of this requirement.

(iii) *Subsequent management*. Treatment residues may not be placed in any other surface impoundment for subsequent management.

(iv) *Recordkeeping.* Sampling and testing and recordkeeping provisions of §§264.13 and 265.13 of this chapter apply.

(3) The impoundment meets the design requirements of §264.221(c) or §265.221(a) of this chapter, regardless that the unit may not be new, expanded, or a replacement, and be in compliance with applicable ground water monitoring requirements of subpart F of part 264 or part 265 of this chapter unless:

(i) Exempted pursuant to §264.221 (d) or (e) of this chapter, or to §265.221 (c) or (d) of this chapter; or,

(ii) Upon application by the owner or operator, the Administrator, after notice and an opportunity to comment, has granted a waiver of the requirements on the basis that the surface impoundment:

(A) Has at least one liner, for which there is no evidence that such liner is leaking;

(B) Is located more than one-quarter mile from an underground source of drinking water; and

(C) Is in compliance with generally applicable ground water monitoring requirements for facilities with permits; or,

(iii) Upon application by the owner or operator, the Administrator, after notice and an opportunity to comment, has granted a modification to the requirements on the basis of a demonstration that the surface impoundment is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(4) The owner or operator submits to the Regional Administrator a written certification that the requirements of §268.4(a)(3) have been met. The following certification is required:

I certify under penalty of law that the requirements of 40 CFR 268.4(a)(3) have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(b) Evaporation of hazardous constituents as the principal means of treatment is not considered to be treatment for purposes of an exemption under this section.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987, as amended at 52 FR 25788, July 8, 1987; 53 FR 31212, Aug. 17, 1988; 62 FR 26019, May 12, 1997; 63 FR 28639, May 26, 1998; 71 FR 40278, July 14, 2006]

§ 268.5: Procedures for case-by-case extensions to an effective date.

(a) Any person who generates, treats, stores, or disposes of a hazardous waste may submit an application to the Administrator for an extension to the effective date of any applicable restriction established under subpart C of this part. The applicant must demonstrate the following:

(1) He has made a good-faith effort to locate and contract with treatment, recovery, or disposal facilities nationwide to manage his waste in accordance with the effective date of the applicable restriction established under subpart C of this part;

(2) He has entered into a binding contractual commitment to construct or otherwise provide alternative treatment, recovery (e.g., recycling), or disposal capacity that meets the treatment standards specified in subpart D or, where treatment standards have not been specified, such treatment, recovery, or disposal capacity is protective of human health and the environment.

(3) Due to circumstances beyond the applicant's control, such alternative capacity cannot reasonably be made available by the applicable effective date. This demonstration may include a showing that the technical and practical difficulties associated with providing the alternative capacity will result in the capacity not being available by the applicable effective date;

(4) The capacity being constructed or otherwise provided by the applicant will be sufficient to manage the entire quantity of waste that is the subject of the application;

(5) He provides a detailed schedule for obtaining required operating and construction permits or an outline of how and when alternative capacity will be available;

(6) He has arranged for adequate capacity to manage his waste during an extension and has documented in the application the location of all sites at which the waste will be managed; and

(7) Any waste managed in a surface impoundment or landfill during the extension period will meet the requirements of paragraph (h)(2) of this section.

(b) An authorized representative signing an application described under paragraph (a) of this section shall make the following certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(c) After receiving an application for an extension, the Administrator may request any additional information which he deems as necessary to evaluate the application.

(d) An extension will apply only to the waste generated at the individual facility covered by the application and will not apply to restricted waste from any other facility.

(e) On the basis of the information referred to in paragraph (a) of this section, after notice and opportunity for comment, and after consultation with appropriate State agencies in all affected States, the Administrator may grant an extension of up to 1 year from the effective date. The Administrator may renew this extension for up to 1 additional year upon the request of the applicant if the demonstration required in paragraph (a) of this section can still be made. In no event will an extension extend beyond 24 months from the applicable effective date specified in subpart C of part 268. The length of any extension authorized will be determined by the Administrator based on the time required to construct or obtain the type of capacity needed by the applicant as described in the completion schedule discussed in paragraph (a)(5) of this section. The Administrator will give public notice of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition will be published in the Federal Register.

(f) Any person granted an extension under this section must immediately notify the Administrator as soon as he has knowledge of any change in the conditions certified to in the application.

(g) Any person granted an extension under this section shall submit written progress reports at intervals designated by the Administrator. Such reports must describe the overall progress made toward constructing or otherwise providing alternative treatment, recovery or disposal capacity; must identify any event which may cause or has caused a delay in the development of the capacity; and must summarize the steps taken to mitigate the delay. The Administrator can revoke the extension at any time if the applicant does not demonstrate a good-faith effort to meet the schedule for completion, if the Agency denies or revokes any required permit, if conditions certified in the application change, or for any violation of this chapter.

(h) Whenever the Administrator establishes an extension to an effective date under this section, during the period for which such extension is in effect:

(1) The storage restrictions under §268.50(a) do not apply; and

(2) Such hazardous waste may be disposed in a landfill or surface impoundment only if such unit is in compliance with the technical requirements of the following provisions regardless of whether such unit is existing, new, or a replacement or lateral expansion.

(i) The landfill, if in interim status, is in compliance with the requirements of subpart F of part 265 and §265.301 (a), (c), and (d) of this chapter; or,

(ii) The landfill, if permitted, is in compliance with the requirements of subpart F of part 264 and §264.301 (c), (d) and (e) of this chapter; or

(iii) The surface impoundment, if in interim status, is in compliance with the requirements of subpart F of part 265, §265.221 (a), (c), and (d) of this chapter, and RCRA section 3005(j)(1); or

(iv) The surface impoundment, if permitted, is in compliance with the requirements of subpart F of part 264 and §264.221 (c), (d) and (e) of this chapter; or

(v) The surface impoundment, if newly subject to RCRA section 3005(j)(1) due to the promulgation of additional listings or characteristics for the identification of hazardous waste, is in compliance with the requirements of subpart F of part 265 of this chapter within 12 months after the promulgation of additional listings or characteristics of hazardous waste, and with the requirements of §265.221 (a), (c) and (d) of this chapter within 48 months after the promulgation of additional listings or characteristics of hazardous waste. If a national capacity variance is granted, during the period the variance is in effect, the surface impoundment, if newly subject to RCRA section 3005(j)(1) due to the promulgation of additional listings or characteristics of hazardous waste, is in compliance with the requirements of subpart F of part 265 of this chapter within 12 months after the promulgation of additional listings or characteristics of hazardous waste, and with the requirements of §265.221 (a), (c) and (d) of this chapter within 48 months after the promulgation of additional listings or characteristics of hazardous waste; or

(vi) The landfill, if disposing of containerized liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm, is also in compliance with the requirements of 40 CFR 761.75 and parts 264 and 265.

(i) Pending a decision on the application the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987, as amended at 52 FR 25788, July 8, 1987; 54 FR 36971, Sept. 6, 1989; 55 FR 23935, June 13, 1990; 57 FR 37270, Aug. 18, 1992]

§ 268.6: Petitions to allow land disposal of a waste prohibited under subpart C of part 268.

(a) Any person seeking an exemption from a prohibition under subpart C of this part for the disposal of a restricted hazardous waste in a particular unit or units must submit a petition to the Administrator demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration must include the following components:

(1) An identification of the specific waste and the specific unit for which the demonstration will be made;

(2) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;

(3) A comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality.

(4) A monitoring plan that detects migration at the earliest practicable time;

(5) Sufficient information to assure the Administrator that the owner or operator of a land disposal unit receiving restricted waste(s) will comply with other applicable Federal, State, and local laws.

(b) The demonstration referred to in paragraph (a) of this section must meet the following criteria:

(1) All waste and environmental sampling, test, and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow;

(2) All sampling, testing, and estimation techniques for chemical and physical properties of the waste and all environmental parameters must have been approved by the Administrator;

(3) Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;

(4) A quality assurance and quality control plan that addresses all aspects of the demonstration must be approved by the Administrator; and,

(5) An analysis must be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis must include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or other natural phenomena.

(c) Each petition referred to in paragraph (a) of this section must include the following:

(1) A monitoring plan that describes the monitoring program installed at and/or around the unit to verify continued compliance with the conditions of the variance. This monitoring plan must provide information on the monitoring of the unit and/or the environment around the unit. The following specific information must be included in the plan:

(i) The media monitored in the cases where monitoring of the environment around the unit is required;

(ii) The type of monitoring conducted at the unit, in the cases where monitoring of the unit is required;

(iii) The location of the monitoring stations;

(iv) The monitoring interval (frequency of monitoring at each station);

(v) The specific hazardous constituents to be monitored;

(vi) The implementation schedule for the monitoring program;

(vii) The equipment used at the monitoring stations;

(viii) The sampling and analytical techniques employed; and

(ix) The data recording/reporting procedures.

(2) Where applicable, the monitoring program described in paragraph (c)(1) of this section must be in place for a period of time specified by the Administrator, as part of his approval of the petition, prior to receipt of prohibited waste at the unit.

(3) The monitoring data collected according to the monitoring plan specified under paragraph (c)(1) of this section must be sent to the Administrator according to a format and schedule specified and approved in the monitoring plan, and

(4) A copy of the monitoring data collected under the monitoring plan specified under paragraph (c)(1) of this section must be kept on-site at the facility in the operating record.

(5) The monitoring program specified under paragraph (c)(1) of this section meets the following criteria:

(i) All sampling, testing, and analytical data must be approved by the Administrator and must provide data that is accurate and reproducible.

(ii) All estimation and monitoring techniques must be approved by the Administrator.

(iii) A quality assurance and quality control plan addressing all aspects of the monitoring program must be provided to and approved by the Administrator.

(d) Each petition must be submitted to the Administrator.

(e) After a petition has been approved, the owner or operator must report any changes in conditions at the unit and/or the environment around the unit that significantly depart from the conditions described in the variance and affect the potential for migration of hazardous constituents from the units as follows:

(1) If the owner or operator plans to make changes to the unit design, construction, or operation, such a change must be proposed, in writing, and the owner or operator must submit a demonstration to the Administrator at least 30 days prior to making the change. The Administrator will determine whether the proposed change invalidates the terms of the petition and will determine the appropriate response. Any change must be approved by the Administrator prior to being made.

(2) If the owner or operator discovers that a condition at the site which was modeled or predicted in the petition does not occur as predicted, this change must be reported, in writing, to the Administrator within 10 days of discovering the change. The Administrator will determine whether the reported change from the terms of the petition requires further action, which may include termination of waste acceptance and revocation of the petition, petition modifications, or other responses.

(f) If the owner or operator determines that there is migration of hazardous constituent(s) from the unit, the owner or operator must:

(1) Immediately suspend receipt of prohibited waste at the unit, and

(2) Notify the Administrator, in writing, within 10 days of the determination that a release has occurred.

(3) Following receipt of the notification the Administrator will determine, within 60 days of receiving notification, whether the owner or operator can continue to receive prohibited waste in the unit and whether the variance is to be revoked. The Administrator shall also determine whether further examination of any migration is warranted under applicable provisions of part 264 or part 265.

(g) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(h) After receiving a petition, the Administrator may request any additional information that reasonably may be required to evaluate the demonstration.

(i) If approved, the petition will apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and will not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.

(j) The Administrator will give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition will be published in the Federal Register.

(k) The term of a petition granted under this section shall be no longer than the term of the RCRA permit if the disposal unit is operating under a RCRA permit, or up to a maximum of 10 years from the date of approval provided under paragraph (g) of this section if the unit is operating under interim status. In either case, the term of the granted petition shall expire upon the termination or denial of a RCRA permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.

(l) Prior to the Administrator's decision, the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

(m) The petition granted by the Administrator does not relieve the petitioner of his responsibilities in the management of hazardous waste under 40 CFR part 260 through part 271.

(n) Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 500 ppm are not eligible for an exemption under this section.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987, as amended at 52 FR 25789, July 8, 1987; 53 FR 31212, Aug. 17, 1988; 54 FR 36971, Sept. 6, 1989; 71 FR 40278, July 14, 2006]

§ 268.7: Testing, tracking, and recordkeeping requirements for generators, treaters, and disposal facilities.

(a) *Requirements for generators:* (1) A generator of hazardous waste must determine if the waste has to be treated before it can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in §268.40, 268.45, or §268.49. This determination can be made concurrently with the hazardous waste determination required in §262.11 of this chapter, in either of two ways: testing the waste or using knowledge of the waste. If the generator tests the waste, testing would normally determine the total concentration of hazardous constituents, or the concentration of hazardous constituents in an extract of the waste obtained using test method 1311 in “Test Methods of Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW–846, (incorporated by reference, see §260.11 of this chapter), depending on whether the treatment standard for the waste is expressed as a total concentration or concentration of hazardous constituent in the waste's extract. (Alternatively, the generator must send the waste to a RCRA-permitted hazardous waste treatment facility, where the waste treatment facility must comply with the requirements of §264.13 of this chapter and paragraph (b) of this section.) In addition, some hazardous wastes must be treated by particular treatment methods before they can be land disposed and some soils are contaminated by such

hazardous wastes. These treatment standards are also found in §268.40, and are described in detail in §268.42, Table 1. These wastes, and soils contaminated with such wastes, do not need to be tested (however, if they are in a waste mixture, other wastes with concentration level treatment standards would have to be tested). If a generator determines they are managing a waste or soil contaminated with a waste, that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, they must comply with the special requirements of §268.9 of this part in addition to any applicable requirements in this section.

(2) If the waste or contaminated soil does not meet the treatment standards, or if the generator chooses not to make the determination of whether his waste must be treated, with the initial shipment of waste to each treatment or storage facility, the generator must send a one-time written notice to each treatment or storage facility receiving the waste, and place a copy in the file. The notice must include the information in column "268.7(a)(2)" of the Generator Paperwork Requirements Table in paragraph (a)(4) of this section. (Alternatively, if the generator chooses not to make the determination of whether the waste must be treated, the notification must include the EPA Hazardous Waste Numbers and Manifest Number of the first shipment and must state "This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination.") No further notification is necessary until such time that the waste or facility change, in which case a new notification must be sent and a copy placed in the generator's file.

(3) If the waste or contaminated soil meets the treatment standard at the original point of generation:

(i) With the initial shipment of waste to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each treatment, storage, or disposal facility receiving the waste, and place a copy in the file. The notice must include the information indicated in column "268.7(a)(3)" of the Generator Paperwork Requirements Table in §268.7(a)(4) and the following certification statement, signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR part 268 subpart D. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(ii) For contaminated soil, with the initial shipment of wastes to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each facility receiving the waste and place a copy in the file. The notice must include the information in column "268.7(a)(3)" of the Generator Paperwork Requirements Table in §268.7(a)(4).

(iii) If the waste changes, the generator must send a new notice and certification to the receiving facility, and place a copy in their files. Generators of hazardous debris excluded from the definition of hazardous waste under §261.3(f) of this chapter are not subject to these requirements.

(4) For reporting, tracking, and recordkeeping when exceptions allow certain wastes or contaminated soil that do not meet the treatment standards to be land disposed: There are certain exemptions from the requirement that hazardous wastes or contaminated soil meet treatment standards before they can be land disposed. These include, but are not limited to case-by-case extensions under §268.5, disposal in a no-migration unit under §268.6, or a national capacity variance or case-by-case capacity variance under subpart C of this part. If a generator's waste is so exempt, then with the initial shipment of waste, the generator must send a one-time written notice to each land disposal facility receiving the waste. The notice must include the information indicated in column "268.7(a)(4)" of the Generator Paperwork Requirements Table below. If the waste changes, the generator must send a new notice to the receiving facility, and place a copy in their files.

Generator Paperwork Requirements Table

Required information	§268.7 (a)(2)	§268.7 (a)(3)	§268.7 (a)(4)	§268.7 (a)(9)
1. EPA Hazardous Waste Numbers and Manifest Number of first shipment	✓	✓	✓	✓
2. Statement: this waste is not prohibited from land disposal			✓	
3. The waste is subject to the LDRs. The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice	✓	✓		
4. The notice must include the applicable wastewater/nonwastewater category (see §§ 268.2(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide)	✓	✓		
5. Waste analysis data (when available)	✓	✓	✓	
6. Date the waste is subject to the prohibition			✓	
7. For hazardous debris, when treating with the alternative treatment technologies provided by §268.45: the contaminants subject to treatment, as described in § 268.45(b); and an indication that these contaminants are being treated to comply with § 268.45	✓		✓	
8. For contaminated soil subject to LDRs as	✓	✓		

provided in § 268.49(a), the constituents subject to treatment as described in § 268.49(d), and the following statement: This contaminated soil [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and [is subject to/complies with] the soil treatment standards as provided by § 268.49(c) or the universal treatment standards				
9. A certification is needed (see applicable section for exact wording)		✓		✓

(5) If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under 40 CFR 262.34 to meet applicable LDR treatment standards found at §268.40, the generator must develop and follow a written waste analysis plan which describes the procedures they will carry out to comply with the treatment standards. (Generators treating hazardous debris under the alternative treatment standards of Table 1, §268.45, however, are not subject to these waste analysis requirements.) The plan must be kept on site in the generator's records, and the following requirements must be met:

(i) The waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the prohibited waste(s) being treated, and contain all information necessary to treat the waste(s) in accordance with the requirements of this part, including the selected testing frequency.

(ii) Such plan must be kept in the facility's on-site files and made available to inspectors.

(iii) Wastes shipped off-site pursuant to this paragraph must comply with the notification requirements of §268.7(a)(3).

(6) If a generator determines that the waste or contaminated soil is restricted based solely on his knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines that the waste is restricted based on testing this waste or an extract developed using the test method 1311 in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW–846, as referenced in §260.11 of this chapter, and all waste analysis data must be retained on-site in the generator's files.

(7) If a generator determines that he is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or is exempted from Subtitle C regulation under 40 CFR 261.2 through 261.6 subsequent to the point of generation (including deactivated characteristic hazardous wastes managed in wastewater treatment systems subject to the Clean Water Act (CWA) as specified at 40 CFR 261.4(a)(2) or that are CWA-equivalent, or are managed in an underground injection well regulated by the SDWA), he must place a one-time notice describing such generation, subsequent exclusion from the definition of

hazardous or solid waste or exemption from RCRA Subtitle C regulation, and the disposition of the waste, in the facility's on-site files.

(8) Generators must retain on-site a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to this section for at least three years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal. The three year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator. The requirements of this paragraph apply to solid wastes even when the hazardous characteristic is removed prior to disposal, or when the waste is excluded from the definition of hazardous or solid waste under 40 CFR 261.2 through 261.6, or exempted from Subtitle C regulation, subsequent to the point of generation.

(9) If a generator is managing a lab pack containing hazardous wastes and wishes to use the alternative treatment standard for lab packs found at §268.42(c):

(i) With the initial shipment of waste to a treatment facility, the generator must submit a notice that provides the information in column "§268.7(a)(9)" in the Generator Paperwork Requirements Table of paragraph (a)(4) of this section, and the following certification. The certification, which must be signed by an authorized representative and must be placed in the generator's files, must say the following:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under appendix IV to 40 CFR part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(ii) No further notification is necessary until such time that the wastes in the lab pack change, or the receiving facility changes, in which case a new notice and certification must be sent and a copy placed in the generator's file.

(iii) If the lab pack contains characteristic hazardous wastes (D001–D043), underlying hazardous constituents (as defined in §268.2(i)) need not be determined.

(iv) The generator must also comply with the requirements in paragraphs (a)(6) and (a)(7) of this section.

(10) Small quantity generators with tolling agreements pursuant to 40 CFR 262.20(e) must comply with the applicable notification and certification requirements of paragraph (a) of this section for the initial shipment of the waste subject to the agreement. Such generators must retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

(b) Treatment facilities must test their wastes according to the frequency specified in their waste analysis plans as required by 40 CFR 264.13 (for permitted TSDs) or 40 CFR 265.13 (for interim status facilities). Such testing must be performed as provided in paragraphs (b)(1), (b)(2) and (b)(3) of this section.

(1) For wastes or contaminated soil with treatment standards expressed in the waste extract (TCLP), the owner or operator of the treatment facility must test an extract of the treatment residues, using test method 1311 (the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846 as incorporated by reference in §260.11 of this chapter) to assure that the treatment residues extract meet the applicable treatment standards.

(2) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility must test the treatment residues (not an extract of such residues) to assure that they meet the applicable treatment standards.

(3) A one-time notice must be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice must be placed in the treatment facility's file.

(i) No further notification is necessary until such time that the waste or receiving facility change, in which case a new notice must be sent and a copy placed in the treatment facility's file.

(ii) The one-time notice must include these requirements:

Treatment Facility Paperwork Requirements Table

Required Information	§268.7(b)
1. EPA Hazardous Waste Numbers and Manifest Number of first shipment	✓
2. The waste is subject to the LDRs. The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice	✓
3. The notice must include the applicable wastewater/ nonwastewater category (see §§ 268.2(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide)	✓
4. Waste analysis data (when available)	✓
5. For contaminated soil subject to LDRs as provided in 268.49(a), the constituents subject to treatment as described in 268.49(d) and the following statement, ``this contaminated soil [does/does not] exhibit a	✓

characteristic of hazardous waste and [is subject to/complies with] the soil treatment standards as provided by 268.49(c)"	
6. A certification is needed (see applicable section for exact wording)	✓

(4) The treatment facility must submit a one-time certification signed by an authorized representative with the initial shipment of waste or treatment residue of a restricted waste to the land disposal facility. The certification must state:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

A certification is also necessary for contaminated soil and it must state:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 40 CFR 268.49 without impermissible dilution of the prohibited wastes. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(i) A copy of the certification must be placed in the treatment facility's on-site files. If the waste or treatment residue changes, or the receiving facility changes, a new certification must be sent to the receiving facility, and a copy placed in the file.

(ii) Debris excluded from the definition of hazardous waste under §261.3(f) of this chapter (i.e., debris treated by an extraction or destruction technology provided by Table 1, §268.45, and debris that the Director has determined does not contain hazardous waste), however, is subject to the notification and certification requirements of paragraph (d) of this section rather than the certification requirements of this paragraph.

(iii) For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in whole or in part on the analytical detection limit alternative specified in §268.40(d), the certification, signed by an authorized representative, must state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in 268.42, Table 1. I have been unable to detect the nonwastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(iv) For characteristic wastes that are subject to the treatment standards in §268.40 (other than those expressed as a method of treatment), or §268.49, and that contain underlying

hazardous constituents as defined in §268.2(i); if these wastes are treated on-site to remove the hazardous characteristic; and are then sent off-site for treatment of underlying hazardous constituents, the certification must state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(v) For characteristic wastes that contain underlying hazardous constituents as defined §268.2(i) that are treated on-site to remove the hazardous characteristic to treat underlying hazardous constituents to levels in §268.48 Universal Treatment Standards, the certification must state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic and that underlying hazardous constituents, as defined in §268.2(i) have been treated on-site to meet the §268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(5) If the waste or treatment residue will be further managed at a different treatment, storage, or disposal facility, the treatment, storage, or disposal facility sending the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under this section.

(6) Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of §266.20(b) of this chapter regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (*i.e.*, the recycler) must, for the initial shipment of waste, prepare a one-time certification described in paragraph (b)(4) of this section, and a one-time notice which includes the information in paragraph (b)(3) of this section (except the manifest number). The certification and notification must be placed in the facility's on-site files. If the waste or the receiving facility changes, a new certification and notification must be prepared and placed in the on site files. In addition, the recycling facility must also keep records of the name and location of each entity receiving the hazardous waste-derived product.

(c) Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to 40 CFR 266.20(b), the owner or operator of any land disposal facility disposing any waste subject to restrictions under this part must:

(1) Have copies of the notice and certifications specified in paragraph (a) or (b) of this section.

(2) Test the waste, or an extract of the waste or treatment residue developed using test method 1311 (the Toxicity Characteristic Leaching Procedure, described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication

SW–846 as incorporated by reference in §260.11 of this chapter), to assure that the wastes or treatment residues are in compliance with the applicable treatment standards set forth in subpart D of this part. Such testing must be performed according to the frequency specified in the facility's waste analysis plan as required by §264.13 or §265.13 of this chapter.

(d) Generators or treaters who first claim that hazardous debris is excluded from the definition of hazardous waste under §261.3(f) of this chapter (i.e., debris treated by an extraction or destruction technology provided by Table 1, §268.45, and debris that the EPA Regional Administrator (or his designated representative) or State authorized to implement part 268 requirements has determined does not contain hazardous waste) are subject to the following notification and certification requirements:

(1) A one-time notification, including the following information, must be submitted to the EPA Regional hazardous waste management division director (or his designated representative) or State authorized to implement part 268 requirements:

(i) The name and address of the Subtitle D facility receiving the treated debris;

(ii) A description of the hazardous debris as initially generated, including the applicable EPA Hazardous Waste Number(s); and

(iii) For debris excluded under §261.3(f)(1) of this chapter, the technology from Table 1, §268.45, used to treat the debris.

(2) The notification must be updated if the debris is shipped to a different facility, and, for debris excluded under §261.2(f)(1) of this chapter, if a different type of debris is treated or if a different technology is used to treat the debris.

(3) For debris excluded under §261.3(f)(1) of this chapter, the owner or operator of the treatment facility must document and certify compliance with the treatment standards of Table 1, §268.45, as follows:

(i) Records must be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards;

(ii) Records must be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit; and

(iii) For each shipment of treated debris, a certification of compliance with the treatment standards must be signed by an authorized representative and placed in the facility's files. The certification must state the following: “I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment.”

(e) Generators and treaters who first receive from EPA or an authorized state a determination that a given contaminated soil subject to LDRs as provided in §268.49(a) no longer contains a listed hazardous waste and generators and treaters who first determine that a contaminated soil subject to LDRs as provided in §268.49(a) no longer exhibits a characteristic of hazardous waste must:

(1) Prepare a one-time only documentation of these determinations including all supporting information; and,

(2) Maintain that information in the facility files and other records for a minimum of three years.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987]

Editorial Note: For Federal Register citations affecting §268.7, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 268.8 [Reserved]

§ 268.9 Special rules regarding wastes that exhibit a characteristic.

(a) The initial generator of a solid waste must determine each EPA Hazardous Waste Number (waste code) applicable to the waste in order to determine the applicable treatment standards under subpart D of this part. This determination may be made concurrently with the hazardous waste determination required in §262.11 of this chapter. For purposes of part 268, the waste will carry the waste code for any applicable listed waste (40 CFR part 261, subpart D). In addition, where the waste exhibits a characteristic, the waste will carry one or more of the characteristic waste codes (40 CFR part 261, subpart C), except when the treatment standard for the listed waste operates in lieu of the treatment standard for the characteristic waste, as specified in paragraph (b) of this section. If the generator determines that their waste displays a hazardous characteristic (and is not D001 nonwastewaters treated by CMBST, RORGS, OR POLYM of §268.42, Table 1), the generator must determine the underlying hazardous constituents (as defined at §268.2(i)) in the characteristic waste.

(b) Where a prohibited waste is both listed under 40 CFR part 261, subpart D and exhibits a characteristic under 40 CFR part 261, subpart C, the treatment standard for the waste code listed in 40 CFR part 261, subpart D will operate in lieu of the standard for the waste code under 40 CFR part 261, subpart C, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.

(c) In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under 40 CFR part 261, subpart C

may be land disposed unless the waste complies with the treatment standards under subpart D of this part.

(d) Wastes that exhibit a characteristic are also subject to §268.7 requirements, except that once the waste is no longer hazardous, a one-time notification and certification must be placed in the generator's or treater's on-site files. The notification and certification must be updated if the process or operation generating the waste changes and/or if the subtitle D facility receiving the waste changes.

(1) The notification must include the following information:

(i) Name and address of the RCRA Subtitle D facility receiving the waste shipment; and

(ii) A description of the waste as initially generated, including the applicable EPA hazardous waste code(s), treatability group(s), and underlying hazardous constituents (as defined in §268.2(i)), unless the waste will be treated and monitored for all underlying hazardous constituents. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any of the underlying hazardous constituents on the notice.

(2) The certification must be signed by an authorized representative and must state the language found in §268.7(b)(4).

(i) If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification found in §268.7(b)(4)(iv) applies.

(ii) [Reserved]

[55 FR 22688, June 1, 1990, as amended at 56 FR 3878, Jan. 31, 1991; 57 FR 37271, Aug. 18, 1992; 58 FR 29885, May 24, 1993; 59 FR 48045, Sept. 19, 1994; 60 FR 245, Jan. 3, 1995; 61 FR 15599, 15662, Apr. 8, 1996; 62 FR 26022, May 12, 1997; 64 FR 25415, May 11, 1999; 71 FR 16913, Apr. 4, 2006]

Subpart B—Schedule for Land Disposal Prohibition and Establishment of Treatment Standards

Source: 51 FR 19305, May 28, 1986, unless otherwise noted.

§§ 268.10-268.12 [Reserved]

§ 268.13 Schedule for wastes identified or listed after November 8, 1984.

In the case of any hazardous waste identified or listed under section 3001 after November 8, 1984, the Administrator shall make a land disposal prohibition determination within 6 months after the date of identification or listing.

§ 268.14 Surface impoundment exemptions.

(a) This section defines additional circumstances under which an otherwise prohibited waste may continue to be placed in a surface impoundment.

(b) Wastes which are newly identified or listed under section 3001 after November 8, 1984, and stored in a surface impoundment that is newly subject to subtitle C of RCRA as a result of the additional identification or listing, may continue to be stored in the surface impoundment for 48 months after the promulgation of the additional listing or characteristic, notwithstanding that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of subpart F of part 265 of this chapter within 12 months after promulgation of the new listing or characteristic.

(c) Wastes which are newly identified or listed under section 3001 after November 8, 1984, and treated in a surface impoundment that is newly subject to subtitle C of RCRA as a result of the additional identification or listing, may continue to be treated in that surface impoundment, notwithstanding that the waste is otherwise prohibited from land disposal, provided that surface impoundment is in compliance with the requirements of subpart F of part 265 of this chapter within 12 months after the promulgation of the new listing or characteristic. In addition, if the surface impoundment continues to treat hazardous waste after 48 months from promulgation of the additional listing or characteristic, it must then be in compliance with §268.4.

[57 FR 37271, Aug. 18, 1992, as amended at 71 FR 40278, July 14, 2006]

Subpart C—Prohibitions on Land Disposal

§ 268.20 Waste specific prohibitions—Dyes and/or pigments production wastes.

(a) Effective August 23, 2005, the waste specified in 40 CFR part 261 as EPA Hazardous Waste Number K181, and soil and debris contaminated with this waste, radioactive wastes mixed with this waste, and soil and debris contaminated with radioactive wastes mixed with this waste are prohibited from land disposal.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this Part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under §268.44;

(4) Hazardous debris has met the treatment standards in §268.40 or the alternative treatment standards in §268.45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract of the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable subpart D levels, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

[70 FR 9177, Feb. 24, 2005]

§§ 268.21-268.29 [Reserved]

§ 268.30 Waste specific prohibitions—wood preserving wastes.

(a) Effective August 11, 1997, the following wastes are prohibited from land disposal: the wastes specified in 40 CFR part 261 as EPA Hazardous Waste numbers F032, F034, and F035.

(b) Effective May 12, 1999, the following wastes are prohibited from land disposal: soil and debris contaminated with F032, F034, F035; and radioactive wastes mixed with EPA Hazardous waste numbers F032, F034, and F035.

(c) Between May 12, 1997 and May 12, 1999, soil and debris contaminated with F032, F034, F035; and radioactive waste mixed with F032, F034, and F035 may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in §268.5(h)(2) of this part.

(d) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in Subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under §268.44; or

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to those wastes covered by the extension.

(e) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Universal Treatment Standard levels of §268.48 of this part, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

[62 FR 26022, May 12, 1997]

§ 268.31 Waste specific prohibitions—Dioxin-containing wastes.

(a) Effective November 8, 1988, the dioxin-containing wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Nos. F020, F02l, F022, F023, F026, F027, and F028, are prohibited from land disposal unless the following condition applies:

(1) The F020–F023 and F026–F028 dioxin-containing waste is contaminated soil and debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or a corrective action taken under subtitle C of the Resource Conservation and Recovery Act (RCRA).

(b) Effective November 8, 1990, the F020–F023 and F026–F028 dioxin-containing wastes listed in paragraph (a)(1) of this section are prohibited from land disposal.

(c) Between November 8, 1988, and November 8, 1990, wastes included in paragraph (a)(1) of this section may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in §268.5(h)(2) and all other applicable requirements of parts 264 and 265 of this chapter.

(d) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes meet the standards of subpart D of this part; or

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition; or

(3) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to those wastes covered by the extension.

[53 FR 31216, Aug. 17, 1988]

§ 268.32 Waste specific prohibitions—Soils exhibiting the toxicity characteristic for metals and containing PCBs.

(a) Effective December 26, 2000, the following wastes are prohibited from land disposal: any volumes of soil exhibiting the toxicity characteristic solely because of the presence of metals (D004—D011) and containing PCBs.

(b) The requirements of paragraph (a) of this section do not apply if:

(1)(i) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

(ii) The wastes meet the treatment standards specified in Subpart D of this part for EPA hazardous waste numbers D004—D011, as applicable; or

(2)(i) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

(ii) The wastes meet the alternative treatment standards specified in §268.49 for contaminated soil; or

(3) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition; or

(4) The wastes meet applicable alternative treatment standards established pursuant to a petition granted under §268.44.

[65 FR 81380, Dec. 26, 2000]

§ 268.33 Waste specific prohibitions—chlorinated aliphatic wastes.

(a) Effective May 8, 2001, the wastes specified in 40 CFR part 261 as EPA Hazardous Wastes Numbers K174, and K175, soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under §268.44;

(4) Hazardous debris has met the treatment standards in §268.40 or the alternative treatment standards in §268.45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels of subpart D of this part, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

(d) Disposal of K175 wastes that have complied with all applicable 40 CFR 268.40 treatment standards must also be macroencapsulated in accordance with 40 CFR 268.45 Table 1 unless the waste is placed in:

(1) A Subtitle C monofill containing only K175 wastes that meet all applicable 40 CFR 268.40 treatment standards; or

(2) A dedicated Subtitle C landfill cell in which all other wastes being co-disposed are at pH≤6.0.

[65 FR 67127, Nov. 8, 2000]

§ 268.34 Waste specific prohibitions—toxicity characteristic metal wastes.

(a) Effective August 24, 1998, the following wastes are prohibited from land disposal: the wastes specified in 40 CFR Part 261 as EPA Hazardous Waste numbers D004–D011 that are newly identified (i.e. wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure), and waste, soil, or debris from mineral processing operations that is identified as hazardous by the specifications at 40 CFR Part 261.

(b) Effective November 26, 1998, the following waste is prohibited from land disposal: Slag from secondary lead smelting which exhibits the Toxicity Characteristic due to the presence of one or more metals.

(c) Effective May 26, 2000, the following wastes are prohibited from land disposal: newly identified characteristic wastes from elemental phosphorus processing; radioactive wastes mixed with EPA Hazardous wastes D004–D011 that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure); or mixed with newly identified characteristic mineral processing wastes, soil, or debris.

(d) Between May 26, 1998 and May 26, 2000, newly identified characteristic wastes from elemental phosphorus processing, radioactive waste mixed with D004–D011 wastes that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic

Characteristic Leaching Procedure but not the Extraction Procedure), or mixed with newly identified characteristic mineral processing wastes, soil, or debris may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in §268.5(h) of this part.

(e) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this part:

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under §268.44; or

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(f) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentration in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents (including underlying hazardous constituents in characteristic wastes) in excess of the applicable Universal Treatment Standard levels of §268.48 of this part, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

[63 FR 28641, May 26, 1998, as amended at 63 FR 48127, Sept. 9, 1998]

§ 268.35 Waste specific prohibitions—petroleum refining wastes.

(a) Effective February 8, 1999, the wastes specified in 40 CFR part 261 as EPA Hazardous Wastes Numbers K169, K170, K171, and K172, soils and debris contaminated with these wastes, radioactive wastes mixed with these hazardous wastes, and soils and debris contaminated with these radioactive mixed wastes, are prohibited from land disposal.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in Subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under §268.44;

(4) Hazardous debris that have met treatment standards in §268.40 or in the alternative treatment standards in §268.45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Universal Treatment Standard levels of §268.48, the waste is prohibited from land disposal, and all requirements of this part are applicable, except as otherwise specified.

[63 FR 42186, Aug. 6, 1998]

§ 268.36 Waste specific prohibitions—inorganic chemical wastes

(a) Effective May 20, 2002, the wastes specified in 40 CFR part 261 as EPA Hazardous Wastes Numbers K176, K177, and K178, and soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under §268.44;

(4) Hazardous debris has met the treatment standards in §268.40 or the alternative treatment standards in §268.45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment

standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable subpart D levels, the waste is prohibited from land disposal, and all requirements of this part are applicable, except as otherwise specified.

[66 FR 58298, Nov. 20, 2001]

§ 268.37 Waste specific prohibitions—ignitable and corrosive characteristic wastes whose treatment standards were vacated.

(a) Effective August 9, 1993, the wastes specified in 40 CFR 261.21 as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in §261.22 as D002, that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies.

(b) Effective February 10, 1994, the wastes specified in 40 CFR 261.21 as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in §261.22 as D002, that are managed in systems defined in 40 CFR 144.6(e) and 146.6(e) as Class V injection wells, that do not engage in CWA-equivalent treatment before injection, are prohibited from land disposal.

[58 FR 29885, May 24, 1993]

§ 268.38 Waste specific prohibitions—newly identified organic toxicity characteristic wastes and newly listed coke by-product and chlorotoluene production wastes.

(a) Effective December 19, 1994, the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste numbers K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151 are prohibited from land disposal. In addition, debris contaminated with EPA Hazardous Waste numbers F037, F038, K107–K112, K117, K118, K123–K126, K131, K132, K136, U328, U353, U359, and soil and debris contaminated with D012–D043, K141–K145, and K147–K151 are prohibited from land disposal. The following wastes that are specified in 40 CFR 261.24, Table 1 as EPA Hazardous Waste numbers: D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043 that are not radioactive, or that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that are zero dischargers that do not engage in CWA-equivalent treatment before ultimate land disposal, or that are injected in Class I deep wells regulated under the Safe Drinking

Water Act (SDWA), are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/ sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or better than these technologies.

(b) On September 19, 1996, radioactive wastes that are mixed with D018–D043 that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/ sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies. Radioactive wastes mixed with K141–K145, and K147–K151 are also prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

(c) Between December 19, 1994 and September 19, 1996, the wastes included in paragraphs (b) of this section may be disposed in a landfill or surface impoundment, only if such unit is in compliance with the requirements specified in §268.5(h)(2) of this Part.

(d) The requirements of paragraphs (a), (b), and (c) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in Subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under §268.44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(e) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Subpart D levels, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

[59 FR 48045, Sept. 19, 1995]

§ 268.39 Waste specific prohibitions—spent aluminum potliners; reactive; and carbamate wastes.

(a) On July 8, 1996, the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste numbers K156–K159, and K161; and in 40 CFR 261.33 as EPA Hazardous Waste numbers P127, P128, P185, P188–P192, P194, P196–P199, P201–P205, U271, U278–U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409–U411 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

(b) On July 8, 1996, the wastes identified in 40 CFR 261.23 as D003 that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. This prohibition does not apply to unexploded ordnance and other explosive devices which have been the subject of an emergency response. (Such D003 wastes are prohibited unless they meet the treatment standard of DEACT before land disposal (see §268.40)).

(c) On September 21, 1998, the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste number K088 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

(d) On April 8, 1998, radioactive wastes mixed with K088, K156–K159, K161, P127, P128, P185, P188–P192, P194, P196–P199, P201–P205, U271, U278–U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409–U411 are prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

(e) Between July 8, 1996, and April 8, 1998, the wastes included in paragraphs (a), (c), and (d) of this section may be disposed in a landfill or surface impoundment, only if such unit is in compliance with the requirements specified in §268.5(h)(2).

(f) The requirements of paragraphs (a), (b), (c), and (d) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in Subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under §268.44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(g) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Subpart D levels, the waste is prohibited from land disposal, and all requirements of this part 268 are applicable, except as otherwise specified.

[61 FR 15663, Apr. 8, 1996, as amended at 61 FR 33683, June 28, 1996; 62 FR 1997, Jan. 14, 1997; 62 FR 32979, June 17, 1997; 62 FR 37699, July 14, 1997; 63 FR 51264, Sept. 24, 1998]

Subpart D—Treatment Standards

§ 268.40 Applicability of treatment standards.

(a) A prohibited waste identified in the table "Treatment Standards for Hazardous Wastes" may be land disposed only if it meets the requirements found in the table. For each waste, the table identifies one of three types of treatment standard requirements:

(1) All hazardous constituents in the waste or in the treatment residue must be at or below the values found in the table for that waste ("total waste standards"); or

(2) The hazardous constituents in the extract of the waste or in the extract of the treatment residue must be at or below the values found in the table ("waste extract standards"); or

(3) The waste must be treated using the technology specified in the table ("technology standard"), which are described in detail in §268.42, Table 1—Technology Codes and Description of Technology-Based Standards.

(b) For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846, as incorporated by reference in §260.11, must be used to measure compliance. An exception is made for D004 and D008, for which either of two test methods may be used: Method 1311, or Method 1310B, the Extraction Procedure Toxicity Test. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the Administrator under the procedures set forth in §268.42(b).

(c) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.

(d) Notwithstanding the prohibitions specified in paragraph (a) of this section, treatment and disposal facilities may demonstrate (and certify pursuant to 40 CFR 268.7(b)(5)) compliance with the treatment standards for organic constituents specified by a footnote in the table "Treatment Standards for Hazardous Wastes" in this section, provided the following conditions are satisfied:

(1) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart O, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

(2) The treatment or disposal facility has used the methods referenced in paragraph (d)(1) of this section to treat the organic constituents; and

(3) The treatment or disposal facility may demonstrate compliance with organic constituents if good-faith analytical efforts achieve detection limits for the regulated organic constituents that do not exceed the treatment standards specified in this section by an order of magnitude.

(e) For characteristic wastes (D001–D043) that are subject to treatment standards in the following table "Treatment Standards for Hazardous Wastes," and are not managed in a wastewater treatment system that is regulated under the Clean Water Act (CWA), that is CWA-equivalent, or that is injected into a Class I nonhazardous deep injection well, all underlying hazardous constituents (as defined in §268.2(i)) must meet Universal Treatment Standards, found in §268.48, Table Universal Treatment Standards, prior to land disposal as defined in §268.2(c) of this part.

(f) The treatment standards for F001–F005 nonwastewater constituents carbon disulfide, cyclohexanone, and/or methanol apply to wastes which contain only one, two, or three of these constituents. Compliance is measured for these constituents in the waste extract from test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW–846, as incorporated by reference in §260.11. If the waste contains any of these three constituents along with any of the other 25 constituents found in F001–F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, and/or methanol are not required.

(g) Between August 26, 1996 and March 4, 1999 the treatment standards for the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste numbers K156–K161; and in 40 CFR 261.33 as EPA Hazardous Waste numbers P127, P128, P185, P188–P192, P194, P196–P199, P201–P205, U271, U277–U280, U364–U367, U372, U373, U375–U379, U381–U387, U389–U396, U400–U404, U407, and U409–U411; and soil contaminated

with these wastes; may be satisfied by either meeting the constituent concentrations presented in the table "Treatment Standards for Hazardous Wastes" in this section, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at §268.42 Table 1, for nonwastewaters; and, biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at §268.42 Table 1, for wastewaters.

(h) Prohibited D004–D011 mixed radioactive wastes and mixed radioactive listed wastes containing metal constituents, that were previously treated by stabilization to the treatment standards in effect at that time and then put into storage, do not have to be re-treated to meet treatment standards in this section prior to land disposal.

(i) [Reserved]

(j) Effective September 4, 1998, the treatment standards for the wastes specified in 40 CFR 261.33 as EPA Hazardous Waste numbers P185, P191, P192, P197, U364, U394, and U395 may be satisfied by either meeting the constituent concentrations presented in the table "Treatment Standards for Hazardous Wastes" in this section, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at §268.42 Table 1 of this Part, for nonwastewaters; and, biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at §268.42 Table 1 of this Part, for wastewaters.

TABLE: TREATMENT STANDARDS FOR HAZARDOUS WASTE

[59 FR 48046, Sept. 19, 1994]

Editorial Note: For Federal Register citations affecting §268.40, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 268.41 Treatment standards expressed as concentrations in waste extract.

For the requirements previously found in this section and for treatment standards in Table CCWE—Constituent Concentrations in Waste Extracts, refer to §268.40.

[59 FR 48103, Sept. 19, 1994]

§ 268.42 Treatment standards expressed as specified technologies.

Note: For the requirements previously found in this section in Table 2—Technology-Based Standards By RCRA Waste Code, and Table 3—Technology-Based Standards for Specific Radioactive Hazardous Mixed Waste, refer to §268.40.

(a) The following wastes in the table in §268.40 “Treatment Standards for Hazardous Wastes,” for which standards are expressed as a treatment method rather than a concentration level, must be treated using the technology or technologies specified in the table entitled “Technology Codes and Description of Technology-Based Standards” in this section.

TABLE: TECHNOLOGY CODES AND DESCRIPTIONS OF TECHNOLOGY-BASED STANDARDS.

(b) Any person may submit an application to the Administrator demonstrating that an alternative treatment method can achieve a measure of performance equivalent to that achieved by methods specified in paragraphs (a), (c), and (d) of this section for wastes or specified in Table 1 of §268.45 for hazardous debris. The applicant must submit information demonstrating that his treatment method is in compliance with federal, state, and local requirements and is protective of human health and the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in paragraphs (a), (c), and (d) of this section for wastes or in Table 1 of §268.45 for hazardous debris. Any approval must be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such approval is issued must comply with all limitations contained in such a determination.

(c) As an alternative to the otherwise applicable subpart D treatment standards, lab packs are eligible for land disposal provided the following requirements are met:

(1) The lab packs comply with the applicable provisions of 40 CFR 264.316 and 40 CFR 265.316;

(2) The lab pack does not contain any of the wastes listed in Appendix IV to part 268;

(3) The lab packs are incinerated in accordance with the requirements of 40 CFR part 264, subpart O or 40 CFR part 265, subpart O; and

(4) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in subpart D of this part.

(d) Radioactive hazardous mixed wastes are subject to the treatment standards in §268.40. Where treatment standards are specified for radioactive mixed wastes in the Table of Treatment Standards, those treatment standards will govern. Where there is no specific treatment standard for radioactive mixed waste, the treatment standard for the hazardous waste (as designated by EPA waste code) applies. Hazardous debris containing radioactive waste is subject to the treatment standards specified in §268.45.

[51 FR 40642, Nov. 7, 1986, as amended at 52 FR 25790, July 8, 1987; 55 FR 22692, June 1, 1990; 56 FR 3884, Jan. 31, 1991; 57 FR 8089, Mar. 6, 1992; 57 FR 37273, Aug. 18, 1992; 58 FR 29885, May 24, 1993; 59 FR 31552, June 20, 1994; 59 FR 48103, Sept. 19, 1994; 60 FR 302, Jan. 3, 1995; 61 FR 15654, Apr. 8, 1996; 62 FR 26025, May 12, 1997; 63 FR 28738, May 26, 1998; 71 FR 40278, July 14, 2006]

§ 268.43 Treatment standards expressed as waste concentrations.

For the requirements previously found in this section and for treatment standards in Table CCW—Constituent Concentrations in Wastes, refer to §268.40.

[59 FR 48103, Sept. 19, 1994]

§ 268.44 Variance from a treatment standard.

(a) Based on a petition filed by a generator or treater of hazardous waste, the Administrator may approve a variance from an applicable treatment standard if:

(1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must either demonstrate that:

(i) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media); or

(ii) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

(b) Each petition must be submitted in accordance with the procedures in §260.20.

(c) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(d) After receiving a petition for variance from a treatment standard, the Administrator may request any additional information or samples which he may require to evaluate the petition. Additional copies of the complete petition may be requested as needed to send to affected states and Regional Offices.

(e) The Administrator will give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a variance from a treatment standard will be published in the Federal Register.

(f) A generator, treatment facility, or disposal facility that is managing a waste covered by a variance from the treatment standards must comply with the waste analysis requirements for restricted wastes found under §268.7.

(g) During the petition review process, the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

(h) Based on a petition filed by a generator or treater of hazardous waste, the Administrator or his or her delegated representative may approve a site-specific variance from an applicable treatment standard if:

(1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must either demonstrate that:

(i) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media where the treatment standard is not based on combustion of such media); or

(ii) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

(3) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) the concentrations necessary to minimize short- and long-term

threats to human health and the environment. Treatment variances approved under this paragraph must:

(i) At a minimum, impose alternative land disposal restriction treatment standards that, using a reasonable maximum exposure scenario:

(A) For carcinogens, achieve constituent concentrations that result in the total excess risk to an individual exposed over a lifetime generally falling within a range from 10^{-4} to 10^{-6}; and

(B) For constituents with non-carcinogenic effects, achieve constituent concentrations that an individual could be exposed to on a daily basis without appreciable risk of deleterious effect during a lifetime.

(ii) Not consider post-land-disposal controls.

(4) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) natural background concentrations at the site where the contaminated soil will land disposed.

(5) Public notice and a reasonable opportunity for public comment must be provided before granting or denying a petition.

(i) Each application for a site-specific variance from a treatment standard must include the information in §260.20(b)(1)–(4);

(j) After receiving an application for a site-specific variance from a treatment standard, the Assistant Administrator, or his delegated representative, may request any additional information or samples which may be required to evaluate the application.

(k) A generator, treatment facility, or disposal facility that is managing a waste covered by a site-specific variance from a treatment standard must comply with the waste analysis requirements for restricted wastes found under §268.7.

(l) During the application review process, the applicant for a site-specific variance must comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

(m) For all variances, the petitioner must also demonstrate that compliance with any given treatment variance is sufficient to minimize threats to human health and the environment posed by land disposal of the waste. In evaluating this demonstration, EPA may take into account whether a treatment variance should be approved if the subject waste is to be used in a manner constituting disposal pursuant to 40 CFR 266.20 through 266.23.

(n) [Reserved]

(o) The following facilities are excluded from the treatment standards under §268.40, and are subject to the following constituent concentrations:

TABLE: WASTES EXCLUDED FROM TREATMENT STANDARDS

[51 FR 40642, Nov. 7, 1986, as amended at 52 FR 21017, June 4, 1987; 53 FR 31221, Aug. 17, 1988; 54 FR 36972, Sept. 6, 1989; 56 FR 12355, Mar. 25, 1991; 61 FR 55727, Oct. 28, 1996; 62 FR 26025, May 12, 1997; 62 FR 64509, Dec. 5, 1997; 63 FR 28738, May 26, 1998; 64 FR 28391, May 26, 1999; 66 FR 33890, June 26, 2001; 67 FR 35928, May 22, 2002; 67 FR 36818, May 28, 2002; 69 FR 6575, Feb. 11, 2004; 69 FR 67653, Nov. 19, 2004; 70 FR 34589, June 14, 2005; 70 FR 44511, Aug. 3, 2005; 71 FR 6212, Feb. 7, 2006; 71 FR 40279, July 14, 2006]

§ 268.45 Treatment standards for hazardous debris.

(a) *Treatment standards*. Hazardous debris must be treated prior to land disposal as follows unless EPA determines under §261.3(f)(2) of this chapter that the debris is no longer contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard provided in this subpart for the waste contaminating the debris:

(1) *General.* Hazardous debris must be treated for each "contaminant subject to treatment" defined by paragraph (b) of this section using the technology or technologies identified in Table 1 of this section.

(2) *Characteristic debris.* Hazardous debris that exhibits the characteristic of ignitability, corrosivity, or reactivity identified under §§261.21, 261.22, and 261.23 of this chapter, respectively, must be deactivated by treatment using one of the technologies identified in Table 1 of this section.

(3) *Mixtures of debris types.* The treatment standards of Table 1 in this section must be achieved for each type of debris contained in a mixture of debris types. If an immobilization technology is used in a treatment train, it must be the last treatment technology used.

(4) *Mixtures of contaminant types.* Debris that is contaminated with two or more contaminants subject to treatment identified under paragraph (b) of this section must be treated for each contaminant using one or more treatment technologies identified in Table 1 of this section. If an immobilization technology is used in a treatment train, it must be the last treatment technology used.

(5) *Waste PCBs.* Hazardous debris that is also a waste PCB under 40 CFR part 761 is subject to the requirements of either 40 CFR part 761 or the requirements of this section, whichever are more stringent.

(b) *Contaminants subject to treatment.* Hazardous debris must be treated for each "contaminant subject to treatment." The contaminants subject to treatment must be determined as follows:

(1) *Toxicity characteristic debris.* The contaminants subject to treatment for debris that exhibits the Toxicity Characteristic (TC) by §261.24 of this chapter are those EP constituents for which the debris exhibits the TC toxicity characteristic.

(2) *Debris contaminated with listed waste.* The contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents or wastes for which treatment standards are established for the waste under §268.40.

(3) *Cyanide reactive debris.* Hazardous debris that is reactive because of cyanide must be treated for cyanide.

(c) *Conditioned exclusion of treated debris.* Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table 1 of this section and that does not exhibit a characteristic of hazardous waste identified under subpart C, part 261, of this chapter after treatment is not a hazardous waste and need not be managed in a subtitle C facility. Hazardous debris contaminated with a listed waste that is treated by an immobilization technology specified in Table 1 is a hazardous waste and must be managed in a subtitle C facility.

(d) *Treatment residuals*—(1) *General requirements.* Except as provided by paragraphs (d)(2) and (d)(4) of this section:

(i) Residue from the treatment of hazardous debris must be separated from the treated debris using simple physical or mechanical means; and

(ii) Residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by subpart D of this part for the waste contaminating the debris.

(2) *Nontoxic debris.* Residue from the deactivation of ignitable, corrosive, or reactive characteristic hazardous debris (other than cyanide-reactive) that is not contaminated with a contaminant subject to treatment defined by paragraph (b) of this section, must be deactivated prior to land disposal and is not subject to the waste-specific treatment standards of subpart D of this part.

(3) *Cyanide-reactive debris*. Residue from the treatment of debris that is reactive because of cyanide must meet the treatment standards for D003 in "Treatment Standards for Hazardous Wastes" at §268.40.

(4) *Ignitable nonwastewater residue*. Ignitable nonwastewaster residue containing equal to or greater than 10% total organic carbon is subject to the technology specified in the treatment standard for D001: Ignitable Liquids.

(5) *Residue from spalling.* Layers of debris removed by spalling are hazardous debris that remain subject to the treatment standards of this section.

TABLE: ALTERNATIVE TREATMENT STANDARDS FOR HAZARDOUS DEBRIS

[57 FR 37277, Aug. 18, 1992, as amended at 59 FR 48103, Sept. 19, 1994; 63 FR 28738, May 26, 1998]

§ 268.46 Alternative treatment standards based on HTMR.

For the treatment standards previously found in this section, refer to §268.40.

[59 FR 48103, Sept. 19, 1994]

§ 268.48 Universal treatment standards.

(a) Table UTS identifies the hazardous constituents, along with the nonwastewater and wastewater treatment standard levels, that are used to regulate most prohibited hazardous wastes with numerical limits. For determining compliance with treatment standards for underlying hazardous constituents as defined in §268.2(i), these treatment standards may not be exceeded. Compliance with these treatment standards is measured by an analysis of grab samples, unless otherwise noted in the following Table UTS.

TABLE: UNIVERSAL TREATMENT STANDARDS

[59 FR 48103, Sept. 19, 1994, as amended by 60 FR 302, Jan. 3, 1995; 61 FR 15654, Apr. 8 1996; 61 FR 33690, June 28, 1996; 62 FR 7596, Feb. 19, 1997; 63 FR 24626, May 4, 1998; 63 FR 28739, May 26, 1998; 63 FR 47417, Sept. 4, 1998; 64 FR 25417, May 11, 1999; 65 FR 14475, Mar. 17, 2000; 70 FR 34590, June 14, 2005; 70 FR 9178, Feb. 24, 2005; 71 FR 40279, July 14, 2006]

§ 268.49 Alternative LDR treatment standards for contaminated soil.

(a) *Applicability.* You must comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste, or exhibited a characteristic of hazardous waste at the time it was generated, into a land disposal unit. The following chart describes whether you must comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

CHART: APPLICABILITY

(b) Prior to land disposal, contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be treated according to the applicable treatment standards specified in paragraph (c) of this section or according to the Universal

Treatment Standards specified in 40 CFR 268.48 applicable to the contaminating listed hazardous waste and/or the applicable characteristic of hazardous waste if the soil is characteristic. The treatment standards specified in paragraph (c) of this section and the Universal Treatment Standards may be modified through a treatment variance approved in accordance with 40 CFR 268.44.

(c) *Treatment standards for contaminated soils.* Prior to land disposal, contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be treated according to all the standards specified in this paragraph or according to the Universal Treatment Standards specified in 40 CFR 268.48.

(1) *All soils.* Prior to land disposal, all constituents subject to treatment must be treated as follows:

(A) For non-metals except carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in total constituent concentrations, except as provided by paragraph (c)(1)(C) of this section.

(B) For metals and carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in constituent concentrations as measured in leachate from the treated media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by paragraph (c)(1)(C)of this section.

(C) When treatment of any constituent subject to treatment to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the universal treatment standard is not required. Universal Treatment Standards are identified in 40 CFR 268.48 Table UTS.

(2) *Soils that exhibit the characteristic of ignitability, corrosivity or reactivity.* In addition to the treatment required by paragraph (c)(1) of this section, prior to land disposal, soils that exhibit the characteristic of ignitability, corrosivity, or reactivity must be treated to eliminate these characteristics.

(3) *Soils that contain nonanalyzable constituents.* In addition to the treatment requirements of paragraphs (c)(1) and (2) of this section, prior to land disposal, the following treatment is required for soils that contain nonanalyzable constituents:

(A) For soil that contains only analyzable and nonanalyzable organic constituents, treatment of the analyzable organic constituents to the levels specified in paragraphs (c)(1) and (2) of this section; or,

(B) For soil that contains only nonanalyzable constituents, treatment by the method(s) specified in §268.42 for the waste contained in the soil.

(d) *Constituents subject to treatment.* When applying the soil treatment standards in paragraph (c) of this section, constituents subject to treatment are any constituents listed in §268.48 Table UTS-Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium, zinc, and that are present at concentrations greater than ten times the universal treatment standard. PCBs are not constituent subject to treatment in any given volume of soil which exhibits the toxicity characteristic solely because of the presence of metals.

(e) *Management of treatment residuals.* Treatment residuals from treating contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be managed as follows:

(1) Soil residuals are subject to the treatment standards of this section;

(2) Non-soil residuals are subject to:

(A) For soils contaminated by listed hazardous waste, the RCRA Subtitle C standards applicable to the listed hazardous waste; and

(B) For soils that exhibit a characteristic of hazardous waste, if the non-soil residual also exhibits a characteristic of hazardous waste, the treatment standards applicable to the characteristic hazardous waste.

[63 FR 28751, May 26, 1998, as amended at 64 FR 25417, May 11, 1999; 64 FR 56472, Oct. 20, 1999; 65 FR 81381, Dec. 26, 2000; 71 FR 40279, July 14, 2006]

Subpart E—Prohibitions on Storage

§ 268.50 Prohibitions on storage of restricted wastes.

(a) Except as provided in this section, the storage of hazardous wastes restricted from land disposal under subpart C of this part of RCRA section 3004 is prohibited, unless the following conditions are met:

(1) A generator stores such wastes in tanks, containers, or containment buildings on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and the generator complies with the requirements in §262.34 and parts 264 and 265 of this chapter.

(2) An owner/operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and:

(i) Each container is clearly marked to identify its contents and the date each period of accumulation begins;

(ii) Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility. Regardless of whether the tank itself is marked, an owner/operator must comply with the operating record requirements specified in §264.73 or §265.73.

(3) A transporter stores manifested shipments of such wastes at a transfer facility for 10 days or less.

(b) An owner/operator of a treatment, storage or disposal facility may store such wastes for up to one year unless the Agency can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

(c) An owner/operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner/operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

(d) If a generator's waste is exempt from a prohibition on the type of land disposal utilized for the waste (for example, because of an approved case-by-case extension under §268.5, an approved §268.6 petition, or a national capacity variance under subpart C), the prohibition in paragraph (a) of this section does not apply during the period of such exemption.

(e) The prohibition in paragraph (a) of this section does not apply to hazardous wastes that meet the treatment standards specified under §§268.41, 268.42, and 268.43 or the treatment standards specified under the variance in §268.44, or, where treatment standards have not been specified, is in compliance with the applicable prohibitions specified in §268.32 or RCRA section 3004.

(f) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm must be stored at a facility that meets the requirements of 40 CFR 761.65(b) and must be removed from storage and treated or disposed as required by this part within one year of the date when such wastes are first placed into storage. The provisions of paragraph (c) of this section do not apply to such PCB wastes prohibited under §268.32 of this part.

(g) The prohibition and requirements in this section do not apply to hazardous remediation wastes stored in a staging pile approved pursuant to §264.554 of this chapter.

[51 FR 40642, Nov. 7, 1986; 52 FR 21017, June 4, 1987, as amended at 52 FR 25791, July 8, 1987; 54 FR 36972, Sept. 6, 1989; 57 FR 37281, Aug. 18, 1992; 63 FR 65940, Nov. 30, 1998; 71 FR 40279, July 14, 2006]

Appendixes I-II to Part 268 [Reserved]

Appendix III to Part 268- List of Halogenated Organize Compounds Regulated under §268.32

Appendix IV to Part 268—Wastes Excluded From Lab Packs Under the Alternative Treatment Standards of §268.42(c)

Appendix V to Part 268 [Reserved]

Appendix VI to Part 268—Recommended Technologies To Achieve Deactivation of Characteristics in Section 268.42

Appendix VIII to Part 268—LDR Effective Dates of Injected Prohibited Hazardous Wastes
Appendix IX to Part 268—Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test (Method 1310B)

Appendix X to Part 268 [Reserved]

Appendix XI to Part 268—Metal Bearing Wastes Prohibited From Dilution in a Combustion Unit According to 40 CFR 268.3(c)

Related Resources:

- Land Disposal Restrictions: Summary of Requirements
- Land Disposal Restrictions
- Land Disposal Restrictions for F001-F005 Solvent Wastes
- Land Disposal Restriction Requirements For Characteristic Wastes
- LDR Notification for Listed and Characteristic Wastes
- Questions Regarding the Land Disposal Restrictions (LDR) Notification Regulations at 40 CFR 268.7
- Recordkeeping Requirements for Small Quantity Generators Subject to Land Disposal Restrictions
- Land Disposal Restrictions Notification Requirements for Contaminated Soil
- One-Time Notification Requirement Under §268.7(a)(6)
- Land Disposal Restrictions- Land Disposal Definition, Lab Packs, Conditionally Exempt SQG Waste, Empty Containers

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Pre-transport Requirements

Subpart C—Pre-Transport Requirements

§ 262.30: Packaging.

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must package the waste in accordance with the applicable Department of Transportation regulations on packaging under 49 CFR parts 173, 178, and 179.

§ 262.31: Labeling.

Before transporting or offering hazardous waste for transportation off- site, a generator must label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR part 172.

§ 262.32: Marking.

(a) Before transporting or offering hazardous waste for transportation off- site, a generator must mark each package of hazardous waste in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR part 172;

(b) Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must mark each container of 119 gallons or less used in such transportation with the following words and information in accordance with the requirements of 49 CFR 172.304:
HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency. Generator's Name and Address_____. Generator's EPA Identification Number lllll. Manifest Tracking Number _____.

§ 262.33: Placarding.

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to Department of Transportation regulations for hazardous materials under 49 CFR part 172, subpart F.

Related Resources:

- Hazardous Waste Transport Between Contiguous Properties
- Manifest Exemption for Shipments Between Sites on Certain Contiguous Properties
- Labeling of Steel Drums Need Not Include Previous Contents
- Hazardous Waste Container Labeling Requirements

Manifest

Subpart B—The Manifest

§ 262.20: General requirements.

(a)(1) A generator who transports, or offers for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected hazardous waste load, must prepare a Manifest (OMB Control number 2050–0039) on EPA Form 8700–22, and, if necessary, EPA Form 8700–22A, according to the instructions included in the appendix to this part.

(2) The revised manifest form and procedures in 40 CFR 260.10, 261.7, 262.20, 262.21, 262.27, 262.32, 262.34, 262.54, 262.60, and the appendix to part 262, shall not apply until September 5, 2006. The manifest form and procedures in 40 CFR 260.10, 261.7, 262.20, 262.21, 262.32, 262.34, 262.54, 262.60, and the Appendix to part 262, contained in the 40 CFR, parts 260 to 265, edition revised as of July 1, 2004, shall be applicable until September 5, 2006.

(b) A generator must designate on the manifest one facility which is permitted to handle the waste described on the manifest.

(c) A generator may also designate on the manifest one alternate facility which is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.

(d) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste.

(e) The requirements of this subpart do not apply to hazardous waste produced by generators of greater than 100 kg but less than 1000 kg in a calendar month where:

(1) The waste is reclaimed under a contractual agreement pursuant to which:

(i) The type of waste and frequency of shipments are specified in the agreement;

(ii) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and

(2) The generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement.

(f) The requirements of this subpart and §262.32(b) do not apply to the transport of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Notwithstanding 40 CFR 263.10(a), the generator or transporter must comply with the requirements for transporters set forth in 40 CFR 263.30 and 263.31 in the event of a discharge of hazardous waste on a public or private right-of-way.

* **Note to Reader**: The regulations found at 262.21 relate to generators, and other entities not even in the business of hazardous waste management, who intend to **actually print** the new manifest form. Generators who do not actually print the manifest form should obtain this form from an approved source registered with EPA. Please visit http://www.epa.gov/epaoswer/hazwaste/gener/manifest/registry/index.htm and mouse-click on the link titled "Approved Registered Printers."

§ 262.21: Manifest tracking numbers, manifest printing, and obtaining manifests.

(a)(1) A registrant may not print, or have printed, the manifest for use or distribution unless it has received approval from the EPA Director of the Office of Solid Waste to do so under paragraphs (c) and (e) of this section.
(2) The approved registrant is responsible for ensuring that the organizations identified in its application are in compliance with the procedures of its approved application and the requirements of this section. The registrant is responsible for assigning manifest tracking numbers to its manifests.
(b) A registrant must submit an initial application to the EPA Director of the Office of Solid Waste that contains the following information:
(1) Name and mailing address of registrant;
(2) Name, telephone number and email address of contact person;
(3) Brief description of registrant's government or business activity;
(4) EPA identification number of the registrant, if applicable;
(5) Description of the scope of the operations that the registrant plans to undertake in printing, distributing, and using its manifests, including:

(i) A description of the printing operation. The description should include an explanation of whether the registrant intends to print its manifests in-house (*i.e.*, using its own printing establishments) or through a separate (*i.e.*, unaffiliated) printing company. If the registrant intends to use a separate printing company to print the manifest on its behalf, the application must identify this printing company and discuss how the registrant will oversee the company. If this includes the use of intermediaries (*e.g.*, prime and subcontractor relationships), the role of each must be discussed. The application must provide the name and mailing address of each company. It also must provide the name and telephone number of the contact person at each company.

(ii) A description of how the registrant will ensure that its organization and unaffiliated companies, if any, comply with the requirements of this section. The application must discuss how the registrant will ensure that a unique manifest tracking number will be pre-printed on each manifest. The application must describe the internal control procedures to be followed by the registrant and unaffiliated companies to ensure that numbers are tightly controlled and remain unique. In particular, the application must describe how the registrant will assign manifest tracking numbers to its manifests. If computer systems or other infrastructure will be used to maintain, track, or assign numbers, these should be indicated. The application must also indicate how the printer will pre-print a unique number on each form (*e.g.*, crash or press numbering). The application also must explain the other quality procedures to be followed by each establishment and printing company to ensure that all required print specifications are consistently achieved and that printing violations are identified and corrected at the earliest practicable time.

(iii) An indication of whether the registrant intends to use the manifests for its own business operations or to distribute the manifests to a separate company or to the general public (*e.g.*, for purchase).

(6) A brief description of the qualifications of the company that will print the manifest. The registrant may use readily available information to do so (*e.g.*, corporate brochures, product samples, customer references, documentation of ISO certification), so long as such information pertains to the establishments or company being proposed to print the manifest.

(7) Proposed unique three-letter manifest tracking number suffix. If the registrant is approved to print the manifest, the registrant must use this suffix to pre-print a unique manifest tracking number on each manifest.

(8) A signed certification by a duly authorized employee of the registrant that the organizations and companies in its application will comply with the procedures of its approved application and the requirements of this Section and that it will notify the EPA Director of the Office of Solid Waste of any duplicated manifest tracking numbers on manifests that have been used or distributed to other parties as soon as this becomes known.

(c) EPA will review the application submitted under paragraph (b) of this section and either approve it or request additional information or modification before approving it.

(d)(1) Upon EPA approval of the application under paragraph (c) of this section, EPA will provide the registrant an electronic file of the manifest, continuation sheet, and manifest instructions and ask the registrant to submit three fully assembled manifests and continuation sheet samples, except as noted in paragraph (d)(3) of this section. The registrant's samples must meet all of the specifications in paragraph (f) of this section and be printed by the company that will print the manifest as identified in the application approved under paragraph (c) of this section.

(2) The registrant must submit a description of the manifest samples as follows:

(i) Paper type (*i.e.*, manufacturer and grade of the manifest paper);

(ii) Paper weight of each copy;

(iii) Ink color of the manifest's instructions. If screening of the ink was used, the registrant must indicate the extent of the screening; and

(iv) Method of binding the copies.

(3) The registrant need not submit samples of the continuation sheet if it will print its continuation sheet using the same paper type, paper weight of each copy, ink color of the instructions, and binding method as its manifest form samples.

(e) EPA will evaluate the forms and either approve the registrant to print them as proposed or request additional information or modification to them before approval. EPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its forms until EPA approves them. An approved registrant must print the manifest and

continuation sheet according to its application approved under paragraph (c) of this section and the manifest specifications in paragraph (f) of this section. It also must print the forms according to the paper type, paper weight, ink color of the manifest instructions and binding method of its approved forms.

(f) Paper manifests and continuation sheets must be printed according to the following specifications:
(1) The manifest and continuation sheet must be printed with the exact format and appearance as EPA Forms 8700–22 and 8700–22A, respectively. However, information required to complete the manifest may be pre-printed on the manifest form.
(2) A unique manifest tracking number assigned in accordance with a numbering system approved by EPA must be pre-printed in Item 4 of the manifest. The tracking number must consist of a unique three-letter suffix following nine digits.
(3) The manifest and continuation sheet must be printed on 8 ½ x 11-inch white paper, excluding common stubs (*e.g.*, top- or side-bound stubs). The paper must be durable enough to withstand normal use.
(4) The manifest and continuation sheet must be printed in black ink that can be legibly photocopied, scanned, and faxed, except that the marginal words indicating copy distribution must be in red ink.
(5) The manifest and continuation sheet must be printed as six-copy forms. Copy-to-copy registration must be exact within 1.32nd of an inch. Handwritten and typed impressions on the form must be legible on all six copies. Copies must be bound together by one or more common stubs that reasonably ensure that they will not become detached inadvertently during normal use.
(6) Each copy of the manifest and continuation sheet must indicate how the copy must be distributed, as follows:
(i) Page 1 (top copy): ‘‘Designated facility to destination State (if required)’’.
(ii) Page 2: ‘‘Designated facility to generator State (if required)’’.
(iii) Page 3: ‘‘Designated facility to generator’’.
(iv) Page 4: ‘‘Designated facility’s copy’’.
(v) Page 5: ‘‘Transporter’s copy’’.
(vi) Page 6 (bottom copy): ‘‘Generator’s initial copy’’.

(7) The instructions in the appendix to 40 CFR part 262 must appear legibly on the back of the copies of the manifest and continuation sheet as provided in this paragraph (f). The instructions must not be visible through the front of the copies when photocopied or faxed.
(i) Manifest Form 8700–22.
(A) The ‘‘Instructions for Generators’’ on Copy 6;
(B) The ‘‘Instructions for International Shipment Block’’ and ‘‘Instructions for Transporters’’ on Copy 5; and (C) The ‘‘Instructions for Treatment, Storage, and Disposal Facilities’’ on Copy 4.
(ii) Manifest Form 8700–22A.
(A) The ‘‘Instructions for Generators’’ on Copy 6;
(B) The ‘‘Instructions for Transporters’’ on Copy 5; and
(C) The ‘‘Instructions for Treatment, Storage, and Disposal Facilities’’ on Copy 4.

(g)(1) A generator may use manifests printed by any source so long as the source of the printed form has received approval from EPA to print the manifest under paragraphs (c) and (e) of this section. A registered source may be a:
(i) State agency;
(ii) Commercial printer;
(iii) Hazardous waste generator, transporter or TSDF; or
(iv) Hazardous waste broker or other preparer who prepares or arranges shipments of hazardous waste for transportation.
(2) A generator must determine whether the generator state or the consignment state for a shipment regulates any additional wastes (beyond those regulated Federally) as hazardous wastes under these states' authorized programs. Generators also must determine whether the consignment state or generator state requires the generator to submit any copies of the manifest to these states. In cases where the generator must supply copies to either the generator's state or the consignment state, the generator is responsible for supplying legible photocopies of the manifest to these states.

(h)(1) If an approved registrant would like to update any of the information provided in its application approved under paragraph (c) of this section (*e.g.*, to update a company phone number or name of contact person), the registrant must revise the application and submit it to the EPA Director of the Office of Solid Waste, along with an indication or explanation of the update, as soon as practicable after the change occurs. The Agency either will approve or deny the revision. If the Agency denies the revision, it will explain the reasons for the denial, and it will contact the registrant and request further modification before approval.

(2) If the registrant would like a new tracking number suffix, the registrant must submit a proposed suffix to the EPA Director of the Office of Solid Waste, along with the reason for requesting it. The Agency will either approve the suffix or deny the suffix and provide an explanation why it is not acceptable.
(3) If a registrant would like to change the paper type, paper weight, ink color of the manifest instructions, or binding method of its manifest or continuation sheet subsequent to approval under paragraph (e) of this section, then the registrant must submit three samples of the revised form for EPA review and approval. If the approved registrant would like to use a new printer, the registrant must submit three manifest samples printed by the new printer, along with a brief description of the printer's qualifications to print the manifest. EPA will evaluate the manifests and either approve the registrant to print the forms as proposed or request additional information or modification to them before approval. EPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its revised forms until EPA approves them.
(i) If, subsequent to its approval under paragraph (e) of this section, a registrant typesets its manifest or continuation sheet instead of using the electronic file of the forms provided by EPA, it must submit three samples of the manifest or continuation sheet to the registry for approval. EPA will evaluate the manifests or continuation sheets and either approve the registrant to print them as proposed or request additional information or modification to them before approval. EPA will notify the registrant of its decision by

mail. The registrant cannot use or distribute its typeset forms until EPA approves them.

(j) EPA may exempt a registrant from the requirement to submit form samples under paragraph (d) or (h)(3) of this section if the Agency is persuaded that a separate review of the registrant's forms would serve little purpose in informing an approval decision (*e.g.*, a registrant certifies that it will print the manifest using the same paper type, paper weight, ink color of the instructions and binding method of the form samples approved for some other registrant). A registrant may request an exemption from EPA by indicating why an exemption is warranted.

(k) An approved registrant must notify EPA by phone or email as soon as it becomes aware that it has duplicated tracking numbers on any manifests that have been used or distributed to other parties.

(l) If, subsequent to approval of a registrant under paragraph (e) of this section, EPA becomes aware that the approved paper type, paper weight, ink color of the instructions, or binding method of the registrant's form is unsatisfactory, EPA will contact the registrant and require modifications to the form.

(m)(1) EPA may suspend and, if necessary, revoke printing privileges if we find that the registrant: (i) Has used or distributed forms that deviate from its approved form samples in regard to paper weight, paper type, ink color of the instructions, or binding method; or (ii) Exhibits a continuing pattern of behavior in using or distributing manifests that contain duplicate manifest tracking numbers.
(2) EPA will send a warning letter to the registrant that specifies the date by which it must come into compliance with the requirements. If the registrant does not come in compliance by the specified date, EPA will send a second letter notifying the registrant that EPA has suspended or revoked its printing privileges. An approved registrant must provide information on its printing activities to EPA if requested.

§ 262.22: Number of copies.

The manifest consists of at least the number of copies which will provide the generator, each transporter, and the owner or operator of the designated facility with one copy each for their records and another copy to be returned to the generator.

§ 262.23: Use of the manifest.

(a) The generator must: (1) Sign the manifest certification by hand; and (2) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest; and (3) Retain one copy, in accordance with § 262.40(a).

(b) The generator must give the transporter the remaining copies of the manifest.
(c) For shipments of hazardous waste within the United States solely by water (bulk shipments only), the generator must send three copies of the manifest dated and signed in

accordance with this section to the owner or operator of the designated facility or the last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.

(d) For rail shipments of hazardous waste within the United States which originate at the site of generation, the generator must send at least three copies of the manifest dated and signed in accordance with this section to: (1) The next non-rail transporter, if any; or (2) The designated facility if transported solely by rail; or (3) The last rail transporter to handle the waste in the United States if exported by rail.

(e) For shipments of hazardous waste to a designated facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, the generator must assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

NOTE: See § 263.20(e) and (f) for special provisions for rail or water (bulk shipment) transporters. [45 FR 33142, May 19, 1980, as amended at 45 FR 86973, Dec. 31, 1980; 55 FR 2354, Jan. 23, 1990]

§ 262.27: Waste minimization certification.

A generator who initiates a shipment of hazardous waste must certify to one of the following statements in Item 15 of the uniform hazardous waste manifest: (a) ‘‘I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;’’ or (b) ‘‘I am a small quantity generator. I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.’’ [70 FR 10817, Mar. 4, 2005] EFFECTIVE DATE NOTE: At 70 FR 10817, Mar. 4, 2005, subpart B was amended by adding new § 262.27, effective Sept. 6, 2005.

Related Resources:

- Instructions for Completing the Hazardous Waste Manifest
- Environmental Fact Sheet: Hazardous Waste Manifest System Streamlined
- Instructions for Preparing Application Materials for Submittal to EPA’s Manifest Registry
- Federal Policy on Several Issues Related to the Use of the Hazardous Waste Manifest by Hazardous Waste Transporters
- Off-Site Shipments of Hazardous Waste to Designated Facilities
- Use of the Hazardous Waste Manifest for Import Shipments of Maquiladora Hazardous Wastes
- Uniform Manifest Form, Use of Continuation Sheet
- Manifesting Requirements

- Date of Shipment Determines Time Period for Exemption Reporting
- The Hazardous Waste Manifest System

Exports

Subpart E - Exports of Hazardous Waste

Source: 51 FR 28682, Aug. 8, 1986, unless otherwise noted.

§262.50: Applicability.

This subpart establishes requirements applicable to exports of hazardous waste. Except to the extent Sec. 262.58 provides otherwise, a primary exporter of hazardous waste must comply with the special requirements of this subpart and a transporter transporting hazardous waste for export must comply with applicable requirements of part 263. Section 262.58 sets forth the requirements of international agreements between the United States and receiving countries which establish different notice, export, and enforcement procedures for the transportation, treatment, storage and disposal of hazardous waste for shipments between the United States and those countries.

§262.51: Definitions.

In addition to the definitions set forth at 40 CFR 260.10, the following definitions apply to this subpart:

Consignee means the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste will be sent.

EPA Acknowledgement of Consent means the cable sent to EPA from the U.S. Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.

Primary Exporter means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with 40 CFR part 262, subpart B, or equivalent State provision, which specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.

Receiving country means a foreign country to which a hazardous waste is sent for the purpose of treatment, storage or disposal (except short-term storage incidental to transportation).

Transit country means any foreign country, other than a receiving country, through which a hazardous waste is transported.

[53 FR 27164, July 19, 1988]

§262.52: General requirements.

Exports of hazardous waste are prohibited except in compliance with the applicable requirements of this subpart and part 263. Exports of hazardous waste are prohibited unless:

(a) Notification in accordance with Sec. 262.53 has been provided;

(b) The receiving country has consented to accept the hazardous waste;

(c) A copy of the EPA Acknowledgment of Consent to the shipment accompanies the hazardous waste shipment and, unless exported by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).

(d) The hazardous waste shipment conforms to the terms of the receiving country's written consent as reflected in the EPA Acknowledgment of Consent.

§262.53: Notification of intent to export.

(a) A primary exporter of hazardous waste must notify EPA of an intended export before such waste is scheduled to leave the United States. A complete notification should be submitted sixty (60) days before the initial shipment is intended to be shipped off site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification must be in writing, signed by the primary exporter, and include the following information:

(1) Name, mailing address, telephone number and EPA ID number of the primary exporter;

(2) By consignee, for each hazardous waste type:

(i) A description of the hazardous waste and the EPA hazardous waste number (from 40 CFR part 261, subparts C and D), U.S. DOT proper shipping name, hazard class and ID number (UN/NA) for each hazardous waste as identified in 49 CFR parts 171 through 177;

(ii) The estimated frequency or rate at which such waste is to be exported and the period of time over which such waste is to be exported.

(iii) The estimated total quantity of the hazardous waste in units as specified in the instructions to the Uniform Hazardous Waste Manifest Form (8700-22);

(iv) All points of entry to and departure from each foreign country through which the hazardous waste will pass;

(v) A description of the means by which each shipment of the hazardous waste will be transported (e.g., mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.));

(vi) A description of the manner in which the hazardous waste will be treated, stored or disposed of in the receiving country (e.g., land or ocean incineration, other land disposal, ocean dumping, recycling);

(vii) The name and site address of the consignee and any alternate consignee; and

(viii) The name of any transit countries through which the hazardous waste will be sent and a description of the approximate length of time the hazardous waste will remain in such country and the nature of its handling while there;

(b) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection

Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 12th St. and Pennsylvania Ave., NW., Washington, DC 20004. In both cases, the following shall be prominently displayed on the front of the envelope: “Attention: Notification of Intent to Export.”.
(c) Except for changes to the telephone number in paragraph (a)(1) of this section, changes to paragraph (a)(2)(v) of this section and decreases in the quantity indicated pursuant to paragraph (a)(2)(iii) of this section when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous waste specified in the original notification), the primary exporter must provide EPA with a written renotification of the change. The shipment cannot take place until consent of the receiving country to the changes (except for changes to paragraph (a)(2)(viii) of this section and in the ports of entry to and departure from transit countries pursuant to paragraph (a)(2)(iv) of this section) has been obtained and the primary exporter receives an EPA Acknowledgment of Consent reflecting the receiving country's consent to the changes.

(d) Upon request by EPA, a primary exporter shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.
(e) In conjunction with the Department of State, EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of paragraph (a) of this section. Where a claim of confidentiality is asserted with respect to any notification information required by paragraph (a) of this section, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.
(f) Where the receiving country consents to the receipt of the hazardous waste, EPA will forward an EPA Acknowledgment of Consent to the primary exporter for purposes of Sec. 262.54(h). Where the receiving country objects to receipt of the hazardous waste or withdraws a prior consent, EPA will notify the primary exporter in writing. EPA will also notify the primary exporter of any responses from transit countries.

[51 FR 28682, Aug. 8, 1986, as amended at 56 FR 43705, Sept. 4, 1991; 61 FR 16309, Apr. 12, 1996; 71 FR 40271, July 14, 2006]

§262.54: Special manifest requirements.

A primary exporter must comply with the manifest requirements of 40 CFR 262.20 through 262.23 except that:
(a) In lieu of the name, site address and EPA ID number of the designated permitted facility, the primary exporter must enter the name and site address of the consignee;
(b) In lieu of the name, site address and EPA ID number of a permitted alternate facility, the primary exporter may enter the name and site address of any alternate consignee.

(c) In the International Shipments block, the primary exporter must check the export box and enter the point of exit (city and State) from the United States.

(d) The following statement must be added to the end of the first sentence of the certification set forth in Item 16 of the Uniform Hazardous Waste Manifest Form: ``and conforms to the terms of the attached EPA Acknowledgment of Consent";

(e) The primary exporter may obtain the manifest from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers).

(f) The primary exporter must require the consignee to confirm in writing the delivery of the hazardous waste to that facility and to describe any significant discrepancies (as defined in 40 CFR 264.72(a)) between the manifest and the shipment. A copy of the manifest signed by such facility may be used to confirm delivery of the hazardous waste.

(g) In lieu of the requirements of Sec. 262.20(d), where a shipment cannot be delivered for any reason to the designated or alternate consignee, the primary exporter must:

(1) Renotify EPA of a change in the conditions of the original notification to allow shipment to a new consignee in accordance with Sec. 262.53(c) and obtain an EPA Acknowledgment of Consent prior to delivery; or

(2) Instruct the transporter to return the waste to the primary exporter in the United States or designate another facility within the United States; and

(3) Instruct the transporter to revise the manifest in accordance with the primary exporter's instructions.

(h) The primary exporter must attach a copy of the EPA Acknowledgment of Consent to the shipment to the manifest which must accompany the hazardous waste shipment. For exports by rail or water (bulk shipment), the primary exporter must provide the transporter with an EPA Acknowledgment of Consent which must accompany the hazardous waste but which need not be attached to the manifest except that for exports by water (bulk shipment) the primary exporter must attach the copy of the EPA Acknowledgment of Consent to the shipping paper.

(i) The primary exporter shall provide the transporter with an additional copy of the manifest for delivery to the U.S. Customs official at the point the hazardous waste leaves the United States in accordance with Sec. 263.20(g)(4).

§262.55: Exception reports.

In lieu of the requirements of Sec. 262.42, a primary exporter must file an exception report with the Administrator if:

(a) He has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within forty-five (45) days from the date it was accepted by the initial transporter;

(b) Within ninety (90) days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received;

(c) The waste is returned to the United States.

§262.56: Annual reports.

(a) Primary exporters of hazardous waste shall file with the Administrator no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year. Such reports shall include the following:

(1) The EPA identification number, name, and mailing and site address of the exporter;

(2) The calendar year covered by the report;

(3) The name and site address of each consignee;

(4) By consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from 40 CFR part 261, subpart C or D), DOT hazard class, the name and US EPA ID number (where applicable) for each transporter used, the total amount of waste shipped and number of shipments pursuant to each notification;

(5) Except for hazardous waste produced by exporters of greater than 100 kg but less than 1000 kg in a calendar month, unless provided pursuant to Sec. 262.41, in even numbered years:

(i) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

(ii) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

(6) A certification signed by the primary exporter which states: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

(b) Annual reports submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Hand-delivered reports should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 12th St. and Pennsylvania Ave., NW., Washington, DC 20004.

[51 FR 28682, Aug. 8, 1986, as amended at 56 FR 43705, Sept. 4, 1991; 61 FR 16309, Apr. 12, 1996, 71 FR 40271, July 14, 2006]

§262.57: Recordkeeping.

(a) For all exports a primary exporter must:

(1) Keep a copy of each notification of intent to export for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(2) Keep a copy of each EPA Acknowledgment of Consent for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(3) Keep a copy of each confirmation of delivery of the hazardous waste from the consignee for at least three years from the date the hazardous waste was accepted by the initial transporter; and

(4) Keep a copy of each annual report for a period of at least three years from the due date of the report.

(b) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

§262.58: International agreements.

(a) Any person who exports or imports hazardous waste subject to Federal manifest requirements of Part 262, or subject to the universal waste management standards of 40 CFR Part 273, or subject to State requirements analogous to 40 CFR Part 273, to or from designated member countries of the Organization for Economic Cooperation and Development (OECD) as defined in paragraph (a)(1) of this section for purposes of recovery is subject to Subpart H of this part. The requirements of Subparts E and F do not apply.

(1) For the purposes of subpart H, the designated OECD Member countries consist of Australia, Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

(2) For the purposes of this Subpart, Canada and Mexico are considered OECD member countries only for the purpose of transit.

(b) Any person who exports hazardous waste to or imports hazardous waste from: a designated OECD member country for purposes other than recovery (e.g., incineration, disposal), Mexico (for any purpose), or Canada (for any purpose) remains subject to the requirements of subparts E and F of this part.

[61 FR 16310, Apr. 12, 1996, as amended at 71 FR 40271, July 14, 2006]

Related Resources:

- Applicability of Transporter Requirements to Hazardous Waste Imports and Exports
- Generator as Primary Exporter
- Facts on Hazardous Waste Exports
- Broker as Intermediary Arranging for Export
- Tolling Agreements and Exports
- Export Requirements for Transportation Through Transit Countries
- Notification Requirements for Exported Wastes
- Exportation of Hazardous Waste
- Land Disposal Restrictions Applied to Exported Wastes
- Exporters of Hazardous Waste to Mexico, Responsibilities of
- Hazardous and Municipal Waste Imports and Exports Between the U.S. and Canada

Imports

Subpart F - Imports of Hazardous Waste

§262.60: Imports of hazardous waste.

(a) Any person who imports hazardous waste from a foreign country into the United States must comply with the requirements of this part and the special requirements of this subpart.

(b) When importing hazardous waste, a person must meet all the requirements of Sec. 262.20(a) for the manifest except that:

(1) In place of the generator's name, address and EPA identification number, the name and address of the foreign generator and the importer's name, address and EPA identification number must be used.

(2) In place of the generator's signature on the certification statement, the U.S. importer or his agent must sign and date the certification and obtain the signature of the initial transporter.

(c) A person who imports hazardous waste may obtain the manifest form from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers).

(d) In the International Shipments block, the importer must check the import box and enter the point of entry (city and State) into the United States.

(e) The importer must provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with Sec. 264.71(a)(3) and Sec. 265.71(a)(3) of this chapter.

[51 FR 28685, Aug. 8, 1986]

Related Resources:

- Hazardous and Municipal Waste Imports and Exports Between the U.S. and Canada
- RCRA Hazardous Waste Import Requirements
- Concerns About Importing of Toxic Waste
- Accumulation Time for Hazardous Waste Importers

Transfrontier Shipments of Hazardous Waste for Recovery within the OECD

Subpart H -Transfrontier Shipments of Hazardous Waste for Recovery within the OECD

Source: 61 FR 16310, Apr. 12, 1996, unless otherwise noted.

§262.80: Applicability.

(a) The requirements of this subpart apply to imports and exports of wastes that are considered hazardous under U.S. national procedures and are destined for recovery operations in the countries listed in Sec. 262.58(a)(1). A waste is considered hazardous under U.S. national procedures if it meets the Federal definition of hazardous waste in 40 CFR 261.3 and it is subject to either the Federal manifesting requirements at 40 CFR Part 262, Subpart B, to the universal waste management standards of 40 CFR Part 273, or to State requirements analogous to 40 CFR Part 273.

(b) Any person (notifier, consignee, or recovery facility operator) who mixes two or more wastes (including hazardous and non-hazardous wastes) or otherwise subjects two or more wastes (including hazardous and non-hazardous wastes) to physical or chemical transformation operations, and thereby creates a new hazardous waste, becomes a generator and assumes all subsequent generator duties under RCRA and any notifier duties, if applicable, under this subpart.

§262.81: Definitions.

The following definitions apply to this subpart.

(a) *Competent authorities* means the regulatory authorities of concerned countries having jurisdiction over transfrontier movements of wastes destined for recovery operations.

(b) *Concerned countries* means the exporting and importing OECD member countries and any OECD member countries of transit.

(c) *Consignee* means the person to whom possession or other form of legal control of the waste is assigned at the time the waste is received in the importing country.

(d) *Country of transit* means any designated OECD country in Sec. 262.58(a)(1) and (a)(2) other than the exporting or importing country across which a transfrontier movement of wastes is planned or takes place.

(e) *Exporting country* means any designated OECD member country in Sec. 262.58(a)(1) from which a transfrontier movement of wastes is planned or has commenced.

(f) *Importing country* means any designated OECD country in Sec. 262.58(a)(1) to which a transfrontier movement of wastes is planned or takes place for the purpose of submitting the wastes to recovery operations therein.

(g) *Notifier* means the person under the jurisdiction of the exporting country who has, or will have at the time the planned transfrontier movement commences, possession or other forms of legal control of the wastes and who proposes their transfrontier movement for the ultimate purpose of submitting them to recovery operations. When the United States (U.S.) is the exporting country, notifier is interpreted to mean a person domiciled in the U.S.

(h) *OECD area* means all land or marine areas under the national jurisdiction of any designated OECD member country in Sec. 262.58. When the regulations refer to shipments to or from an OECD country, this means OECD area.

(i) *Recognized trader* means a person who, with appropriate authorization of concerned countries, acts in the role of principal to purchase and subsequently sell wastes; this person has legal control of such wastes from time of purchase to time of sale; such a

person may act to arrange and facilitate transfrontier movements of wastes destined for recovery operations.

(j) *Recovery facility* means an entity which, under applicable domestic law, is operating or is authorized to operate in the importing country to receive wastes and to perform recovery operations on them.

(k) *Recovery operations* means activities leading to resource recovery, recycling, reclamation, direct re-use or alternative uses as listed in Table 2.B of the Annex of OECD Council Decision C(88)90(Final) of 27 May 1988, (available from the Environmental Protection Agency, RCRA Information Center (RIC), 1235 Jefferson-Davis Highway, first floor, Arlington, VA 22203 (Docket F-94-IEHF-FFFFF) and the Organisation for Economic Co-operation and Development, Environment Direcorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France) which include:

R1 Use as a fuel (other than in direct incineration) or other means to generate energy
R2 Solvent reclamation/regeneration
R3 Recycling/reclamation of organic substances which are not used as solvents
R4 Recycling/reclamation of metals and metal compounds
R5 Recycling/reclamation of other inorganic materials
R6 Regeneration of acids or bases
R7 Recovery of components used for pollution control
R8 Recovery of components from catalysts
R9 Used oil re-refining or other reuses of previously used oil
R10 Land treatment resulting in benefit to agriculture or ecological improvement
R11 Uses of residual materials obtained from any of the operations numbered R1-R10
R12 Exchange of wastes for submission to any of the operations numbered R1-R11
6R13 Accumulation of material intended for any operation in Table 2.B

(l) *Transfrontier movement* means any shipment of wastes destined for recovery operations from an area under the national jurisdiction of one OECD member country to an area under the national jurisdiction of another OECD member country.

§262.82: General conditions.

(a*) Scope.* The level of control for exports and imports of waste is indicated by assignment of the waste to a green, amber, or red list and by U.S. national procedures as defined in Sec. 262.80(a). The green, amber, and red lists are incorporated by reference in Sec. 262.89 (e).

(1) Wastes on the green list are subject to existing controls normally applied to commercial transactions, except as provided below:

(i) Green-list wastes that are considered hazardous under U.S. national procedures are subject to amber-list controls.

(ii) Green-list waste that are sufficiently contaminated or mixed with amber-list wastes, such that the waste or waste mixture is considered hazardous under U.S. national procedures, are subject to amber-list controls.

(iii) Green-list wastes that are sufficiently contaminated or mixed with other wastes subject to red-list controls such that the waste or waste mixture is considered hazardous under U.S. national procedures must be handled in accordance with the red-list controls.

(2) Wastes on the amber list that are considered hazardous under U.S. national procedures as defined in Sec. 262.80(a) are subject to the amber-list controls of this Subpart.

(i) If amber-list wastes are sufficiently contaminated or mixed with other wastes subject to red-list controls such that the waste or waste mixture is considered hazardous under U.S. national procedures, the wastes must be handled in accordance with the red-list controls.

(ii) [Reserved]

(3) Wastes on the red list that are considered hazardous under U.S. national procedures as defined in Sec. 262.80(a) are subject to the red-list controls of this subpart.

Note to paragraph (a)(3): Some wastes on the amber or red lists are not listed or otherwise identified as hazardous under RCRA (e.g., polychlorinated biphenyls) and therefore are not subject to the amber- or red-list controls of this subpart. Regardless of the status of the waste under RCRA, however, other Federal environmental statutes (e.g., the Toxic Substances Control Act) may restrict certain waste imports or exports. Such restrictions continue to apply without regard to this Subpart.

(4) Wastes not yet assigned to a list are eligible for transfrontier movements, as follows:

(i) If such wastes are considered hazardous under U.S. national procedures as defined in Sec. 262.80(a), these wastes are subject to the red-list controls; or

(ii) If such wastes are not considered hazardous under U.S. national procedures as defined in Sec. 262.80(a), such wastes may move as though they appeared on the green list.

(b) General conditions applicable to transfrontier movements of hazardous waste.

(1) The waste must be destined for recovery operations at a facility that, under applicable domestic law, is operating or is authorized to operate in the importing country;

(2) The transfrontier movement must be in compliance with applicable international transport agreements; and

Note to paragraph (b)(2): These international agreements include, but are not limited to, the Chicago Convention (1944), ADR (1957), ADNR (1970), MARPOL Convention (1973/1978), SOLAS Convention (1974), IMDG Code (1985), COTIF (1985), and RID (1985).

(3) Any transit of waste through a non-OECD member country must be conducted in compliance with all applicable international and national laws and regulations.

(c) Provisions relating to re-export for recovery to a third country. (1) Re-export of wastes subject to the amber-list control system from the U.S., as the importing country, to a third country listed in Sec. 262.58(a)(1) may occur only after a notifier in the U.S. provides notification to and obtains consent of the competent authorities in the third country, the original exporting country, and new transit countries. The notification must

comply with the notice and consent procedures in Sec. 262.83 for all concerned countries and the original exporting country. The competent authorities of the original exporting country as well as the competent authorities of all other concerned countries have 30 days to object to the proposed movement.

(i) The 30-day period begins once the competent authorities of both the initial exporting country and new importing country issue Acknowledgements of Receipt of the notification.

(ii) The transfrontier movement may commence if no objection has been lodged after the 30-day period has passed or immediately after written consent is received from all relevant OECD importing and transit countries.

(2) Re-export of waste subject to the red-list control system from the original importing country to a third country listed in Sec. 262.58(a)(1) may occur only following notification of the competent authorities of the third country, the original exporting country, and new transit countries by a notifier in the original importing country in accordance with Sec. 262.83. The transfrontier movement may not proceed until receipt by the original importing country of written consent from the competent authorities of the third country, the original exporting country, and new transit countries.

(3) In the case of re-export of amber or red-list wastes to a country other than those in Sec. 262.58(a)(1), notification to and consent of the competent authorities of the original OECD member country of export and any OECD member countries of transit is required as specified in paragraphs (c)(1) and (c)(2) of this section in addition to compliance with all international agreements and arrangements to which the first importing OECD member country is a party and all applicable regulatory requirements for exports from the first importing country.

§262.83: Notification and consent.

(a*) Applicability*. Consent must be obtained from the competent authorities of the relevant OECD importing and transit countries prior to exporting hazardous waste destined for recovery operations subject to this Subpart. Hazardous wastes subject to amber-list controls are subject to the requirements of paragraph (b) of this section; hazardous wastes subject to red-list controls are subject to the requirements of paragraph (c) of this section; and wastes not identified on any list are subject to the requirements of paragraph (d) of this section.

(b*) Amber-list wastes.* The export from the U.S. of hazardous wastes as described in Sec. 262.80(a) that appear on the amber list is prohibited unless the notification and consent requirements of paragraph (b)(1) or paragraph (b)(2) of this section are met.

(1) Transactions requiring specific consent:

(i*) Notification.* At least 45 days prior to commencement of the transfrontier movement, the notifier must provide written notification in English of the proposed transfrontier movement to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, with the words ``Attention: OECD Export Notification'' prominently displayed on the envelope. This notification must include all of the information identified in paragraph (e) of this section. In cases where wastes having similar physical and chemical

characteristics, the same United Nations classification, and the same RCRA waste codes are to be sent periodically to the same recovery facility by the same notifier, the notifier may submit one notification of intent to export these wastes in multiple shipments during a period of up to one year.

(ii) *Tacit consent*. If no objection has been lodged by any concerned country (i.e., exporting, importing, or transit countries) to a notification provided pursuant to paragraph (b)(1)(i) of this section within 30 days after the date of issuance of the Acknowledgment of Receipt of notification by the competent authority of the importing country, the transfrontier movement may commence. Tacit consent expires one calendar year after the close of the 30 day period; renotification and renewal of all consents is required for exports after that date.

(iii) *Written consent.* If the competent authorities of all the relevant OECD importing and transit countries provide written consent in a period less than 30 days, the transfrontier movement may commence immediately after all necessary consents are received. Written consent expires for each relevant OECD importing and transit country one calendar year after the date of that country's consent unless otherwise specified; renotification and renewal of each expired consent is required for exports after that date.

(2) Shipments to facilities pre-approved by the competent authorities of the importing countries to accept specific wastes for recovery:

(i) The notifier must provide EPA the information identified in paragraph (e) of this section in English, at least 10 days in advance of commencing shipment to a pre-approved facility. The notification should indicate that the recovery facility is pre-approved, and may apply to a single specific shipment or to multiple shipments as described in paragraph (b)(1)(i) of this section. This information must be sent to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, with the words ``OECD Export Notification--Pre-approved Facility'' prominently displayed on the envelope.

(ii) Shipments may commence after the notification required in paragraph (b)(1)(i) of this section has been received by the competent authorities of all concerned countries, unless the notifier has received information indicating that the competent authorities of one or more concerned countries objects to the shipment.

(c*) Red-list wastes.* The export from the U.S. of hazardous wastes as described in Sec. 262.80(a) that appear on the red list is prohibited unless notice is given pursuant to paragraph (b)(1)(i) of this section and the notifier receives written consent from the importing country and any transit countries prior to commencement of the transfrontier movement.

(d) *Unlisted wastes.* Wastes not assigned to the green, amber, or red list that are considered hazardous under U.S. national procedures as defined in Sec. 262.80(a) are subject to the notification and consent requirements established for red-list wastes in accordance with paragraph (c) of this section. Unlisted wastes that are not considered hazardous under U.S. national procedures as defined in Sec. 262.80(a) are not subject to amber or red controls when exported or imported.

(e) *Notification information*. Notifications submitted under this section must include:

(1) Serial number or other accepted identifier of the notification form;

(2) Notifier name and EPA identification number (if applicable), address, and telephone and telefax numbers;

(3) Importing recovery facility name, address, telephone and telefax numbers, and technologies employed;

(4) Consignee name (if not the owner or operator of the recovery facility) address, and telephone and telefax numbers; whether the consignee will engage in waste exchange or storage prior to delivering the waste to the final recovery facility and identification of recovery operations to be employed at the final recovery facility;

(5) Intended transporters and/or their agents;

(6) Country of export and relevant competent authority, and point of departure;

(7) Countries of transit and relevant competent authorities and points of entry and departure;

(8) Country of import and relevant competent authority, and point of entry;

(9) Statement of whether the notification is a single notification or a general notification. If general, include period of validity requested;

(10) Date foreseen for commencement of transfrontier movement;

(11) Designation of waste type(s) from the appropriate list (amber or red and waste list code), descriptions of each waste type, estimated total quantity of each, RCRA waste code, and United Nations number for each waste type; and

(12) Certification/Declaration signed by the notifier that states:

I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, and that any applicable insurance or other financial guarantees are or shall be in force covering the transfrontier movement.

Name: _____

Signature: _____

Date: _____

Note to paragraph (e)(12): The U.S. does not currently require financial assurance; however, U.S. exporters may be asked by other governments to provide and certify to such assurance as a condition of obtaining consent to a proposed movement.

§262.84: Tracking document.

(a) All U.S. parties subject to the contract provisions of Sec. 262.85 must ensure that a tracking document meeting the conditions of Sec. 262.84(b) accompanies each transfrontier shipment of wastes subject to amber-list or red-list controls from the initiation of the shipment until it reaches the final recovery facility, including cases in which the waste is stored and/or exchanged by the consignee prior to shipment to the final recovery facility, except as provided in Sec. Sec. 262.84(a)(1) and (2).

(1) For shipments of hazardous waste within the U.S. solely by water (bulk shipments only) the generator must forward the tracking document with the manifest to the last water (bulk shipment) transporter to handle the waste in the U.S. if exported by water, (in accordance with the manifest routing procedures at Sec. 262.23(c)).

(2) For rail shipments of hazardous waste within the U.S. which originate at the site of generation, the generator must forward the tracking document with the manifest (in accordance with the routing procedures for the manifest in Sec. 262.23(d)) to the next non-rail transporter, if any, or the last rail transporter to handle the waste in the U.S. if exported by rail.

(b) The tracking document must include all information required under Sec. 262.83 (for notification), and the following:

(1) Date shipment commenced.

(2) Name (if not notifier), address, and telephone and telefax numbers of primary exporter.

(3) Company name and EPA ID number of all transporters.

(4) Identification (license, registered name or registration number) of means of transport, including types of packaging.

(5) Any special precautions to be taken by transporters.

(6) Certification/declaration signed by notifier that no objection to the shipment has been lodged as follows:

I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, that any applicable insurance or other financial guarantees are or shall be in force covering the transfrontier movement, and that:

1. All necessary consents have been received; OR
2. The shipment is directed at a recovery facility within the OECD area and no objection has been received from any of the concerned countries within the 30 day tacit consent period; OR
3. The shipment is directed at a recovery facility pre-authorized for that type of waste within the OECD area; such an authorization has not been revoked, and no objection has been received from any of the concerned countries.

(delete sentences that are not applicable)

Name: _____
Signature: _____
Date: _____

(7) Appropriate signatures for each custody transfer (e.g. transporter, consignee, and owner or operator of the recovery facility).

(c) Notifiers also must comply with the special manifest requirements of 40 CFR 262.54(a), (b), (c), (e), and (i) and consignees must comply with the import requirements of 40 CFR part 262, subpart F.

(d) Each U.S. person that has physical custody of the waste from the time the movement commences until it arrives at the recovery facility must sign the tracking document (e.g. transporter, consignee, and owner or operator of the recovery facility).

(e) Within 3 working days of the receipt of imports subject to this Subpart, the owner or operator of the U.S. recovery facility must send signed copies of the tracking document to the notifier, to the Office of Enforcement and Compliance Assurance, Office

of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, and to the competent authorities of the exporting and transit countries.

§262.85: Contracts.

(a) Transfrontier movements of hazardous wastes subject to amber or red control procedures are prohibited unless they occur under the terms of a valid written contract, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). Such contracts or equivalent arrangements must be executed by the notifier and the owner or operator of the recovery facility, and must specify responsibilities for each. Contracts or equivalent arrangements are valid for the purposes of this section only if persons assuming obligations under the contracts or equivalent arrangements have appropriate legal status to conduct the operations specified in the contract or equivalent arrangement.

(b) Contracts or equivalent arrangements must specify the name and EPA ID number, where available, of:

(1) The generator of each type of waste;

(2) Each person who will have physical custody of the wastes;

(3) Each person who will have legal control of the wastes; and

(4) The recovery facility.

(c) Contracts or equivalent arrangements must specify which party to the contract will assume responsibility for alternate management of the wastes if its disposition cannot be carried out as described in the notification of intent to export. In such cases, contracts must specify that:

(1) The person having actual possession or physical control over the wastes will immediately inform the notifier and the competent authorities of the exporting and importing countries and, if the wastes are located in a country of transit, the competent authorities of that country; and

(2) The person specified in the contract will assume responsibility for the adequate management of the wastes in compliance with applicable laws and regulations including, if necessary, arranging their return to the original country of export.

(d) Contracts must specify that the consignee will provide the notification required in Sec. 262.82(c) prior to re-export of controlled wastes to a third country.

(e) Contracts or equivalent arrangements must include provisions for financial guarantees, if required by the competent authorities of any concerned country, in accordance with applicable national or international law requirements.

Note to paragraph (e): Financial guarantees so required are intended to provide for alternate recycling, disposal or other means of sound management of the wastes in cases where arrangements for the shipment and the recovery operations cannot be carried out as foreseen. The U.S. does not require such financial guarantees at this time; however, some OECD countries do. It is the responsibility of the notifier to ascertain and comply with such requirements; in some cases, transporters or consignees may refuse to enter into the necessary contracts absent specific references or certifications to financial guarantees.

(f) Contracts or equivalent arrangements must contain provisions requiring each contracting party to comply with all applicable requirements of this subpart.

(g) Upon request by EPA, U.S. notifiers, consignees, or recovery facilities must submit to EPA copies of contracts, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). Information contained in the contracts or equivalent arrangements for which a claim of confidentiality is asserted accordance with 40 CFR 2.203(b) will be treated as confidential and will be disclosed by EPA only as provided in 40 CFR 260.2.

Note to paragraph (g): Although the U.S. does not require routine submission of contracts at this time, OECD Council Decision C(92)39/FINAL allows members to impose such requirements. When other OECD countries require submission of partial or complete copies of the contract as a condition to granting consent to proposed movements, EPA will request the required information; absent submission of such information, some OECD countries may deny consent for the proposed movement.

§262.86: Provisions relating to recognized traders.

(a) A recognized trader who takes physical custody of a waste and conducts recovery operations (including storage prior to recovery) is acting as the owner or operator of a recovery facility and must be so authorized in accordance with all applicable Federal laws.

(b) A recognized trader acting as a notifier or consignee for transfrontier shipments of waste must comply with all the requirements of this Subpart associated with being a notifier or consignee.

§262.87: Reporting and recordkeeping.

(a) *Annual reports.* For all waste movements subject to this Subpart, persons (e.g., notifiers, recognized traders) who meet the definition of primary exporter in Sec. 262.51 shall file an annual report with the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, no later than March 1 of each year summarizing the types, quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year. (If the primary exporter is required to file an annual report for waste exports that are not covered under this Subpart, he may include all export information in one report provided the following information on exports of waste destined for recovery within the designated OECD member countries is contained in a separate section). Such reports shall include the following:

(1) The EPA identification number, name, and mailing and site address of the notifier filing the report;

(2) The calendar year covered by the report;

(3) The name and site address of each final recovery facility;

(4) By final recovery facility, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from 40 CFR part 261, subpart C or

D), designation of waste type(s) from OECD waste list and applicable waste code from the OECD lists, DOT hazard class, the name and U.S. EPA identification number (where applicable) for each transporter used, the total amount of hazardous waste shipped pursuant to this Subpart, and number of shipments pursuant to each notification;

(5) In even numbered years, for each hazardous waste exported, except for hazardous waste produced by exporters of greater than 100kg but less than 1000kg in a calendar month, and except for hazardous waste for which information was already provided pursuant to Sec. 262.41:

(i) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

(ii) A description of the changes in volume and toxicity of the waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984; and

(6) A certification signed by the person acting as primary exporter that states:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

(b) *Exception reports.* Any person who meets the definition of primary exporter in Sec. 262.51 must file an exception report in lieu of the requirements of Sec. 262.42 with the Administrator if any of the following occurs:

(1) He has not received a copy of the tracking documentation signed by the transporter stating point of departure of the waste from the United States, within forty-five (45) days from the date it was accepted by the initial transporter;

(2) Within ninety (90) days from the date the waste was accepted by the initial transporter, the notifier has not received written confirmation from the recovery facility that the hazardous waste was received;

(3) The waste is returned to the United States.

(c) *Recordkeeping.* (1) Persons who meet the definition of primary exporter in Sec. 262.51 shall keep the following records: Sec. 262.89

(i) A copy of each notification of intent to export and all written consents obtained from the competent authorities of concerned countries for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(ii) A copy of each annual report for a period of at least three years from the due date of the report; and

(iii) A copy of any exception reports and a copy of each confirmation of delivery (i.e., tracking documentation) sent by the recovery facility to the notifier for at least three years from the date the hazardous waste was accepted by the initial transporter or received by the recovery facility, whichever is applicable.

(2) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

§262.88: Pre-approval for U.S. Recovery Facilities (Reserved)

§262.89: OECD Waste Lists.

(a) General. For the purposes of this Subpart, a waste is considered hazardous under U.S. national procedures, and hence subject to this Subpart, if the waste:

(1) Meets the Federal definition of hazardous waste in 40 CFR 261.3; and

(2) Is subject to either the Federal RCRA manifesting requirements at 40 CFR part 262, subpart B, to the universal waste management standards of 40 CFR part 273, or to State requirements analogous to 40 CFR part 273.

(b) If a waste is hazardous under paragraph (a) of this section and it appears on the amber or red list, it is subject to amber- or red-list requirements respectively;

(c) If a waste is hazardous under paragraph (a) of this section and it does not appear on either amber or red lists, it is subject to red-list requirements.

(d) The appropriate control procedures for hazardous wastes and hazardous waste mixtures are addressed in Sec. 262.82.

(e) The OECD Green List of Wastes (revised May 1994), Amber List of Wastes and Red List of Wastes (both revised May 1993) as set forth in Appendix 3, Appendix 4 and Appendix 5, respectively, to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 on July 11, 1996. These materials are incorporated as they exist on the date of the approval and a notice of any change in these materials will be published in the Federal Register. The materials are available for inspection at: the U.S. Environmental Protection Agency, RCRA Information Center (RIC), 1235 Jefferson-Davis Highway, first floor, Arlington, VA 22203 (Docket F-94-IEHF-FFFFF) or at the National Archives and Records Administration (NARA), and may be obtained from the Organisation for Economic Co-operation and Development, Environment Direcorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France. For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal--register/code--of--federal--regulations/ibr--locations.html.

[61 FR 16310, Apr. 12, 1996, as amended at 69 FR 18803, Apr. 9, 2004]

Related Resources:

- Frequently Asked Questions on Imports and Exports of Hazardous Waste Between Members of the Organization for Economic Cooperation and Development (OECD)
- Frequently Asked Questions on the Basel Convention

Farmers

Subpart G: Farmers

§262.70: Farmers.

A farmer disposing of waste pesticides from his own use which are hazardous wastes is not required to comply with the standards in this part or other standards in 40 CFR parts 264, 265, 268, or 270 for those wastes provided he triple rinses each emptied pesticide container in accordance with Sec. 261.7(b)(3) and disposes of the pesticide residues on his own farm in a manner consistent with the disposal instructions on the pesticide label.

[53 FR 27165, July 19, 1988, as amended at 71 FR 40271, July 14, 2006]

Related Resources:

- Scope of Farmer Exemption at 40 CFR §262.10(D) and 262.51

LQG Requirements

- Resources for Large Quantity Generators
- Frequently Asked Questions on Waste
- Hazardous Waste Management System: Definitions

Applicability

§ 262.10: Purpose, scope, and applicability

(a) These regulations establish standards for generators of hazardous waste.

(b) 40 CFR 261.5(c) and (d) must be used to determine the applicability of provisions of this part that are dependent on calculations of the quantity of hazardous waste generated per month.

(c) A generator who treats, stores, or disposes of hazardous waste on-site must only comply with the following sections of this part with respect to that waste: Section 262.11 for determining whether or not he has a hazardous waste, § 262.12 for obtaining an EPA identification number, § 262.34 for accumulation of hazardous waste, § 262.40 (c) and (d) for recordkeeping, § 262.43 for additional reporting, and if applicable, § 262.70 for farmers.

(d) Any person who exports or imports hazardous waste subject to the Federal manifesting requirements of part 262, or subject to the universal waste management standards of 40 CFR Part 273, or subject to State requirements analogous to 40 CFR Part 273, to or from the countries listed in § 262.58(a)(1) for recovery must comply with subpart H of this part.

(e) Any person who imports hazardous waste into the United States must comply with the standards applicable to generators established in this part.

(f) A farmer who generates waste pesticides which are hazardous waste and who complies with all of the requirements of § 262.70 is not required to comply with other standards in this part or 40 CFR parts 270, 264, 265, or 268 with respect to such pesticides.

(g) A person who generates a hazardous waste as defined by 40 CFR part 261 is subject to the compliance requirements and penalties prescribed in section 3008 of the Act if he does not comply with the requirements of this part.

(h) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility must comply with the generator standards established in this part.

(i) Persons responding to an explosives or munitions emergency in accordance with 40 CFR 264.1(g)(8)(i)(D) or (iv) or 265.1(c)(11)(i)(D) or (iv), and 270.1(c)(3)(i)(D) or (iii) are not required to comply with the standards of this part.

(j) (1) Universities that are participating in the Laboratory XL project are the University of Massachusetts in Boston, Massachusetts, Boston College in Chestnut Hill, Massachusetts, and the University of Vermont in Burlington, Vermont (''Universities''). The Universities generate laboratory wastes (as defined in § 262.102), some of which will be hazardous wastes. As long as the Universities comply with all the requirements of subpart J of this part the Universities' laboratories that are participating in the University Laboratories XL Project as identified in Table 1 of this section, are not subject to the provisions of §§ 262.11, 262.34(c), 40 CFR Parts 264 and 265, and the permit requirements of 40 CFR Part 270 with respect to said laboratory wastes.

(2) Each University shall have the right to change its respective departments or the on-site location of its hazardous waste accumulation areas listed in Table 1 of this section upon written notice to the Regional Administrator for EPA-Region I and the appropriate state agency. Such written notice will be provided at least ten days prior to the effective date of any such changes.

(k) Generators in the Commonwealth of Massachusetts may comply with the State regulations regarding Class A recyclable materials in 310 C.M.R. 30.200, when authorized by the EPA under 40 CFR part 271, with respect to those recyclable materials and matters covered by the authorization, instead of complying with the hazardous waste accumulation requirements of § 262.34, the reporting requirements of § 262.41, the storage facility operator requirements of 40 CFR parts 264 and 265 and the permitting requirements of 40 CFR part 270. Such generators must also comply with any other applicable requirements, including any applicable authorized State regulations governing hazardous wastes not being recycled and any applicable Federal requirements which are being directly implemented by the EPA within Massachusetts pursuant to the Hazardous and Solid Waste Amendments of 1984.

NOTE 1: The provisions of § 262.34 are applicable to the on-site accumulation of hazardous waste by generators. Therefore, the provisions of § 262.34 only apply to owners or operators who are shipping hazardous waste which they generated at that facility.

NOTE 2: A generator who treats, stores, or disposes of hazardous waste on-site must comply with the applicable standards and permit requirements set forth in 40 CFR parts 264, 265, 266, 268, and 270. [45 FR 33142, May 19, 1980, as amended at 45 FR 86970, Dec. 31, 1980; 47 FR 1251, Jan. 11, 1982; 48 FR 14294, Apr. 1, 1983; 53 FR 27164, July 19, 1988; 56 FR 3877, Jan. 31, 1991; 60 FR 25541, May 11, 1995; 61 FR 16309, Apr. 12, 1996; 62 FR 6651, Feb. 12, 1997; 64 FR 52392, Sept. 28,1999; 69 FR 11813, Mar. 12, 2004]

Generator Status Determination

§261.5 (c) and (d): Generator status determination

(c) When making the quantity determinations of this part and 40 CFR part 262, the generator must include all hazardous waste that it generates, except hazardous waste that:
(1) Is exempt from regulation under 40 CFR 261.4(c) through (f), 261.6(a)(3), 261.7(a)(1), or 261.8; or
(2) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10; or
(3) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under 40 CFR 261.6(c)(2); or
(4) Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and 40 CFR part 279; or
(5) Is spent lead-acid batteries managed under the requirements of 40 CFR part 266, subpart G; or
(6) Is universal waste managed under 40 CFR 261.9 and 40 CFR part 273.

(d) In determining the quantity of hazardous waste generated, a generator need not include:
(1) Hazardous waste when it is removed from on-site storage; or
(2) Hazardous waste produced by on- site treatment (including reclamation) of his hazardous waste, so long as the hazardous waste that is treated was counted once; or
(3) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.

Related Resources:

- Amount of Waste Generated Per Month Determines Generator Status
- Determining Generator Status By Including Wastes Collected at Satellite Accumulation Areas
- Generator Quantity Determination for Mixtures
- Generator Quantity Determinations for F006 Listed Sludge (8/16/2002)
- Weight of Container for Quantity Determinations (6/1/1994)
- Elementary Neutralization Units
- Generator Counting Requirement for Solvent Stills
- Containment Buildings as Generator Accumulation Units

Hazardous Waste Determination

§ 262.11: Hazardous waste determination.

A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous waste using the following method:

(a) He should first determine if the waste is excluded from regulation under 40 CFR 261.4.

(b) He must then determine if the waste is listed as a hazardous waste in subpart D of 40 CFR part 261.

NOTE: Even if the waste is listed, the generator still has an opportunity under 40 CFR 260.22 to demonstrate to the Administrator that the waste from his particular facility or operation is not a hazardous waste.

(c) For purposes of compliance with 40 CFR part 268, or if the waste is not listed in subpart D of 40 CFR part 261, the generator must then determine whether the waste is identified in subpart C of 40 CFR part 261 by either:
(1) Testing the waste according to the methods set forth in subpart C of 40 CFR part 261, or according to an equivalent method approved by the Administrator under 40 CFR 260.21; or
(2) Applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used.
(d) If the waste is determined to be hazardous, the generator must refer to parts 261, 264, 265, 266, 268, and 273 of this chapter for possible exclusions or restrictions pertaining to management of the specific waste. [45 FR 33142, May 19, 1980, as amended at 45 FR 76624, Nov. 19, 1980; 51 FR 40637, Nov. 7, 1986; 55 FR 22684, June 1, 1990; 56 FR 3877, Jan. 31, 1991; 60 FR 25541, May 11, 1995]

Related Resources:

- What Makes a Waste Hazardous?
- Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste: A Guidance Manual
- Policies Regarding Self-Certification of Non-Hazardous Waste
- Analytes to Look For When Performing RCRA Analysis

EPA ID Number

§ 262.12: EPA identification numbers.

(a) A generator must not treat, store, dispose of, transport, or offer for transportation, hazardous waste without having received an EPA identification number from the Administrator.
(b) A generator who has not received an EPA identification number may obtain one by applying to the Administrator using EPA form 8700–12. Upon receiving the request the Administrator will assign an EPA identification number to the generator.
(c) A generator must not offer his hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received an EPA identification number.

Related Resources:

- Managing Your Hazardous Waste: A Guide for Small Businesses

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On-site Accumulation Time Limits

§ 262.34 Accumulation time.

(a) Except as provided in paragraphs (d), (e), and (f) of this section, a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, provided that:

(1) The waste is placed:

(i) In containers and the generator complies with the applicable requirements of subparts I, AA, BB, and CC of 40 CFR part 265; and/or

(ii) In tanks and the generator complies with the applicable requirements of subparts J, AA, BB, and CC of 40 CFR part 265 except §§265.197(c) and 265.200; and/or

(iii) On drip pads and the generator complies with subpart W of 40 CFR part 265 and maintains the following records at the facility:

(A) A description of procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and

(B) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal; and/or

(iv) In containment buildings and the generator complies with subpart DD of 40 CFR part 265, has placed its professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101 in the facility's operating record no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit. The owner or operator shall maintain the following records at the facility:

(A) A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that they are consistent with respecting the 90 day limit, and documentation that the procedures are complied with; or

(B) Documentation that the unit is emptied at least once every 90 days.

In addition, such a generator is exempt from all the requirements in subparts G and H of 40 CFR part 265, except for §§265.111 and 265.114.

(2) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;

(3) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste"; and

(4) The generator complies with the requirements for owners or operators in Subparts C and D in 40 CFR part 265, with §265.16, and with 40 CFR 268.7(a)(5).

Related Resources:

- Accumulation of Hazardous Waste in Tanks (90-day)
- Extension to Generator Accumulation Time Limits For Unforeseen, Temporary Circumstances
- Generator Accumulation Time Requirements
- Frequently Asked Questions on Hazardous Waste Generator Requirements
- Classification and Possible Modification of the 90-Day Generator Rule

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Consequences of Exceeding On-site Accumulation Time Limits

(b) A generator who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of 40 CFR parts 264 and 265 and the permit requirements of 40 CFR part 270 unless he has been granted an extension to the 90-day period. Such extension may be granted by EPA if hazardous wastes must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

Accumulation Requirements for Storage Units: Containers

Subpart I—Use and Management of Containers

§ 265.170: Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities that store containers of hazardous waste, except as§ 265.1 provides otherwise.

§ 265.171: Condition of containers.

If a container holding hazardous waste is not in good condition, or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the

requirements of this part.

§ 265.172: Compatibility of waste with container.

The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

§ 265.173: Management of containers.

(a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.
(b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
[*Comment:* Re-use of containers in transportation is governed by U.S. Department of Transportation regulations, including those set forth in 49 CFR 173.28.]
[45 FR 33232, May 19, 1980, as amended at 45 FR 78529, Nov. 25, 1980]

§ 265.174: Inspections.

The owner or operator must inspect areas where containers are stored, at least weekly, looking for leaks and for deterioration caused by corrosion or other factors.
[*Comment:* See § 265.171 for remedial action required if deterioration or leaks are detected.]

§ 265.175: [Reserved]

§ 265.176: Special requirements for ignitable or reactive waste.
Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.
[*Comment:* See § 265.17(a) for additional requirements.]

§ 265.177: Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, (see appendix V for examples) must not be placed in the same container, unless § 265.17(b) is complied with.
(b) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material (see appendix V for examples), unless § 265.17(b) is complied with.
(c) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.
[*Comment:* The purpose of this is to prevent fires, explosions, gaseous emissions, leaching, or other discharge of hazardous waste or hazardous waste constituents which could result from the mixing of incompatible wastes or materials if containers break or

leak.]

§ 265.178: Air emission standards.

The owner or operator shall manage all hazardous waste placed in a container in accordance with the applicable requirements of subparts AA, BB, and CC of this part. [61 FR 59968, Nov. 25, 1996]

Related Resources:

- Hazardous Waste Container Storage Requirements
- Treating Wastes in Generators Accumulation Tanks and Containers
- Containers Storing Hazardous Waste, Requirements
- Containers for Safe and Economical Storage, Transport, and Disposal of Hazardous Waste
- LQG Compliance with Part 265

Accumulation Requirements for Storage Units: Tanks

Subpart J- Tank Systems

Source: 51 FR 25479, July 14, 1986, unless otherwise noted.

§ 265.190: Applicability.

The requirements of this subpart apply to owners and operators of facilities that use tank systems for storing or treating hazardous waste except as otherwise provided in paragraphs (a), (b), and (c) of this section or in § 265.1 of this part.

(a) Tank systems that are used to store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in § 265.193. To demonstrate the absence or presence of free liquids in the stored/treated waste, the following test must be used: Method 9095B (Paint Filter Liquids Test) as described in ‘‘Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,’’ EPA Publication SW–846, as incorporated by reference in § 260.11 of this chapter.

(b) Tank systems, including sumps, as defined in § 260.10, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in § 265.193(a). (c) Tanks, sumps, and other collection devices used in conjunction with drip pads, as defined in § 260.10 of this chapter and regulated under 40 CFR part 265 subpart W, must meet the requirements of this subpart.

§ 265.191: Assessment of existing tank system’s integrity.

a) For each existing tank system that does not have secondary containment meeting the

requirements of §265.193, the owner or operator must determine that the tank system is not leaking or is unfit for use. Except as provided in paragraph (c) of this section, the owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by a qualified Professional Engineer in accordance with §270.11(d) of this chapter, that attests to the tank system's integrity by January 12, 1988.

(b) This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:
(1) Design standard(s), if available, according to which the tank and ancillary equipment were constructed;
(2) Hazardous characteristics of the waste(s) that have been or will be handled;
(3) Existing corrosion protection measures;
(4) Documented age of the tank system, if available, (otherwise, an estimate of the age); and
(5) Results of a leak test, internal inspection, or other tank integrity examination such that:
(i) For non-enterable underground tanks, this assessment must consist of a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects,
(ii) For other than non-enterable underground tanks and for ancillary equipment, this assessment must be either a leak test, as described above, or an internal inspection and/or other tank integrity examination certified by a qualified Professional Engineer in accordance with §270.11(d) of this chapter that addresses cracks, leaks, corrosion, and erosion.
[NOTE: The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, ‘‘Atmospheric and Low-Pressure Storage Tanks,’’ 4th edition, 1981, may be used, where applicable, as guidelines in conducting the integrity examination of an other than non-enterable underground tank system.]

(c) Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986 must conduct this assessment within 12 months after the date that the waste becomes a hazardous waste.
(d) If, as a result of the assessment conducted in accordance with paragraph (a) of this section, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of § 265.196.

[51 FR 25479, July 14, 1986, as amended at 71 FR 16910, Apr. 4, 2006]

§ 265.192: Design and installation of new tank systems or components.

(a) Owners or operators of new tank systems or components must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength,

compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner or operator must obtain a written assessment reviewed and certified by a qualified Professional Engineer in accordance with §270.11(d) of this chapter attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. This assessment must include the following information:

(1) Design standard(s) according to which the tank(s) and ancillary equipment is or will be constructed.
(2) Hazardous characteristics of the waste(s) to be handled.
(3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system is or will be in contact with the soil or with water,
a determination by a corrosion expert of:
(i) Factors affecting the potential for corrosion, including but not limited to:
(A) Soil moisture content;
(B) Soil pH;
(C) Soil sulfides level;
(D) Soil resistivity;
(E) Structure to soil potential;
(F) Influence of nearby underground metal structures (e.g., piping);
(G) Stray electric current; and,
(H) Existing corrosion-protection measures (e.g., coating, cathodic protection), and
(ii) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:
(A) Corrosion-resistant materials of construction such as special alloys or fiberglass-reinforced plastic;
(B) Corrosion-resistant coating (such as epoxy or fiberglass) with cathodic protection (e.g., impressed current or sacrificial anodes); and
(C) Electrical isolation devices such as insulating joints and flanges.

NOTE: The practices described in the National Association of Corrosion Engineers (NACE) standard, ‘‘Recommended Practice (RP–02–85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems,’’ and the American Petroleum Institute (API) Publication 1632, ‘‘Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems,’’ may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

(4) For underground tank system components that are likely to be affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and
(5) Design considerations to ensure that:
(i) Tank foundations will maintain the load of a full tank;
(ii) Tank systems will be anchored to prevent flotation or dislodgement where the tank system is placed in a saturated zone, or is located within a seismic fault zone; and

(iii) Tank systems will withstand the effects of frost heave.

(b) The owner or operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified installation inspector or a qualified Professional Engineer, either of whom is trained and experienced in the proper installation of tank systems, must inspect the system or component for the presence of any of the following items:
(1) Weld breaks;
(2) Punctures;
(3) Scrapes of protective coatings;
(4) Cracks;
(5) Corrosion;
(6) Other structural damage or inadequate construction or installation. All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.
(c) New tank systems or components and piping that are placed underground and that are backfilled must be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is carefully installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.
(d) All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system must be performed prior to the tank system being covered, enclosed, or placed in use.
(e) Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion or contraction.

NOTE: The piping system installation procedures described in American Petroleum Institute (API) Publication 1615 (November 1979), ‘‘Installation of Underground Petroleum Storage Systems,’’ or ANSI Standard B31.3, ‘‘Petroleum Refinery System,’’ may be used, where applicable, as guidelines for proper installation of piping systems.

(f) The owner or operator must provide the type and degree of corrosion protection necessary, based on the information provided under paragraph (a)(3) of this section, to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.

(g) The owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of paragraphs (b) through (f) of this section to attest that the tank system was properly designed and installed and that repairs, pursuant to paragraphs (b) and (d) of this section were performed. These written statements must also include the certification statement as required in § 270.11(d) of this chapter.

[51 FR 25479, July 14, 1986; 51 FR 29430, Aug. 15, 1986; 71 FR 16910, Apr. 4, 2006]

§ 265.193: Containment and detection of releases.

(a) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this section must be provided (except as provided in paragraphs (f) and (g) of this section):

(1) For all new and existing tank systems or components, prior to their being put into service.

(2) For tank systems that store or treat materials that become hazardous wastes, within 2 years of the hazardous waste listing, or when the tank system has reached 15 years of age, whichever comes later.

(b) Secondary containment systems must be:
(1) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and
(2) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
(c) To meet the requirements of paragraph (b) of this section, secondary containment systems must be at a minimum:
(1) Constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system and must have sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from nearby vehicular traffic);

(2) Placed on a foundation or base capable of providing support to the secondary containment system and resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or uplift;
(3) Provided with a leak detection system that is designed and operated so that it will detect the failure of either the primary and secondary containment structure or any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within 24 hours;
(4) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health or the environment, if removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours.

NOTE: If the collected material is a hazardous waste under part 261 of this chapter, it is

subject to management as a hazardous waste in accordance with all applicable requirements of parts 262 through 265 of this chapter. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water Act, as amended. If discharged to Publicly Owned Treatment Works (POTWs), it is subject to the requirements of section 307 of the Clear Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR Part 302.
(d) Secondary containment for tanks must include one or more of the following devices:
(1) A liner (external to the tank);
(2) A vault;
(3) A double-walled tank; or
(4) An equivalent device as approved by the Regional Administrator.
(e) In addition to the requirements of paragraphs (b), (c), and (d) of this section, secondary containment systems must satisfy the following requirements:
(1) External liner systems must be:
(i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;
(ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;
(iii) Free of cracks or gaps; and
(iv) Designed and installed to completely surround the tank and to cover all surrounding earth likely to come into contact with the waste if released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste).
(2) Vault systems must be: (i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;
(ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;
(iii) Constructed with chemical-resistant water stops in place at all joints (if any);
(iv) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;
(v) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:
(A) Meets the definition of ignitable waste under § 261.21 of this chapter, or
(B) Meets the definition of reactive waste under § 261.23 of this chapter and may form an ignitable or explosive vapor; and
(vi) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.
(3) Double-walled tanks must be:
(i) Designed as an integral structure (i.e., an inner tank within an outer shell) so that any release from the inner tank is contained by the outer shell;
(ii) Protected, if constructed of metal, from both corrosion of the primary tank interior

and the external surface of the outer shell; and
(iii) Provided with a built-in, continuous leak detection system capable of detecting a release within 24 hours or at the earliest practicable time, if the owner or operator can demonstrate to the Regional Administrator, and the Regional Administrator concurs, that the existing leak detection technology or site conditions will not allow detection of a release within 24 hours.

NOTE: The provisions outlined in the Steel Tank Institute's (STI) ''Standard for Dual Wall Underground Steel Storage Tank'' may be used as guidelines for aspects of the design of underground steel double-walled tanks.

(f) Ancillary equipment must be provided with full secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of paragraphs (b) and (c) of this section except for:
(1) Aboveground piping (exclusive of flanges, joints, valves, and connections) that are visually inspected for leaks on a daily basis;
(2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;
(3) Sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and
(4) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.
(g) The owner or operator may obtain a variance from the requirements of this Section if the Regional Administrator finds, as a result of a demonstration by the owner or operator, either: that alternative design and operating practices, together with location characteristics, will prevent the migration of hazardous waste or hazardous constituents into the ground water *or* surface water at least as effectively as secondary containment during the active life of the tank system *or* that in the event of a release that does migrate to ground water or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with paragraph (g)(2) of this section, be exempted from the secondary containment requirements of this section. Application for a variance as allowed in paragraph (g) of this section does not waive compliance with the requirements of this subpart for new tank systems.
(1) In deciding whether to grant a variance based on a demonstration of equivalent protection of ground water and surface water, the Regional Administrator will consider:
(i) The nature and quantity of the waste;
(ii) The proposed alternate design and operation;
(iii) The hydrogeologic setting of the facility, including the thickness of soils between the tank system and ground water; and
(iv) All other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to ground water or surface water.
(2) In deciding whether to grant a variance, based on a demonstration of no substantial present or potential hazard, the Regional Administrator will consider:
(i) The potential adverse effects on ground water, surface water, and land quality taking

into account:
(A) The physical and chemical characteristics of the waste in the tank system, including its potential for migration,
(B) The hydrogeological characteristics of the facility and surrounding land,
(C) The potential for health risks caused by human exposure to waste constituents,
(D) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents, and
(E) The persistence and permanence of the potential adverse effects;
(ii) The potential adverse effects of a release on ground-water quality, taking into account:
(A) The quantity and quality of ground water and the direction of ground-water flow,
(B) The proximity and withdrawal rates of water in the area,
(C) The current and future uses of ground water in the area, and
(D) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground-water quality;
(iii) The potential adverse effects of a release on surface water quality, taking into account:
(A) The quantity and quality of ground water and the direction of ground-water flow,
(B) The patterns of rainfall in the region,
(C) The proximity of the tank system to surface waters,
(D) The current and future uses of surface waters in the area and any water quality standards established for those surface waters, and
(E) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality; and
(iv) The potential adverse effects of a release on the land surrounding the tank system, taking into account:
(A) The patterns of rainfall in the region, and
(B) The current and future uses of the surrounding land.
(3) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of paragraph (g)(1) of this section, at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), must:
(i) Comply with the requirements of § 265.196, except paragraph (d); and
(ii) Decontaminate or remove contaminated soil to the extent necessary to:
(A) Enable the tank system, for which the variance was granted, to resume operation with the capability for the detection of and response to releases at least equivalent to the capability it had prior to the release, and
(B) Prevent the migration of hazardous waste or hazardous constituents to ground water or surface water; and
(iii) If contaminated soil cannot be removed or decontaminated in accordance with paragraph (g)(3)(ii) of this section, comply with the requirements of § 265.197(b);
(4) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of paragraph (g)(1) of this section, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the

variance), must:
(i) Comply with the requirements of § 265.196(a), (b), (c), and (d); and
(ii) Prevent the migration of hazardous waste or hazardous constituents to ground water or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed, or if ground water has been contaminated, the owner or operator must comply with the requirements of § 265.197(b);
(iii) If repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with the requirements of paragraphs (a) through (f) of this section or reapply for a variance from secondary containment and meet the requirements for new tank systems in § 265.192 if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil can be decontaminated or removed, and ground water or surface water has not been contaminated.

(h) The following procedures must be followed in order to request a variance from secondary containment:
(1) The Regional Administrator must be notified in writing by the owner or operator that he intends to conduct and submit a demonstration for a variance from secondary containment as allowed in paragraph (g) of this section according to the following schedule:
(i) For existing tank systems, at least 24 months prior to the date that secondary containment must be provided in accordance with paragraph (a) of this section; and
(ii) For new tank systems, at least 30 days prior to entering into a contract for installation of the tank system.
(2) As part of the notification, the owner or operator must also submit to the Regional Administrator a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in paragraph (g)(1) or paragraph (g)(2) of this section.
(3) The demonstration for a variance must be completed and submitted to the Regional Administrator within 180 days after notifying the Regional Administrator of intent to conduct the demonstration.
(4) The Regional Administrator will inform the public, through a newspaper notice, of the availability of the demonstration for a variance. The notice shall be placed in a daily or weekly major local newspaper of general circulation and shall provide at least 30 days from the date of the notice for the public to review and comment on the demonstration for a variance. The Regional Administrator also will hold a public hearing, in response to a request or at his own discretion, whenever such a hearing might clarify one or more issues concerning the demonstration for a variance. Public notice of the hearing will be given at least 30 days prior to the date of the hearing and may be given at the same time as notice of the opportunity for the public to review and comment on the demonstration. These two notices may be combined.
(5) The Regional Administrator will approve or disapprove the request for a variance within 90 days of receipt of the demonstration from the owner or operator and w ill notify in writing the owner or operator and each person who submitted written comments or requested notice of the variance decision. If the demonstration for a variance is incomplete or does not include sufficient information, the 90-day time period will begin when the Regional Administrator receives a complete demonstration, including all

information necessary to make a final determination. If the public comment period in paragraph (h)(4) of this section is extended, the 90-day time period will be similarly extended.
(i) All tank systems, until such time as secondary containment meeting the requirements of this section is provided, must comply with the following:
(1) For non-enterable underground tanks, a leak test that meets the requirements of §265.191(b)(5) must be conducted at least annually;
(2) For other than non-enterable underground tanks, and for all ancillary equipment, the owner or operator must either conduct a leak test as in paragraph (i)(1) of this section or an internal inspection or other tank integrity examination by a qualified Professional Engineer that addresses cracks, leaks, and corrosion or erosion at least annually. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed.
NOTE: The practices described in the American Petroleum Institute (API) Publication Guide for Inspection of Refining Equipment, Chapter XIII, ‘‘Atmospheric and Low Pressure Storage Tanks,’’ 4th edition, 1981, may be used, when applicable, as guidelines for assessing the overall condition of the tank system.

(3) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with paragraphs (i)(1) through (i)(3) of this section.
(4) If a tank system or component is found to be leaking or unfit-for-use as a result of the leak test or assessment in paragraphs (i)(1) through (i)(3) of this section, the owner or operator must comply with the requirements of § 265.196.

[51 FR 25479, July 14, 1986; 51 FR 29430, Aug. 15, 1986, as amended at 53 FR 34087, Sept. 2, 1988; 71 FR 16910, Apr. 4, 2006; 71 FR 40275, July 14, 2006]

§ 265.194: General operating requirements.

(a) Hazardous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the secondary containment system to rupture, leak, corrode, or otherwise fail.
(b) The owner or operator must use appropriate controls and practices to prevent spills and overflows from tank or secondary containment systems. These include at a minimum:
(1) Spill prevention controls (e.g., check valves, dry disconnect couplings);
(2) Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and
(3) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.
(c) The owner or operator must comply with the requirements of § 265.196 if a leak or spill occurs in the tank system.

[51 FR 25479, July 14, 1986, as amended at 71 FR 40275, July 14, 2006]

§ 265.195: Inspections.

(a) The owner or operator must inspect, where present, at least once each operating day, data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design.
(1) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;
(2) The aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
(3) Data gathered from monitoring equipment and leak-detection equipment, (e.g., pressure and temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and
(4) The construction materials and the area immediately surrounding the externally accessible portion of the tank system including secondary containment structures (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation);

NOTE: Section 265.15(c) requires the owner or operator to remedy any deterioration or malfunction he finds. Section 265.196 requires the owner or operator to notify the Regional Administrator within 24 hours of confirming a release. Also, 40 CFR part 302 may require the owner or operator to notify the National Response Center of a release.

(b) Except as noted under the paragraph (c) of this section, the owner or operator must inspect at least once each operating day:

(1) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;

(2) Above ground portions of the tank system, if any, to detect corrosion or releases of waste; and

(3) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).

(c) Owners or operators of tank systems that either use leak detection equipment to alert facility personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, must inspect at least weekly those areas described in paragraphs (b)(1) through (3) of this section. Use of the alternate inspection schedule must be documented in the facility's operating record. This documentation must include a description of the established workplace practices at the facility.

(d) Performance Track member facilities may inspect on a less frequent basis, upon approval by the Director, but must inspect at least once each month. To apply for a less

than weekly inspection frequency, the Performance Track member facility must follow the procedures described in §265.15(b)(5).

(e) Ancillary equipment that is not provided with secondary containment, as described in §265.193(f)(1) through (4), must be inspected at least once each operating day.

(f) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

(1) The proper operation of the cathodic protection system must be confirmed within six months after initial installation, and annually thereafter; and

(2) All sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month).

Note: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Recommended Practice (RP–02–85)—Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and the American Petroleum Institute (API) Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

(g) The owner or operator must document in the operating record of the facility an inspection of those items in paragraphs (a) and (b) of this section.

[51 FR 25479, July 14, 1986; 51 FR 29430, Aug. 15, 1986, as amended at 71 FR 16910, Apr. 4, 2006]

§ 265.196: Response to leaks or spills and disposition of leaking or unfit-for-use tank systems.

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:
(a) *Cessation of use; prevent flow or addition of wastes.* The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.
(b) *Removal of waste from tank system or secondary containment system.* (1) If the release was from the tank system, the owner or operator must, within 24 hours after detection of the leak or, if the owner or operator demonstrates that that is not possible, at the earliest practicable time remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.
(2) If the release was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to

human health and the environment.
(c) *Containment of visible releases to the environment.* The owner or operator must immediately conduct a visual inspection of the release and, based upon that inspection:
(1) Prevent further migration of the leak or spill to soils or surface water; and
(2) Remove, and properly dispose of, any visible contamination of the soil or surface water.
(d) *Notifications, reports.*
(1) Any release to the environment, except as provided in paragraph (d)(2) of this section, must be reported to the Regional Administrator within 24 hours of detection. If the release has been reported pursuant to 40 CFR part 302, that report will satisfy this requirement.
(2) A leak or spill of hazardous waste that is:
(i) Less than or equal to a quantity of one (1) pound, and
(ii) Immediately contained and cleaned-up is exempted from the requirements of this paragraph.
(3) Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the Regional Administrator:
(i) Likely route of migration of the release;
(ii) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);
(iii) Results of any monitoring or sampling conducted in connection with the release, (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Regional Administrator as soon as they become available;
(iv) Proximity to down gradient drinking water, surface water, and population areas; and
(v) Description of response actions taken or planned.
(e) *Provision of secondary containment, repair, or closure.*
(1) Unless the owner or operator satisfies the requirements of paragraphs (e) (2) through (4) of this section, the tank system must be closed in accordance with § 265.197.
(2) If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.
(3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.
(4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of § 265.193 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of paragraph (f) of this section are satisfied. If a component is replaced to comply with the requirements of this subparagraph, that component must satisfy the requirements for new tank systems or components in §§ 265.192 and 265.193. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for

visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with § 265.193 prior to being returned to use.

f) *Certification of major repairs.* If the owner/operator has repaired a tank system in accordance with paragraph (e) of this section, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner/operator has obtained a certification by a qualified Professional Engineer in accordance with §270.11(d) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification is to be placed in the operating record and maintained until closure of the facility.

NOTE: The Regional Administrator may, on the basis of any information received that there is or has been a release of hazardous waste or hazardous constituents into the environment, issue an order under RCRA section 3004(v), 3008(h), or 7003(a) requiring corrective action or such other response as deemed necessary to protect human health or the environment.

NOTE: See § 265.15(c) for the requirements necessary to remedy a failure. Also, 40 CFR Part 302 requires the owner or operator to notify the National Response Center of a release of any ‘‘reportable quantity.’’

[51 FR 25479, July 14, 1986, as amended at 53 FR 34087, Sept. 2, 1988; 71 FR 16911, Apr. 4, 2006]

§ 265.197 Closure and post-closure care.

(a) At closure of a tank system, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless §261.3(d) of this Chapter applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems must meet all of the requirements specified in subparts G and H of this part.

(b) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in paragraph (a) of this section, then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (§265.310). In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in subparts G and H of this part.

(§ 265.197(c) is not applicable to Large Quantity Generators)

(c) If an owner or operator has a tank system which does not have secondary containment that meets the requirements of §265.193(b) through (f) and which is not exempt from the secondary containment requirements in accordance with §265.193(g), then,

(1) The closure plan for the tank system must include both a plan for complying with paragraph (a) of this section and a contingent plan for complying with paragraph (b) of this section.

(2) A contingent post-closure plan for complying with paragraph (b) of this section must be prepared and submitted as part of the permit application.

(3) The cost estimates calculated for closure and post-closure care must reflect the costs of complying with the contingent closure plan and the contingent post-closure plan, if these costs are greater than the costs of complying with the closure plan prepared for the expected closure under paragraph (a) of this section.

(4) Financial assurance must be based on the cost estimates in paragraph (c)(3) of this section.

(5) For the purposes of the contingent closure and post-closure plans, such a tank system is considered to be a landfill, and the contingent plans must meet all of the closure, post-closure, and financial responsibility requirements for landfills under subparts G and H of this part.

[51 FR 25479, July 14, 1986, as amended at 71 FR 40275, July 14, 2006]

§ 265.198: Special requirements for ignitable or reactive wastes.

(a) Ignitable or reactive waste must not be placed in a tank system, unless:
(1) The waste is treated, rendered, or mixed before or immediately after placement in the tank system so that:
(i) The resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste under §§ 261.21 or 261.23 of this chapter; and
(ii) Section 265.17(b) is complied with; or
(2) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or
(3) The tank system is used solely for emergencies.
(b) The owner or operator of a facility where ignitable or reactive waste is stored or treated in tanks must comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2–1 through 2–6 of the National Fire Protection Association's ''Flammable and Combustible Liquids Code,'' (1977 or 1981), (incorporated by reference, see § 260.11).

§ 265.199: Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible waste and materials, must not be placed in the same tank system, unless § 265.17(b) is complied with.
(b) Hazardous waste must not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless § 265.17(b) is complied with.

§ 265.200: Waste analysis and trial tests.

(§ 265.200 is not applicable to Large Quantity Generators)

In addition to performing the waste analysis required by § 265.13, the owner or operator must, whenever a tank system is to be used to treat chemically or to store a hazardous waste that is substantially different from waste previously treated or stored in that tank system; or treat chemically a hazardous waste with a substantially different process than any previously used in that tank system:
(a) Conduct waste analyses and trial treatment or storage tests (e.g., bench scale or pilot-plant scale tests); or
(b) Obtain written, documented information on similar waste under similar operating conditions to show that the proposed treatment or storage will meet the requirements of § 265.194(a).

NOTE: Section 265.13 requires the waste analysis plan to include analyses needed to comply with §§ 265.198 and 265.199. Section 265.73 requires the owner or operator to place the results from each waste analysis and trial test, or the documented information, in the operating record of the facility.

§ 265.202: Air emission standards.

The owner or operator shall manage all hazardous waste placed in a tank in accordance with the applicable requirements of subparts AA, BB, and CC of this part.

[61 FR 59968, Nov. 25, 1996]

Related Resources:

- Hazardous Waste Tanks Inspection Manual
- Hazardous Waste Tanks
- Hazardous Waste Tanks - Installation/Certification of Secondary Containment
- Hazardous Waste Tanks/Containers – Capacity of Secondary Containment
- Releases From 90 Day Accumulation Tanks
- Secondary Containment for Hazardous Waste Tanks
- Secondary Containment Systems for Hazardous Waste Tanks
- Hazardous Waste Tank - Leak Detection
- Tank Integrity Assessments
- Tanks Holding Hazardous Waste
- Integrity Assessment for Hazardous Waste Tanks and Post-Closure Requirements

- Accumulation of Hazardous Waste in Tanks (90-Day)
- Inspections Requirements for Hazardous Waste Tanks
- Tank Replacement
- Start Dates on Large Quantity Generator Tanks
- Clarification of Requirements for Secondary Containment Systems Associated With Hazardous Waste Tanks
- Turnover of Hazardous Wastes Stored in Generator Accumulation Tanks
- LQG Compliance with Part 265

Satellite Accumulation

Note: Hazardous wastes stored in satellite accumulation areas have fewer regulatory requirements than wastes stored in central accumulation areas by small and large quantity generators. For a discussion of these reduced requirements, please see the following memorandum: Frequently Asked Questions about Satellite Accumulation Areas

§262.34: Accumulation time.

(c)(1) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in § 261.33(e) in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with paragraph (a) of this section provided he:
(i) Complies with §§ 265.171, 265.172, and 265.173(a) of this chapter; and
(ii) Marks his containers either with the words ''Hazardous Waste'' or with other words that identify the contents of the containers.
(2) A generator who accumulates either hazardous waste or acutely hazardous waste listed in § 261.33(e) in excess of the amounts listed in paragraph (c)(1) of this section at or near any point of generation must, with respect to that amount of excess waste, comply within three days with paragraph (a) of this section or other applicable provisions of this chapter. During the three day period the generator must continue to comply with paragraphs (c)(1)(i) through (ii) of this section. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

Related Resources:

- Clarification of Section 262.34(A) Accumulation Time for Excess of 55-Gallon Limit in Satellite Accumulation Areas
- Frequently Asked Questions about Satellite Accumulation Areas
- Satellite Accumulation
- Satellite Accumulation Area and Regulations
- Cabinets as Satellite Accumulation Areas
- Clarification: Satellite Accumulation Provision

- Determining Generator Status by Including Wastes Collected at Satellite Accumulation Areas
- Clarification of the Satellite Accumulation Provision for Hazardous Waste Generators
- Clarification of Section 262.34(a) Accumulation Time for Excess of 55-Gallon Limit in Satellite Accumulation Areas
- Generator Satellite Accumulation/Counting Requirements
- Satellite Accumulation Area Regulations
- Regulations That Apply to Generators Who Accumulate Waste in Containers At Or Near the Point of Generation

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Marking and Labeling

§ 262.34: Accumulation time.

(a)(2) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;
(a)(3) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, ‘‘Hazardous Waste’’; and… **(Note: End of discussion on labeling and marking)**

Related Resources:

- Hazardous Waste Container Labeling Requirements
- Start Dates on Large Quantity Generator Tanks

Personnel Training

§ 265.16: Personnel training.

(a)(1) Facility personnel must successfully complete a program of classroom instruction or on- the-job training that teaches them to perform their duties in a way that ensures the facility’s compliance with the requirements of this part. The owner or operator must ensure that this program includes all the elements described in the document required under paragraph (d)(3) of this section.
(2) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
(3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:
(i) Procedures for using, inspecting, repairing, and replacing facility emergency and

monitoring equipment;
(ii) Key parameters for automatic waste feed cut-off systems;
(iii) Communications or alarm systems;
(iv) Response to fires or explosions;
(v) Response to ground-water contamination incidents; and
(vi) Shutdown of operations.
(4) For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the facility is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all the requirements of this section.

(b) Facility personnel must successfully complete the program required in paragraph (a) of this section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of paragraph (a) of this section.

(c) Facility personnel must take part in an annual review of the initial training required in paragraph (a) of this section.

(d) The owner or operator must maintain the following documents and records at the facility:
(1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
(2) A written job description for each position listed under paragraph (d)(1) of this Section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;
(3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (d)(1) of this section;
(4) Records that document that the training or job experience required under paragraphs (a), (b), and (c) of this section has been given to, and completed by, facility personnel.

(e) Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

[45 FR 33232, May 19, 1980, as amended at 50 FR 4514, Jan. 31, 1985; 71 FR 16908, Apr. 4, 2006; 71 FR 40274, July 14, 2006]

Related Resources:

- Episodic Generators and Personnel Training
- Clarification on the Amount, Type, and Frequency of Training Required for Personnel Handling Hazardous Waste at Facilities
- Interpretation of the Annual Training Requirements
- Training Employees
- Generator Personnel Training Requirements
- Hazardous Waste Training Under 40 CFR 262.34
- Training and Manifest Signature Requirements for Generators

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Recordkeeping and Reporting

§ 262.40: Recordkeeping.

(a) A generator must keep a copy of each manifest signed in accordance with § 262.23(a) for three years or until he receives a signed copy from the designated facility which received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.
(b) A generator must keep a copy of each Biennial Report and Exception Report for a period of at least three years from the due date of the report.
(c) A generator must keep records of any test results, waste analyses, or other determinations made in accordance with § 262.11 for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.
(d) The periods or retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.
[45 FR 33142, May 19, 1980, as amended at 48 FR 3981, Jan. 28, 1983]

§ 262.41: Biennial report.

(a) A generator who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must prepare and submit a single copy of a Biennial Report to the Regional Administrator by March 1 of each even numbered year. The Biennial Report must be submitted on EPA Form 8700–13A, must cover generator activities during the previous year, and must include the following information:

(1) The EPA identification number, name, and address of the generator;

(2) The calendar year covered by the report;

(3) The EPA identification number, name, and address for each off-site treatment, storage, or disposal facility in the United States to which waste was shipped during the year;

(4) The name and EPA identification number of each transporter used during the reporting year for shipments to a treatment, storage or disposal facility within the United States;

(5) A description, EPA hazardous waste number (from 40 CFR part 261, subpart C or D), DOT hazard class, and quantity of each hazardous waste shipped off-site for shipments to a treatment, storage or disposal facility within the United States. This information must be listed by EPA identification number of each such off-site facility to which waste was shipped.

(6) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.

(7) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

(8) The certification signed by the generator or authorized representative.

(b) Any generator who treats, stores, or disposes of hazardous waste on-site must submit a biennial report covering those wastes in accordance with the provisions of 40 CFR parts 270, 264, 265, and 266. Reporting for exports of hazardous waste is not required on the Biennial Report form. A separate annual report requirement is set forth at 40 CFR 262.56.

[48 FR 3981, Jan. 28, 1983, as amended at 48 FR 14294, Apr. 1, 1983; 50 FR 28746, July 15, 1985; 51 FR 28682, Aug. 8, 1986]

§ 262.42: Exception reporting.

(a)(1) A generator of greater than 1000 kilograms of hazardous waste in a calendar month who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 35 days of the date the waste was accepted by the initial transporter must contact the transporter and/or the owner or operator of the designated facility to determine the status of the hazardous waste.

(2) A generator of greater than 1000 kilograms of hazardous waste in a calendar month must submit an Exception Report to the EPA Regional Administrator for the Region in which the generator is located if he has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter. The Exception Report must include:

(i) A legible copy of the manifest for which the generator does not have confirmation of delivery;

(ii) A cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

(b) A generator of greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 60 days of the date the waste was accepted by the initial transporter must submit a legible copy of the manifest, with some indication that the generator has not received confirmation of delivery, to the EPA Regional Administrator for the Region in which the generator is located.

Note: The submission to EPA need only be a handwritten or typed note on the manifest itself, or on an attached sheet of paper, stating that the return copy was not received.

[52 FR 35898, Sept. 23, 1987]

§ 262.43: Additional reporting.

The Administrator, as he deems necessary under sections 2002(a) and 3002(6) of the Act, may require generators to furnish additional reports concerning the quantities and disposition of wastes identified or listed in 40 CFR part 261.

Related Resources:

- Recordkeeping Requirements for Owners or Operators Assuming Generator Responsibilities
- Interpretation of 40 CFR 268.7 Requirements
- Amendments to Part 262 Hazardous Waste Determination and Recordkeeping Requirements of Part 262 and 268

Preparedness and Prevention

Subpart C—Preparedness and Prevention

§ 265.30 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 265.1 provides otherwise.

§ 265.31 Maintenance and operation of facility.

Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

§ 265.32 Required equipment.

All facilities must be equipped with the following, *unless* none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:
(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
(b) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;
(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and
(d) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

§ 265.33 Testing and maintenance of equipment.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

§ 265.34 Access to communications or alarm system

(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, *unless* such a device is not required under § 265.32.
(b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, *unless* such a device is not required under § 265.32.

§ 265.35 Required aisle space

The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, *unless* aisle space is not needed for any of these purposes.

§ 265.36 [Reserved]

§ 265.37 Arrangements with local authorities

(a) The owner or operator must attempt to make the following arrangements, as

appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:
(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;
(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;
(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and
(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.
(b) Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

Emergency Procedures and Response

Subpart D—Contingency Plan and Emergency Procedures

§ 265.50 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 265.1 provides otherwise.

§ 265.51 Purpose and implementation of contingency plan.

(a) Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.
(b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.
[45 FR 33232, May 19, 1980, as amended at 50 FR 4514, Jan. 31, 1985]

§ 265.52 Content of contingency plan.

(a) The contingency plan must describe the actions facility personnel must take to comply with §§265.51 and 265.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

(b) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with Part 112 of this chapter, or Part 1510 of chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part. The owner or operator may develop one contingency plan which meets all regulatory requirements. EPA recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan"). When modifications are made to non-RCRA provisions in an integrated contingency plan, the changes do not trigger the need for a RCRA permit modification.

(c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to §265.37.

(d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see §265.55), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

(e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

[45 FR 33232, May 19, 1980, as amended at 46 FR 27480, May 20, 1981; 50 FR 4514, Jan. 31, 1985; 71 FR 16908, Apr. 4, 2006]

§ 265.53 Copies of contingency plan.

A copy of the contingency plan and all revisions to the plan must be:
(a) Maintained at the facility; and
(b) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.
[45 FR 33232, May 19, 1980, as amended at 50 FR 4514, Jan. 31, 1985]

§ 265.54 Amendment of contingency plan.

The contingency plan must be reviewed, and immediately amended, if necessary,

whenever:
(a) Applicable regulations are revised;
(b) The plan fails in an emergency;
(c) The facility changes—in its design, construction, operation, maintenance, or other circumstances—in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
(d) The list of emergency coordinators changes; or
(e) The list of emergency equipment changes.
[45 FR 33232, May 19, 1980, as amended at 50 FR 4514, Jan. 31, 1985]

§ 265.55 Emergency coordinator.

At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.
[*Comment:* The emergency coordinator's responsibilities are more fully spelled out in § 265.56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility.]

§ 265.56 Emergency procedures.

(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(1) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(2) Notify appropriate State or local agencies with designated response roles if their help is needed.

(b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

(c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion

(e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).

(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

(1) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(2) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under part 1510 of this title), or the National Response Center (using their 24-hour toll free number 800/424–8802). The report must include:

(i) Name and telephone number of reporter;

(ii) Name and address of facility;

(iii) Time and type of incident (e.g., release, fire);

(iv) Name and quantity of material(s) involved, to the extent known;

(v) The extent of injuries, if any; and

(vi) The possible hazards to human health, or the environment, outside the facility.

(e) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

(f) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

[*Comment:* Unless the owner or operator can demonstrate, in accordance with §261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or

operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, and 265 of this chapter.]

(h) The emergency coordinator must ensure that, in the affected area(s) of the facility:

(1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(i) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include:

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;

(3) Date, time, and type of incident (e.g., fire, explosion);

(4) Name and quantity of material(s) involved;

(5) The extent of injuries, if any;

(6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(7) Estimated quantity and disposition of recovered material that resulted from the incident.

[45 FR 33232, May 19, 1980, as amended at 50 FR 4514, Jan. 31, 1985; 71 FR 16908, Apr. 4, 2006; 71 FR 40274, July 14, 2006]

Related Resources:

- LQG Compliance with Part 265

Land Disposal Restrictions

§ 268.1: Purpose, scope, and applicability.

(a) This part identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.

(b) Except as specifically provided otherwise in this part or part 261 of this chapter, the requirements of this part apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities.

(c) Restricted wastes may continue to be land disposed as follows:

(1) Where persons have been granted an extension to the effective date of a prohibition under subpart C of this part or pursuant to §268.5, with respect to those wastes covered by the extension;

(2) Where persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under this part, or part 148 of this chapter, are not prohibited if the wastes:

(i) Are disposed into a nonhazardous or hazardous injection well as defined under 40 CFR 146.6(a); and

(ii) Do not exhibit any prohibited characteristic of hazardous waste identified in 40 CFR part 261, subpart C at the point of injection.

(4) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under this part, are not prohibited if the wastes meet any of the following criteria, unless the wastes are subject to a specified method of treatment other than DEACT in §268.40, or are D003 reactive cyanide:

(i) The wastes are managed in a treatment system which subsequently discharges to waters of the U.S. pursuant to a permit issued under section 402 of the Clean Water Act; or

(ii) The wastes are treated for purposes of the pretreatment requirements of section 307 of the Clean Water Act; or

(iii) The wastes are managed in a zero discharge system engaged in Clean Water Act-equivalent treatment as defined in §268.37(a); and

(iv) The wastes no longer exhibit a prohibited characteristic at the point of land disposal (i.e., placement in a surface impoundment).

(d) The requirements of this part shall not affect the availability of a waiver under section 121(d)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

(e) The following hazardous wastes are not subject to any provision of part 268:

(1) Waste generated by small quantity generators of less than 100 kilograms of non-acute hazardous waste or less than 1 kilogram of acute hazardous waste per month, as defined in §261.5 of this chapter;

(2) Waste pesticides that a farmer disposes of pursuant to §262.70;

(3) Wastes identified or listed as hazardous after November 8, 1984 for which EPA has not promulgated land disposal prohibitions or treatment standards;

(4) *De minimis* losses of characteristic wastes to wastewaters are not considered to be prohibited wastes and are defined as losses from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; and relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; rinsate from empty containers or from containers that are rendered empty by that rinsing; and laboratory wastes not exceeding one per cent of the total flow of wastewater into the facility's headworks on an annual basis, or with a combined annualized average concentration not exceeding one part per million in the headworks of the facility's wastewater treatment or pretreatment facility.

(f) Universal waste handlers and universal waste transporters (as defined in 40 CFR 260.10) are exempt from 40 CFR 268.7 and 268.50 for the hazardous wastes listed below. These handlers are subject to regulation under 40 CFR part 273.

(1) Batteries as described in 40 CFR 273.2;

(2) Pesticides as described in §273.3 of this chapter;

(3) Mercury-containing equipment as described in §273.4 of this chapter; and

(4) Lamps as described in 40 CFR 273.5.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987, as amended at 53 FR 27165, July 19, 1988; 53 FR 31212, Aug. 17, 1988; 54 FR 36970, Sept. 6, 1989; 55 FR 22686, June 1, 1990; 58 FR 29884, May 24, 1993; 59 FR 48043, Sept. 19, 1994; 60 FR 25542, May 11, 1995; 61 FR 15663, Apr. 8, 1996; 61 FR 33682, June 28, 1996; 62 FR 26019, May 12, 1997; 64 FR 36488, July 6, 1999; 70 FR 45520, Aug. 5, 2005]

§ 268.2: Definitions applicable in this part.

When used in this part the following terms have the meanings given below:

(a) *Halogenated organic compounds* or *HOCs* means those compounds having a carbon-halogen bond which are listed under appendix III to this part.

(b) *Hazardous constituent or constituents* means those constituents listed in appendix VIII to part 261 of this chapter.

(c) *Land disposal* means placement in or on the land, except in a corrective action management unit or staging pile, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

(d) *Nonwastewaters* are wastes that do not meet the criteria for wastewaters in paragraph (f) of this section.

(e) *Polychlorinated biphenyls* or *PCBs* are halogenated organic compounds defined in accordance with 40 CFR 761.3.

(f) *Wastewaters* are wastes that contain less than 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS).

(g) *Debris* means solid material exceeding a 60 mm particle size that is intended for disposal and that is: a manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in Subpart D, Part 268, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by §268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

(h) *Hazardous debris* means debris that contains a hazardous waste listed in subpart D of part 261 of this chapter, or that exhibits a characteristic of hazardous waste identified in subpart C of part 261 of this chapter. Any deliberate mixing of prohibited hazardous waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in §268.3.

(i) *Underlying hazardous constituent* means any constituent listed in §268.48, Table UTS—Universal Treatment Standards, except fluoride, selenium, sulfides, vanadium, and zinc, which can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standards.

(j) *Inorganic metal-bearing waste* is one for which EPA has established treatment standards for metal hazardous constituents, and which does not otherwise contain significant organic or cyanide content as described in §268.3(c)(1), and is specifically listed in appendix XI of this part.

(k) *Soil* means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles as classified by the U.S. Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification (i.e., from waste to contaminated soil) is not allowed under the dilution prohibition in §268.3.

[55 FR 22686, June 1, 1990, as amended at 56 FR 3877, Jan. 31, 1991; 57 FR 37270, Aug. 18, 1992; 58 FR 8685, Feb. 16, 1993; 58 FR 29884, May 24, 1993; 59 FR 48043, Sept. 19, 1994; 60 FR 244, Jan. 3, 1995; 61 FR 15597, 15662, Apr. 8, 1996; 61 FR 33682, June 28, 1996; 63 FR 28639, May 26, 1998; 63 FR 65940, Nov. 30, 1998; 64 FR 25414, May 11, 1999; 71 FR 40278, July 14, 2006]

§ 268.3: Dilution prohibited as a substitute for treatment.

(a) Except as provided in paragraph (b) of this section, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with subpart D of this part, to circumvent the effective date of a prohibition in subpart C of this part, to otherwise avoid a prohibition in subpart C of this part, or to circumvent a land disposal prohibition imposed by RCRA section 3004.

(b) Dilution of wastes that are hazardous only because they exhibit a characteristic in treatment systems which include land- based units which treat wastes subsequently discharged to a water of the United States pursuant to a permit issued under section 402 of the Clean Water Act (CWA), or which treat wastes in a CWA-equivalent treatment system, or which treat wastes for the purposes of pretreatment requirements under section 307 of the CWA is not impermissible dilution for purposes of this section unless a method other than DEACT has been specified in §268.40 as the treatment standard, or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.

(c) Combustion of the hazardous waste codes listed in Appendix XI of this part is prohibited, unless the waste, at the point of generation, or after any bona fide treatment such as cyanide destruction prior to combustion, can be demonstrated to comply with one or more of the following criteria (unless otherwise specifically prohibited from combustion):

(1) The waste contains hazardous organic constituents or cyanide at levels exceeding the constituent-specific treatment standard found in §268.48;

(2) The waste consists of organic, debris-like materials (e.g., wood, paper, plastic, or cloth) contaminated with an inorganic metal-bearing hazardous waste;

(3) The waste, at point of generation, has reasonable heating value such as greater than or equal to 5000 BTU per pound;

(4) The waste is co-generated with wastes for which combustion is a required method of treatment;

(5) The waste is subject to Federal and/or State requirements necessitating reduction of organics (including biological agents); or

(6) The waste contains greater than 1% Total Organic Carbon (TOC).

(d) It is a form of impermissible dilution, and therefore prohibited, to add iron filings or other metallic forms of iron to lead-containing hazardous wastes in order to achieve any land disposal restriction treatment standard for lead. Lead-containing wastes include D008 wastes (wastes exhibiting a characteristic due to the presence of lead), all characteristic wastes containing lead as an underlying hazardous constituent, listed wastes containing lead as a regulated constituent, and hazardous media containing any of the aforementioned lead-containing wastes.

[61 FR 15663, Apr. 8, 1996, as amended at 61 FR 33682, June 28, 1996; 63 FR 28639, May 26, 1998]

§ 268.4: Treatment surface impoundment exemption.

(a) Wastes which are otherwise prohibited from land disposal under this part may be treated in a surface impoundment or series of impoundments provided that:

(1) Treatment of such wastes occurs in the impoundments;

(2) The following conditions are met:

(i) *Sampling and testing.* For wastes with treatment standards in subpart D of this part and/or prohibition levels in subpart C of this part or RCRA section 3004(d), the residues from treatment are analyzed, as specified in §268.7 or §268.32, to determine if they meet the applicable treatment standards or where no treatment standards have been established for the waste, the applicable prohibition levels. The sampling method, specified in the waste analysis plan under §264.13 or §265.13, must be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.

(ii) *Removal*. The following treatment residues (including any liquid waste) must be removed at least annually; residues which do not meet the treatment standards promulgated under subpart D of this part; residues which do not meet the prohibition levels established under subpart C of this part or imposed by statute (where no treatment standards have been established); residues which are from the treatment of wastes prohibited from land disposal under subpart C of this part (where no treatment standards

have been established and no prohibition levels apply); or residues from managing listed wastes which are not delisted under §260.22 of this chapter. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, this flow-through constitutes removal of the supernatant for the purpose of this requirement.

(iii) *Subsequent management*. Treatment residues may not be placed in any other surface impoundment for subsequent management.

(iv) *Recordkeeping.* Sampling and testing and recordkeeping provisions of §§264.13 and 265.13 of this chapter apply.

(3) The impoundment meets the design requirements of §264.221(c) or §265.221(a) of this chapter, regardless that the unit may not be new, expanded, or a replacement, and be in compliance with applicable ground water monitoring requirements of subpart F of part 264 or part 265 of this chapter unless:

(i) Exempted pursuant to §264.221 (d) or (e) of this chapter, or to §265.221 (c) or (d) of this chapter; or,

(ii) Upon application by the owner or operator, the Administrator, after notice and an opportunity to comment, has granted a waiver of the requirements on the basis that the surface impoundment:

(A) Has at least one liner, for which there is no evidence that such liner is leaking;

(B) Is located more than one-quarter mile from an underground source of drinking water; and

(C) Is in compliance with generally applicable ground water monitoring requirements for facilities with permits; or,

(iii) Upon application by the owner or operator, the Administrator, after notice and an opportunity to comment, has granted a modification to the requirements on the basis of a demonstration that the surface impoundment is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(4) The owner or operator submits to the Regional Administrator a written certification that the requirements of §268.4(a)(3) have been met. The following certification is required:

I certify under penalty of law that the requirements of 40 CFR 268.4(a)(3) have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are

significant penalties for submitting false information, including the possibility of fine and imprisonment.

(b) Evaporation of hazardous constituents as the principal means of treatment is not considered to be treatment for purposes of an exemption under this section.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987, as amended at 52 FR 25788, July 8, 1987; 53 FR 31212, Aug. 17, 1988; 62 FR 26019, May 12, 1997; 63 FR 28639, May 26, 1998; 71 FR 40278, July 14, 2006]

§ 268.5: Procedures for case-by-case extensions to an effective date.

(a) Any person who generates, treats, stores, or disposes of a hazardous waste may submit an application to the Administrator for an extension to the effective date of any applicable restriction established under subpart C of this part. The applicant must demonstrate the following:

(1) He has made a good-faith effort to locate and contract with treatment, recovery, or disposal facilities nationwide to manage his waste in accordance with the effective date of the applicable restriction established under subpart C of this part;

(2) He has entered into a binding contractual commitment to construct or otherwise provide alternative treatment, recovery (e.g., recycling), or disposal capacity that meets the treatment standards specified in subpart D or, where treatment standards have not been specified, such treatment, recovery, or disposal capacity is protective of human health and the environment.

(3) Due to circumstances beyond the applicant's control, such alternative capacity cannot reasonably be made available by the applicable effective date. This demonstration may include a showing that the technical and practical difficulties associated with providing the alternative capacity will result in the capacity not being available by the applicable effective date;

(4) The capacity being constructed or otherwise provided by the applicant will be sufficient to manage the entire quantity of waste that is the subject of the application;

(5) He provides a detailed schedule for obtaining required operating and construction permits or an outline of how and when alternative capacity will be available;

(6) He has arranged for adequate capacity to manage his waste during an extension and has documented in the application the location of all sites at which the waste will be managed; and

(7) Any waste managed in a surface impoundment or landfill during the extension period will meet the requirements of paragraph (h)(2) of this section.

(b) An authorized representative signing an application described under paragraph (a) of this section shall make the following certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(c) After receiving an application for an extension, the Administrator may request any additional information which he deems as necessary to evaluate the application.

(d) An extension will apply only to the waste generated at the individual facility covered by the application and will not apply to restricted waste from any other facility.

(e) On the basis of the information referred to in paragraph (a) of this section, after notice and opportunity for comment, and after consultation with appropriate State agencies in all affected States, the Administrator may grant an extension of up to 1 year from the effective date. The Administrator may renew this extension for up to 1 additional year upon the request of the applicant if the demonstration required in paragraph (a) of this section can still be made. In no event will an extension extend beyond 24 months from the applicable effective date specified in subpart C of part 268. The length of any extension authorized will be determined by the Administrator based on the time required to construct or obtain the type of capacity needed by the applicant as described in the completion schedule discussed in paragraph (a)(5) of this section. The Administrator will give public notice of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition will be published in the Federal Register.

(f) Any person granted an extension under this section must immediately notify the Administrator as soon as he has knowledge of any change in the conditions certified to in the application.

(g) Any person granted an extension under this section shall submit written progress reports at intervals designated by the Administrator. Such reports must describe the overall progress made toward constructing or otherwise providing alternative treatment, recovery or disposal capacity; must identify any event which may cause or has caused a delay in the development of the capacity; and must summarize the steps taken to mitigate the delay. The Administrator can revoke the extension at any time if the applicant does not demonstrate a good-faith effort to meet the schedule for completion, if the Agency denies or revokes any required permit, if conditions certified in the application change, or for any violation of this chapter.

(h) Whenever the Administrator establishes an extension to an effective date under this section, during the period for which such extension is in effect:

(1) The storage restrictions under §268.50(a) do not apply; and

(2) Such hazardous waste may be disposed in a landfill or surface impoundment only if such unit is in compliance with the technical requirements of the following provisions regardless of whether such unit is existing, new, or a replacement or lateral expansion.

(i) The landfill, if in interim status, is in compliance with the requirements of subpart F of part 265 and §265.301 (a), (c), and (d) of this chapter; or,

(ii) The landfill, if permitted, is in compliance with the requirements of subpart F of part 264 and §264.301 (c), (d) and (e) of this chapter; or

(iii) The surface impoundment, if in interim status, is in compliance with the requirements of subpart F of part 265, §265.221 (a), (c), and (d) of this chapter, and RCRA section 3005(j)(1); or

(iv) The surface impoundment, if permitted, is in compliance with the requirements of subpart F of part 264 and §264.221 (c), (d) and (e) of this chapter; or

(v) The surface impoundment, if newly subject to RCRA section 3005(j)(1) due to the promulgation of additional listings or characteristics for the identification of hazardous waste, is in compliance with the requirements of subpart F of part 265 of this chapter within 12 months after the promulgation of additional listings or characteristics of hazardous waste, and with the requirements of §265.221 (a), (c) and (d) of this chapter within 48 months after the promulgation of additional listings or characteristics of hazardous waste. If a national capacity variance is granted, during the period the variance is in effect, the surface impoundment, if newly subject to RCRA section 3005(j)(1) due to the promulgation of additional listings or characteristics of hazardous waste, is in compliance with the requirements of subpart F of part 265 of this chapter within 12 months after the promulgation of additional listings or characteristics of hazardous waste, and with the requirements of §265.221 (a), (c) and (d) of this chapter within 48 months after the promulgation of additional listings or characteristics of hazardous waste; or

(vi) The landfill, if disposing of containerized liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm, is also in compliance with the requirements of 40 CFR 761.75 and parts 264 and 265.

(i) Pending a decision on the application the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987, as amended at 52 FR 25788, July 8, 1987; 54 FR 36971, Sept. 6, 1989; 55 FR 23935, June 13, 1990; 57 FR 37270, Aug. 18, 1992]

§ 268.6: Petitions to allow land disposal of a waste prohibited under subpart C of part 268.

(a) Any person seeking an exemption from a prohibition under subpart C of this part for the disposal of a restricted hazardous waste in a particular unit or units must submit a petition to the Administrator demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration must include the following components:

(1) An identification of the specific waste and the specific unit for which the demonstration will be made;

(2) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;

(3) A comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality.

(4) A monitoring plan that detects migration at the earliest practicable time;

(5) Sufficient information to assure the Administrator that the owner or operator of a land disposal unit receiving restricted waste(s) will comply with other applicable Federal, State, and local laws.

(b) The demonstration referred to in paragraph (a) of this section must meet the following criteria:

(1) All waste and environmental sampling, test, and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow;

(2) All sampling, testing, and estimation techniques for chemical and physical properties of the waste and all environmental parameters must have been approved by the Administrator;

(3) Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;

(4) A quality assurance and quality control plan that addresses all aspects of the demonstration must be approved by the Administrator; and,

(5) An analysis must be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis must include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or other natural phenomena.

(c) Each petition referred to in paragraph (a) of this section must include the following:

(1) A monitoring plan that describes the monitoring program installed at and/or around the unit to verify continued compliance with the conditions of the variance. This monitoring plan must provide information on the monitoring of the unit and/or the environment around the unit. The following specific information must be included in the plan:

(i) The media monitored in the cases where monitoring of the environment around the unit is required;

(ii) The type of monitoring conducted at the unit, in the cases where monitoring of the unit is required;

(iii) The location of the monitoring stations;

(iv) The monitoring interval (frequency of monitoring at each station);

(v) The specific hazardous constituents to be monitored;

(vi) The implementation schedule for the monitoring program;

(vii) The equipment used at the monitoring stations;

(viii) The sampling and analytical techniques employed; and

(ix) The data recording/reporting procedures.

(2) Where applicable, the monitoring program described in paragraph (c)(1) of this section must be in place for a period of time specified by the Administrator, as part of his approval of the petition, prior to receipt of prohibited waste at the unit.

(3) The monitoring data collected according to the monitoring plan specified under paragraph (c)(1) of this section must be sent to the Administrator according to a format and schedule specified and approved in the monitoring plan, and

(4) A copy of the monitoring data collected under the monitoring plan specified under paragraph (c)(1) of this section must be kept on-site at the facility in the operating record.

(5) The monitoring program specified under paragraph (c)(1) of this section meets the following criteria:

(i) All sampling, testing, and analytical data must be approved by the Administrator and must provide data that is accurate and reproducible.

(ii) All estimation and monitoring techniques must be approved by the Administrator.

(iii) A quality assurance and quality control plan addressing all aspects of the monitoring program must be provided to and approved by the Administrator.

(d) Each petition must be submitted to the Administrator.

(e) After a petition has been approved, the owner or operator must report any changes in conditions at the unit and/or the environment around the unit that significantly depart from the conditions described in the variance and affect the potential for migration of hazardous constituents from the units as follows:

(1) If the owner or operator plans to make changes to the unit design, construction, or operation, such a change must be proposed, in writing, and the owner or operator must submit a demonstration to the Administrator at least 30 days prior to making the change. The Administrator will determine whether the proposed change invalidates the terms of the petition and will determine the appropriate response. Any change must be approved by the Administrator prior to being made.

(2) If the owner or operator discovers that a condition at the site which was modeled or predicted in the petition does not occur as predicted, this change must be reported, in writing, to the Administrator within 10 days of discovering the change. The Administrator will determine whether the reported change from the terms of the petition requires further action, which may include termination of waste acceptance and revocation of the petition, petition modifications, or other responses.

(f) If the owner or operator determines that there is migration of hazardous constituent(s) from the unit, the owner or operator must:

(1) Immediately suspend receipt of prohibited waste at the unit, and

(2) Notify the Administrator, in writing, within 10 days of the determination that a release has occurred.

(3) Following receipt of the notification the Administrator will determine, within 60 days of receiving notification, whether the owner or operator can continue to receive prohibited waste in the unit and whether the variance is to be revoked. The Administrator shall also determine whether further examination of any migration is warranted under applicable provisions of part 264 or part 265.

(g) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that submitted information is true, accurate, and complete. I am aware that there

are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(h) After receiving a petition, the Administrator may request any additional information that reasonably may be required to evaluate the demonstration.

(i) If approved, the petition will apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and will not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.

(j) The Administrator will give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition will be published in the Federal Register.

(k) The term of a petition granted under this section shall be no longer than the term of the RCRA permit if the disposal unit is operating under a RCRA permit, or up to a maximum of 10 years from the date of approval provided under paragraph (g) of this section if the unit is operating under interim status. In either case, the term of the granted petition shall expire upon the termination or denial of a RCRA permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.

(l) Prior to the Administrator's decision, the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

(m) The petition granted by the Administrator does not relieve the petitioner of his responsibilities in the management of hazardous waste under 40 CFR part 260 through part 271.

(n) Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 500 ppm are not eligible for an exemption under this section.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987, as amended at 52 FR 25789, July 8, 1987; 53 FR 31212, Aug. 17, 1988; 54 FR 36971, Sept. 6, 1989; 71 FR 40278, July 14, 2006]

§ 268.7: Testing, tracking, and recordkeeping requirements for generators, treaters, and disposal facilities.

(a) *Requirements for generators:* (1) A generator of hazardous waste must determine if the waste has to be treated before it can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in §268.40, 268.45, or §268.49. This determination can be made concurrently with the hazardous waste determination required in §262.11 of this chapter, in either of two ways: testing the waste or using knowledge of

the waste. If the generator tests the waste, testing would normally determine the total concentration of hazardous constituents, or the concentration of hazardous constituents in an extract of the waste obtained using test method 1311 in “Test Methods of Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW–846, (incorporated by reference, see §260.11 of this chapter), depending on whether the treatment standard for the waste is expressed as a total concentration or concentration of hazardous constituent in the waste's extract. (Alternatively, the generator must send the waste to a RCRA-permitted hazardous waste treatment facility, where the waste treatment facility must comply with the requirements of §264.13 of this chapter and paragraph (b) of this section.) In addition, some hazardous wastes must be treated by particular treatment methods before they can be land disposed and some soils are contaminated by such hazardous wastes. These treatment standards are also found in §268.40, and are described in detail in §268.42, Table 1. These wastes, and soils contaminated with such wastes, do not need to be tested (however, if they are in a waste mixture, other wastes with concentration level treatment standards would have to be tested). If a generator determines they are managing a waste or soil contaminated with a waste, that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, they must comply with the special requirements of §268.9 of this part in addition to any applicable requirements in this section.

(2) If the waste or contaminated soil does not meet the treatment standards, or if the generator chooses not to make the determination of whether his waste must be treated, with the initial shipment of waste to each treatment or storage facility, the generator must send a one-time written notice to each treatment or storage facility receiving the waste, and place a copy in the file. The notice must include the information in column “268.7(a)(2)” of the Generator Paperwork Requirements Table in paragraph (a)(4) of this section. (Alternatively, if the generator chooses not to make the determination of whether the waste must be treated, the notification must include the EPA Hazardous Waste Numbers and Manifest Number of the first shipment and must state “This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination.”) No further notification is necessary until such time that the waste or facility change, in which case a new notification must be sent and a copy placed in the generator's file.

(3) If the waste or contaminated soil meets the treatment standard at the original point of generation:

(i) With the initial shipment of waste to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each treatment, storage, or disposal facility receiving the waste, and place a copy in the file. The notice must include the information indicated in column “268.7(a)(3)” of the Generator Paperwork Requirements Table in §268.7(a)(4) and the following certification statement, signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this

certification that the waste complies with the treatment standards specified in 40 CFR part 268 subpart D. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(ii) For contaminated soil, with the initial shipment of wastes to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each facility receiving the waste and place a copy in the file. The notice must include the information in column "268.7(a)(3)" of the Generator Paperwork Requirements Table in §268.7(a)(4).

(iii) If the waste changes, the generator must send a new notice and certification to the receiving facility, and place a copy in their files. Generators of hazardous debris excluded from the definition of hazardous waste under §261.3(f) of this chapter are not subject to these requirements.

(4) For reporting, tracking, and recordkeeping when exceptions allow certain wastes or contaminated soil that do not meet the treatment standards to be land disposed: There are certain exemptions from the requirement that hazardous wastes or contaminated soil meet treatment standards before they can be land disposed. These include, but are not limited to case-by-case extensions under §268.5, disposal in a no-migration unit under §268.6, or a national capacity variance or case-by-case capacity variance under subpart C of this part. If a generator's waste is so exempt, then with the initial shipment of waste, the generator must send a one-time written notice to each land disposal facility receiving the waste. The notice must include the information indicated in column "268.7(a)(4)" of the Generator Paperwork Requirements Table below. If the waste changes, the generator must send a new notice to the receiving facility, and place a copy in their files.

Generator Paperwork Requirements Table

Required information	§268.7 (a)(2)	§268.7 (a)(3)	§268.7 (a)(4)	§268.7 (a)(9)
1. EPA Hazardous Waste Numbers and Manifest Number of first shipment	✓	✓	✓	✓
2. Statement: this waste is not prohibited from land disposal			✓	
3. The waste is subject to the LDRs. The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice	✓	✓		
4. The notice must include the applicable wastewater/nonwastewater category (see §§ 268.2(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria (such	✓	✓		

as D003 reactive cyanide)				
5. Waste analysis data (when available)	✓	✓	✓	
6. Date the waste is subject to the prohibition			✓	
7. For hazardous debris, when treating with the alternative treatment technologies provided by §268.45: the contaminants subject to treatment, as described in § 268.45(b); and an indication that these contaminants are being treated to comply with § 268.45	✓		✓	
8. For contaminated soil subject to LDRs as provided in § 268.49(a), the constituents subject to treatment as described in § 268.49(d), and the following statement: This contaminated soil [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and [is subject to/complies with] the soil treatment standards as provided by § 268.49(c) or the universal treatment standards	✓	✓		
9. A certification is needed (see applicable section for exact wording)		✓		✓

(5) If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under 40 CFR 262.34 to meet applicable LDR treatment standards found at §268.40, the generator must develop and follow a written waste analysis plan which describes the procedures they will carry out to comply with the treatment standards. (Generators treating hazardous debris under the alternative treatment standards of Table 1, §268.45, however, are not subject to these waste analysis requirements.) The plan must be kept on site in the generator's records, and the following requirements must be met:

(i) The waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the prohibited waste(s) being treated, and contain all information necessary to treat the waste(s) in accordance with the requirements of this part, including the selected testing frequency.

(ii) Such plan must be kept in the facility's on-site files and made available to inspectors.

(iii) Wastes shipped off-site pursuant to this paragraph must comply with the notification requirements of §268.7(a)(3).

(6) If a generator determines that the waste or contaminated soil is restricted based solely on his knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines that the waste is restricted based on testing this waste or an extract developed using the test method 1311 in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA

Publication SW–846, as referenced in §260.11 of this chapter, and all waste analysis data must be retained on-site in the generator's files.

(7) If a generator determines that he is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or is exempted from Subtitle C regulation under 40 CFR 261.2 through 261.6 subsequent to the point of generation (including deactivated characteristic hazardous wastes managed in wastewater treatment systems subject to the Clean Water Act (CWA) as specified at 40 CFR 261.4(a)(2) or that are CWA-equivalent, or are managed in an underground injection well regulated by the SDWA), he must place a one-time notice describing such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from RCRA Subtitle C regulation, and the disposition of the waste, in the facility's on-site files.

(8) Generators must retain on-site a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to this section for at least three years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal. The three year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator. The requirements of this paragraph apply to solid wastes even when the hazardous characteristic is removed prior to disposal, or when the waste is excluded from the definition of hazardous or solid waste under 40 CFR 261.2 through 261.6, or exempted from Subtitle C regulation, subsequent to the point of generation.

(9) If a generator is managing a lab pack containing hazardous wastes and wishes to use the alternative treatment standard for lab packs found at §268.42(c):

(i) With the initial shipment of waste to a treatment facility, the generator must submit a notice that provides the information in column "§268.7(a)(9)" in the Generator Paperwork Requirements Table of paragraph (a)(4) of this section, and the following certification. The certification, which must be signed by an authorized representative and must be placed in the generator's files, must say the following:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under appendix IV to 40 CFR part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(ii) No further notification is necessary until such time that the wastes in the lab pack change, or the receiving facility changes, in which case a new notice and certification must be sent and a copy placed in the generator's file.

(iii) If the lab pack contains characteristic hazardous wastes (D001–D043), underlying hazardous constituents (as defined in §268.2(i)) need not be determined.

(iv) The generator must also comply with the requirements in paragraphs (a)(6) and (a)(7) of this section.

(10) Small quantity generators with tolling agreements pursuant to 40 CFR 262.20(e) must comply with the applicable notification and certification requirements of paragraph (a) of this section for the initial shipment of the waste subject to the agreement. Such generators must retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

(b) Treatment facilities must test their wastes according to the frequency specified in their waste analysis plans as required by 40 CFR 264.13 (for permitted TSDs) or 40 CFR 265.13 (for interim status facilities). Such testing must be performed as provided in paragraphs (b)(1), (b)(2) and (b)(3) of this section.

(1) For wastes or contaminated soil with treatment standards expressed in the waste extract (TCLP), the owner or operator of the treatment facility must test an extract of the treatment residues, using test method 1311 (the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846 as incorporated by reference in §260.11 of this chapter) to assure that the treatment residues extract meet the applicable treatment standards.

(2) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility must test the treatment residues (not an extract of such residues) to assure that they meet the applicable treatment standards.

(3) A one-time notice must be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice must be placed in the treatment facility's file.

(i) No further notification is necessary until such time that the waste or receiving facility change, in which case a new notice must be sent and a copy placed in the treatment facility's file.

(ii) The one-time notice must include these requirements:

Treatment Facility Paperwork Requirements Table

Required Information	§268.7(b)
1. EPA Hazardous Waste Numbers and Manifest Number of first shipment	✓
2. The waste is subject to the LDRs. The constituents of concern for	✓

F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice	
3. The notice must include the applicable wastewater/ nonwastewater category (see §§ 268.2(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide)	✓
4. Waste analysis data (when available)	✓
5. For contaminated soil subject to LDRs as provided in 268.49(a), the constituents subject to treatment as described in 268.49(d) and the following statement, ``this contaminated soil [does/does not] exhibit a characteristic of hazardous waste and [is subject to/complies with] the soil treatment standards as provided by 268.49(c)"	✓
6. A certification is needed (see applicable section for exact wording)	✓

(4) The treatment facility must submit a one-time certification signed by an authorized representative with the initial shipment of waste or treatment residue of a restricted waste to the land disposal facility. The certification must state:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

A certification is also necessary for contaminated soil and it must state:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 40 CFR 268.49 without impermissible dilution of the prohibited wastes. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(i) A copy of the certification must be placed in the treatment facility's on-site files. If the waste or treatment residue changes, or the receiving facility changes, a new certification must be sent to the receiving facility, and a copy placed in the file.

(ii) Debris excluded from the definition of hazardous waste under §261.3(f) of this chapter (i.e., debris treated by an extraction or destruction technology provided by Table 1, §268.45, and debris that the Director has determined does not contain hazardous waste), however, is subject to the notification and certification requirements of paragraph (d) of this section rather than the certification requirements of this paragraph.

(iii) For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in whole or in

part on the analytical detection limit alternative specified in §268.40(d), the certification, signed by an authorized representative, must state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in 268.42, Table 1. I have been unable to detect the nonwastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(iv) For characteristic wastes that are subject to the treatment standards in §268.40 (other than those expressed as a method of treatment), or §268.49, and that contain underlying hazardous constituents as defined in §268.2(i); if these wastes are treated on-site to remove the hazardous characteristic; and are then sent off-site for treatment of underlying hazardous constituents, the certification must state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(v) For characteristic wastes that contain underlying hazardous constituents as defined §268.2(i) that are treated on-site to remove the hazardous characteristic to treat underlying hazardous constituents to levels in §268.48 Universal Treatment Standards, the certification must state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic and that underlying hazardous constituents, as defined in §268.2(i) have been treated on-site to meet the §268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(5) If the waste or treatment residue will be further managed at a different treatment, storage, or disposal facility, the treatment, storage, or disposal facility sending the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under this section.

(6) Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of §266.20(b) of this chapter regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (*i.e.*, the recycler) must, for the initial shipment of waste, prepare a one-time certification described in paragraph (b)(4) of this section, and a one-time notice which includes the information in paragraph (b)(3) of this section (except the manifest number). The certification and notification must be placed in the facility's on-site files. If the waste or the receiving facility changes, a new certification and notification must be prepared and placed in the on site files. In addition, the recycling facility must also keep records of the name and location of each entity receiving the hazardous waste-derived product.

(c) Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to 40 CFR 266.20(b), the owner or operator of any land disposal facility disposing any waste subject to restrictions under this part must:

(1) Have copies of the notice and certifications specified in paragraph (a) or (b) of this section.

(2) Test the waste, or an extract of the waste or treatment residue developed using test method 1311 (the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846 as incorporated by reference in §260.11 of this chapter), to assure that the wastes or treatment residues are in compliance with the applicable treatment standards set forth in subpart D of this part. Such testing must be performed according to the frequency specified in the facility's waste analysis plan as required by §264.13 or §265.13 of this chapter.

(d) Generators or treaters who first claim that hazardous debris is excluded from the definition of hazardous waste under §261.3(f) of this chapter (i.e., debris treated by an extraction or destruction technology provided by Table 1, §268.45, and debris that the EPA Regional Administrator (or his designated representative) or State authorized to implement part 268 requirements has determined does not contain hazardous waste) are subject to the following notification and certification requirements:

(1) A one-time notification, including the following information, must be submitted to the EPA Regional hazardous waste management division director (or his designated representative) or State authorized to implement part 268 requirements:

(i) The name and address of the Subtitle D facility receiving the treated debris;

(ii) A description of the hazardous debris as initially generated, including the applicable EPA Hazardous Waste Number(s); and

(iii) For debris excluded under §261.3(f)(1) of this chapter, the technology from Table 1, §268.45, used to treat the debris.

(2) The notification must be updated if the debris is shipped to a different facility, and, for debris excluded under §261.2(f)(1) of this chapter, if a different type of debris is treated or if a different technology is used to treat the debris.

(3) For debris excluded under §261.3(f)(1) of this chapter, the owner or operator of the treatment facility must document and certify compliance with the treatment standards of Table 1, §268.45, as follows:

(i) Records must be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards;

(ii) Records must be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit; and

(iii) For each shipment of treated debris, a certification of compliance with the treatment standards must be signed by an authorized representative and placed in the facility's files. The certification must state the following: "I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment."

(e) Generators and treaters who first receive from EPA or an authorized state a determination that a given contaminated soil subject to LDRs as provided in §268.49(a) no longer contains a listed hazardous waste and generators and treaters who first determine that a contaminated soil subject to LDRs as provided in §268.49(a) no longer exhibits a characteristic of hazardous waste must:

(1) Prepare a one-time only documentation of these determinations including all supporting information; and,

(2) Maintain that information in the facility files and other records for a minimum of three years.

[51 FR 40638, Nov. 7, 1986; 52 FR 21016, June 4, 1987]

Editorial Note: For Federal Register citations affecting §268.7, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 268.8 [Reserved]

§ 268.9 Special rules regarding wastes that exhibit a characteristic.

(a) The initial generator of a solid waste must determine each EPA Hazardous Waste Number (waste code) applicable to the waste in order to determine the applicable treatment standards under subpart D of this part. This determination may be made concurrently with the hazardous waste determination required in §262.11 of this chapter. For purposes of part 268, the waste will carry the waste code for any applicable listed waste (40 CFR part 261, subpart D). In addition, where the waste exhibits a characteristic, the waste will carry one or more of the characteristic waste codes (40 CFR part 261, subpart C), except when the treatment standard for the listed waste operates in lieu of the treatment standard for the characteristic waste, as specified in paragraph (b) of this section. If the generator determines that their waste displays a hazardous characteristic (and is not D001 nonwastewaters treated by CMBST, RORGS, OR POLYM of §268.42, Table 1), the generator must determine the underlying hazardous constituents (as defined at §268.2(i)) in the characteristic waste.

(b) Where a prohibited waste is both listed under 40 CFR part 261, subpart D and exhibits a characteristic under 40 CFR part 261, subpart C, the treatment standard for the waste code listed in 40 CFR part 261, subpart D will operate in lieu of the standard for the waste code under 40 CFR part 261, subpart C, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.

(c) In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under 40 CFR part 261, subpart C may be land disposed unless the waste complies with the treatment standards under subpart D of this part.

(d) Wastes that exhibit a characteristic are also subject to §268.7 requirements, except that once the waste is no longer hazardous, a one-time notification and certification must be placed in the generator's or treater's on-site files. The notification and certification must be updated if the process or operation generating the waste changes and/or if the subtitle D facility receiving the waste changes.

(1) The notification must include the following information:

(i) Name and address of the RCRA Subtitle D facility receiving the waste shipment; and

(ii) A description of the waste as initially generated, including the applicable EPA hazardous waste code(s), treatability group(s), and underlying hazardous constituents (as defined in §268.2(i)), unless the waste will be treated and monitored for all underlying hazardous constituents. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any of the underlying hazardous constituents on the notice.

(2) The certification must be signed by an authorized representative and must state the language found in §268.7(b)(4).

(i) If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification found in §268.7(b)(4)(iv) applies.

(ii) [Reserved]

[55 FR 22688, June 1, 1990, as amended at 56 FR 3878, Jan. 31, 1991; 57 FR 37271, Aug. 18, 1992; 58 FR 29885, May 24, 1993; 59 FR 48045, Sept. 19, 1994; 60 FR 245, Jan. 3, 1995; 61 FR 15599, 15662, Apr. 8, 1996; 62 FR 26022, May 12, 1997; 64 FR 25415, May 11, 1999; 71 FR 16913, Apr. 4, 2006]

Subpart B—Schedule for Land Disposal Prohibition and Establishment of Treatment Standards

Source: 51 FR 19305, May 28, 1986, unless otherwise noted.

§§ 268.10-268.12 [Reserved]

§ 268.13 Schedule for wastes identified or listed after November 8, 1984.

In the case of any hazardous waste identified or listed under section 3001 after November 8, 1984, the Administrator shall make a land disposal prohibition determination within 6 months after the date of identification or listing.

§ 268.14 Surface impoundment exemptions.

(a) This section defines additional circumstances under which an otherwise prohibited waste may continue to be placed in a surface impoundment.

(b) Wastes which are newly identified or listed under section 3001 after November 8, 1984, and stored in a surface impoundment that is newly subject to subtitle C of RCRA as a result of the additional identification or listing, may continue to be stored in the surface impoundment for 48 months after the promulgation of the additional listing or characteristic, notwithstanding that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of subpart F of part 265 of this chapter within 12 months after promulgation of the new listing or characteristic.

(c) Wastes which are newly identified or listed under section 3001 after November 8, 1984, and treated in a surface impoundment that is newly subject to subtitle C of RCRA as a result of the additional identification or listing, may continue to be treated in that surface impoundment, notwithstanding that the waste is otherwise prohibited from land disposal, provided that surface impoundment is in compliance with the requirements of subpart F of part 265 of this chapter within 12 months after the promulgation of the new listing or characteristic. In addition, if the surface impoundment continues to treat hazardous waste after 48 months from promulgation of the additional listing or characteristic, it must then be in compliance with §268.4.

[57 FR 37271, Aug. 18, 1992, as amended at 71 FR 40278, July 14, 2006]

Subpart C—Prohibitions on Land Disposal

§ 268.20 Waste specific prohibitions—Dyes and/or pigments production wastes.

(a) Effective August 23, 2005, the waste specified in 40 CFR part 261 as EPA Hazardous Waste Number K181, and soil and debris contaminated with this waste, radioactive wastes mixed with this waste, and soil and debris contaminated with radioactive wastes mixed with this waste are prohibited from land disposal.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this Part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under §268.44;

(4) Hazardous debris has met the treatment standards in §268.40 or the alternative treatment standards in §268.45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract of the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable subpart D levels, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

[70 FR 9177, Feb. 24, 2005]

§§ 268.21-268.29 [Reserved]

§ 268.30 Waste specific prohibitions—wood preserving wastes.

(a) Effective August 11, 1997, the following wastes are prohibited from land disposal: the wastes specified in 40 CFR part 261 as EPA Hazardous Waste numbers F032, F034, and F035.

(b) Effective May 12, 1999, the following wastes are prohibited from land disposal: soil and debris contaminated with F032, F034, F035; and radioactive wastes mixed with EPA Hazardous waste numbers F032, F034, and F035.

(c) Between May 12, 1997 and May 12, 1999, soil and debris contaminated with F032, F034, F035; and radioactive waste mixed with F032, F034, and F035 may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in §268.5(h)(2) of this part.

(d) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in Subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under §268.44; or

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to those wastes covered by the extension.

(e) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Universal Treatment Standard levels of §268.48 of this part, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

[62 FR 26022, May 12, 1997]

§ 268.31 Waste specific prohibitions—Dioxin-containing wastes.

(a) Effective November 8, 1988, the dioxin-containing wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Nos. F020, F02l, F022, F023, F026, F027, and F028, are prohibited from land disposal unless the following condition applies:

(1) The F020–F023 and F026–F028 dioxin-containing waste is contaminated soil and debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or a corrective action taken under subtitle C of the Resource Conservation and Recovery Act (RCRA).

(b) Effective November 8, 1990, the F020–F023 and F026–F028 dioxin-containing wastes listed in paragraph (a)(1) of this section are prohibited from land disposal.

(c) Between November 8, 1988, and November 8, 1990, wastes included in paragraph (a)(1) of this section may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in §268.5(h)(2) and all other applicable requirements of parts 264 and 265 of this chapter.

(d) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes meet the standards of subpart D of this part; or

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition; or

(3) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to those wastes covered by the extension.

[53 FR 31216, Aug. 17, 1988]

§ 268.32 Waste specific prohibitions—Soils exhibiting the toxicity characteristic for metals and containing PCBs.

(a) Effective December 26, 2000, the following wastes are prohibited from land disposal: any volumes of soil exhibiting the toxicity characteristic solely because of the presence of metals (D004—D011) and containing PCBs.

(b) The requirements of paragraph (a) of this section do not apply if:

(1)(i) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

(ii) The wastes meet the treatment standards specified in Subpart D of this part for EPA hazardous waste numbers D004—D011, as applicable; or

(2)(i) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and

(ii) The wastes meet the alternative treatment standards specified in §268.49 for contaminated soil; or

(3) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition; or

(4) The wastes meet applicable alternative treatment standards established pursuant to a petition granted under §268.44.

[65 FR 81380, Dec. 26, 2000]

§ 268.33 Waste specific prohibitions—chlorinated aliphatic wastes.

(a) Effective May 8, 2001, the wastes specified in 40 CFR part 261 as EPA Hazardous Wastes Numbers K174, and K175, soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under §268.44;

(4) Hazardous debris has met the treatment standards in §268.40 or the alternative treatment standards in §268.45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels of subpart D of this part, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

(d) Disposal of K175 wastes that have complied with all applicable 40 CFR 268.40 treatment standards must also be macroencapsulated in accordance with 40 CFR 268.45 Table 1 unless the waste is placed in:

(1) A Subtitle C monofill containing only K175 wastes that meet all applicable 40 CFR 268.40 treatment standards; or

(2) A dedicated Subtitle C landfill cell in which all other wastes being co-disposed are at pH≤6.0.

[65 FR 67127, Nov. 8, 2000]

§ 268.34 Waste specific prohibitions—toxicity characteristic metal wastes.

(a) Effective August 24, 1998, the following wastes are prohibited from land disposal: the wastes specified in 40 CFR Part 261 as EPA Hazardous Waste numbers D004–D011 that are newly identified (i.e. wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure), and waste, soil, or debris from mineral processing operations that is identified as hazardous by the specifications at 40 CFR Part 261.

(b) Effective November 26, 1998, the following waste is prohibited from land disposal: Slag from secondary lead smelting which exhibits the Toxicity Characteristic due to the presence of one or more metals.

(c) Effective May 26, 2000, the following wastes are prohibited from land disposal: newly identified characteristic wastes from elemental phosphorus processing; radioactive wastes mixed with EPA Hazardous wastes D004–D011 that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure); or mixed with newly identified characteristic mineral processing wastes, soil, or debris.

(d) Between May 26, 1998 and May 26, 2000, newly identified characteristic wastes from elemental phosphorus processing, radioactive waste mixed with D004–D011 wastes that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure), or mixed with newly identified characteristic mineral processing wastes, soil, or debris may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in §268.5(h) of this part.

(e) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this part:

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under §268.44; or

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(f) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentration in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents (including underlying hazardous constituents in characteristic wastes) in excess of the applicable Universal Treatment Standard levels of §268.48 of this part, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

[63 FR 28641, May 26, 1998, as amended at 63 FR 48127, Sept. 9, 1998]

§ 268.35 Waste specific prohibitions—petroleum refining wastes.

(a) Effective February 8, 1999, the wastes specified in 40 CFR part 261 as EPA Hazardous Wastes Numbers K169, K170, K171, and K172, soils and debris contaminated with these wastes, radioactive wastes mixed with these hazardous wastes,

and soils and debris contaminated with these radioactive mixed wastes, are prohibited from land disposal.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in Subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under §268.44;

(4) Hazardous debris that have met treatment standards in §268.40 or in the alternative treatment standards in §268.45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Universal Treatment Standard levels of §268.48, the waste is prohibited from land disposal, and all requirements of this part are applicable, except as otherwise specified.

[63 FR 42186, Aug. 6, 1998]

§ 268.36 Waste specific prohibitions—inorganic chemical wastes

(a) Effective May 20, 2002, the wastes specified in 40 CFR part 261 as EPA Hazardous Wastes Numbers K176, K177, and K178, and soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable treatment standards established pursuant to a petition granted under §268.44;

(4) Hazardous debris has met the treatment standards in §268.40 or the alternative treatment standards in §268.45; or

(5) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(c) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable subpart D levels, the waste is prohibited from land disposal, and all requirements of this part are applicable, except as otherwise specified.

[66 FR 58298, Nov. 20, 2001]

§ 268.37 Waste specific prohibitions—ignitable and corrosive characteristic wastes whose treatment standards were vacated.

(a) Effective August 9, 1993, the wastes specified in 40 CFR 261.21 as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in §261.22 as D002, that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies.

(b) Effective February 10, 1994, the wastes specified in 40 CFR 261.21 as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in §261.22 as D002, that are managed in systems defined in 40 CFR 144.6(e) and 146.6(e) as Class V injection wells, that do not engage in CWA-equivalent treatment before injection, are prohibited from land disposal.

[58 FR 29885, May 24, 1993]

§ 268.38 Waste specific prohibitions—newly identified organic toxicity characteristic wastes and newly listed coke by-product and chlorotoluene production wastes.

(a) Effective December 19, 1994, the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste numbers K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151 are prohibited from land disposal. In addition, debris contaminated with EPA Hazardous Waste numbers F037, F038, K107–K112, K117, K118, K123–K126, K131, K132, K136, U328, U353, U359, and soil and debris contaminated with D012–D043, K141–K145, and K147–K151 are prohibited from land disposal. The following wastes that are specified in 40 CFR 261.24, Table 1 as EPA Hazardous Waste numbers: D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043 that are not radioactive, or that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that are zero dischargers that do not engage in CWA-equivalent treatment before ultimate land disposal, or that are injected in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/ sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or better than these technologies.

(b) On September 19, 1996, radioactive wastes that are mixed with D018–D043 that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/ sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies. Radioactive wastes mixed with K141–K145, and K147–K151 are also prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

(c) Between December 19, 1994 and September 19, 1996, the wastes included in paragraphs (b) of this section may be disposed in a landfill or surface impoundment, only if such unit is in compliance with the requirements specified in §268.5(h)(2) of this Part.

(d) The requirements of paragraphs (a), (b), and (c) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in Subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under §268.44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(e) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Subpart D levels, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

[59 FR 48045, Sept. 19, 1995]

§ 268.39 Waste specific prohibitions—spent aluminum potliners; reactive; and carbamate wastes.

(a) On July 8, 1996, the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste numbers K156–K159, and K161; and in 40 CFR 261.33 as EPA Hazardous Waste numbers P127, P128, P185, P188–P192, P194, P196–P199, P201–P205, U271, U278–U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409–U411 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

(b) On July 8, 1996, the wastes identified in 40 CFR 261.23 as D003 that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. This prohibition does not apply to unexploded ordnance and other explosive devices which have been the subject of an emergency response. (Such D003 wastes are prohibited unless they meet the treatment standard of DEACT before land disposal (see §268.40)).

(c) On September 21, 1998, the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste number K088 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.

(d) On April 8, 1998, radioactive wastes mixed with K088, K156–K159, K161, P127, P128, P185, P188–P192, P194, P196–P199, P201–P205, U271, U278–U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409–U411 are prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

(e) Between July 8, 1996, and April 8, 1998, the wastes included in paragraphs (a), (c), and (d) of this section may be disposed in a landfill or surface impoundment, only if such unit is in compliance with the requirements specified in §268.5(h)(2).

(f) The requirements of paragraphs (a), (b), (c), and (d) of this section do not apply if:

(1) The wastes meet the applicable treatment standards specified in Subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under §268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under §268.44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to §268.5, with respect to these wastes covered by the extension.

(g) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §268.40, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Subpart D levels, the waste is prohibited from land disposal, and all requirements of this part 268 are applicable, except as otherwise specified.

[61 FR 15663, Apr. 8, 1996, as amended at 61 FR 33683, June 28, 1996; 62 FR 1997, Jan. 14, 1997; 62 FR 32979, June 17, 1997; 62 FR 37699, July 14, 1997; 63 FR 51264, Sept. 24, 1998]

Subpart D—Treatment Standards

§ 268.40 Applicability of treatment standards.

(a) A prohibited waste identified in the table "Treatment Standards for Hazardous Wastes" may be land disposed only if it meets the requirements found in the table. For each waste, the table identifies one of three types of treatment standard requirements:

(1) All hazardous constituents in the waste or in the treatment residue must be at or below the values found in the table for that waste ("total waste standards"); or

(2) The hazardous constituents in the extract of the waste or in the extract of the treatment residue must be at or below the values found in the table ("waste extract standards"); or

(3) The waste must be treated using the technology specified in the table ("technology standard"), which are described in detail in §268.42, Table 1—Technology Codes and Description of Technology-Based Standards.

(b) For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the

previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846, as incorporated by reference in §260.11, must be used to measure compliance. An exception is made for D004 and D008, for which either of two test methods may be used: Method 1311, or Method 1310B, the Extraction Procedure Toxicity Test. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the Administrator under the procedures set forth in §268.42(b).

(c) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.

(d) Notwithstanding the prohibitions specified in paragraph (a) of this section, treatment and disposal facilities may demonstrate (and certify pursuant to 40 CFR 268.7(b)(5)) compliance with the treatment standards for organic constituents specified by a footnote in the table "Treatment Standards for Hazardous Wastes" in this section, provided the following conditions are satisfied:

(1) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart O, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

(2) The treatment or disposal facility has used the methods referenced in paragraph (d)(1) of this section to treat the organic constituents; and

(3) The treatment or disposal facility may demonstrate compliance with organic constituents if good-faith analytical efforts achieve detection limits for the regulated organic constituents that do not exceed the treatment standards specified in this section by an order of magnitude.

(e) For characteristic wastes (D001–D043) that are subject to treatment standards in the following table "Treatment Standards for Hazardous Wastes," and are not managed in a wastewater treatment system that is regulated under the Clean Water Act (CWA), that is CWA-equivalent, or that is injected into a Class I nonhazardous deep injection well, all underlying hazardous constituents (as defined in §268.2(i)) must meet Universal Treatment Standards, found in §268.48, Table Universal Treatment Standards, prior to land disposal as defined in §268.2(c) of this part.

(f) The treatment standards for F001–F005 nonwastewater constituents carbon disulfide, cyclohexanone, and/or methanol apply to wastes which contain only one, two, or three of these constituents. Compliance is measured for these constituents in the waste extract

from test Method 1311, the Toxicity Characteristic Leaching Procedure found in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA Publication SW–846, as incorporated by reference in §260.11. If the waste contains any of these three constituents along with any of the other 25 constituents found in F001–F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, and/or methanol are not required.

(g) Between August 26, 1996 and March 4, 1999 the treatment standards for the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste numbers K156–K161; and in 40 CFR 261.33 as EPA Hazardous Waste numbers P127, P128, P185, P188–P192, P194, P196–P199, P201–P205, U271, U277–U280, U364–U367, U372, U373, U375–U379, U381–U387, U389–U396, U400–U404, U407, and U409–U411; and soil contaminated with these wastes; may be satisfied by either meeting the constituent concentrations presented in the table “Treatment Standards for Hazardous Wastes” in this section, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at §268.42 Table 1, for nonwastewaters; and, biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at §268.42 Table 1, for wastewaters.

(h) Prohibited D004–D011 mixed radioactive wastes and mixed radioactive listed wastes containing metal constituents, that were previously treated by stabilization to the treatment standards in effect at that time and then put into storage, do not have to be re-treated to meet treatment standards in this section prior to land disposal.

(i) [Reserved]

(j) Effective September 4, 1998, the treatment standards for the wastes specified in 40 CFR 261.33 as EPA Hazardous Waste numbers P185, P191, P192, P197, U364, U394, and U395 may be satisfied by either meeting the constituent concentrations presented in the table “Treatment Standards for Hazardous Wastes” in this section, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at §268.42 Table 1 of this Part, for nonwastewaters; and, biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at §268.42 Table 1 of this Part, for wastewaters.

TABLE: TREATMENT STANDARDS FOR HAZARDOUS WASTE

[59 FR 48046, Sept. 19, 1994]

Editorial Note: For Federal Register citations affecting §268.40, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 268.41 Treatment standards expressed as concentrations in waste extract.

For the requirements previously found in this section and for treatment standards in Table CCWE—Constituent Concentrations in Waste Extracts, refer to §268.40.

[59 FR 48103, Sept. 19, 1994]

§ 268.42 Treatment standards expressed as specified technologies.

Note: For the requirements previously found in this section in Table 2—Technology-Based Standards By RCRA Waste Code, and Table 3—Technology-Based Standards for Specific Radioactive Hazardous Mixed Waste, refer to §268.40.

(a) The following wastes in the table in §268.40 "Treatment Standards for Hazardous Wastes," for which standards are expressed as a treatment method rather than a concentration level, must be treated using the technology or technologies specified in the table entitled "Technology Codes and Description of Technology-Based Standards" in this section.

TABLE: TECHNOLOGY CODES AND DESCRIPTIONS OF TECHNOLOGY-BASED STANDARDS.

(b) Any person may submit an application to the Administrator demonstrating that an alternative treatment method can achieve a measure of performance equivalent to that achieved by methods specified in paragraphs (a), (c), and (d) of this section for wastes or specified in Table 1 of §268.45 for hazardous debris. The applicant must submit information demonstrating that his treatment method is in compliance with federal, state, and local requirements and is protective of human health and the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in paragraphs (a), (c), and (d) of this section for wastes or in Table 1 of §268.45 for hazardous debris. Any approval must be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such approval is issued must comply with all limitations contained in such a determination.

(c) As an alternative to the otherwise applicable subpart D treatment standards, lab packs are eligible for land disposal provided the following requirements are met:

(1) The lab packs comply with the applicable provisions of 40 CFR 264.316 and 40 CFR 265.316;

(2) The lab pack does not contain any of the wastes listed in Appendix IV to part 268;

(3) The lab packs are incinerated in accordance with the requirements of 40 CFR part 264, subpart O or 40 CFR part 265, subpart O; and

(4) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in subpart D of this part.

(d) Radioactive hazardous mixed wastes are subject to the treatment standards in §268.40. Where treatment standards are specified for radioactive mixed wastes in the Table of Treatment Standards, those treatment standards will govern. Where there is no specific treatment standard for radioactive mixed waste, the treatment standard for the hazardous waste (as designated by EPA waste code) applies. Hazardous debris containing radioactive waste is subject to the treatment standards specified in §268.45.

[51 FR 40642, Nov. 7, 1986, as amended at 52 FR 25790, July 8, 1987; 55 FR 22692, June 1, 1990; 56 FR 3884, Jan. 31, 1991; 57 FR 8089, Mar. 6, 1992; 57 FR 37273, Aug. 18, 1992; 58 FR 29885, May 24, 1993; 59 FR 31552, June 20, 1994; 59 FR 48103, Sept. 19, 1994; 60 FR 302, Jan. 3, 1995; 61 FR 15654, Apr. 8, 1996; 62 FR 26025, May 12, 1997; 63 FR 28738, May 26, 1998; 71 FR 40278, July 14, 2006]

§ 268.43 Treatment standards expressed as waste concentrations.

For the requirements previously found in this section and for treatment standards in Table CCW—Constituent Concentrations in Wastes, refer to §268.40.

[59 FR 48103, Sept. 19, 1994]

§ 268.44 Variance from a treatment standard.

(a) Based on a petition filed by a generator or treater of hazardous waste, the Administrator may approve a variance from an applicable treatment standard if:

(1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must either demonstrate that:

(i) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media); or

(ii) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

(b) Each petition must be submitted in accordance with the procedures in §260.20.

(c) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(d) After receiving a petition for variance from a treatment standard, the Administrator may request any additional information or samples which he may require to evaluate the petition. Additional copies of the complete petition may be requested as needed to send to affected states and Regional Offices.

(e) The Administrator will give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a variance from a treatment standard will be published in the Federal Register.

(f) A generator, treatment facility, or disposal facility that is managing a waste covered by a variance from the treatment standards must comply with the waste analysis requirements for restricted wastes found under §268.7.

(g) During the petition review process, the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

(h) Based on a petition filed by a generator or treater of hazardous waste, the Administrator or his or her delegated representative may approve a site-specific variance from an applicable treatment standard if:

(1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must either demonstrate that:

(i) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media where the treatment standard is not based on combustion of such media); or

(ii) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

(3) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) the concentrations necessary to minimize short- and long-term threats to human health and the environment. Treatment variances approved under this paragraph must:

(i) At a minimum, impose alternative land disposal restriction treatment standards that, using a reasonable maximum exposure scenario:

(A) For carcinogens, achieve constituent concentrations that result in the total excess risk to an individual exposed over a lifetime generally falling within a range from 10^{-4} to 10^{-6}; and

(B) For constituents with non-carcinogenic effects, achieve constituent concentrations that an individual could be exposed to on a daily basis without appreciable risk of deleterious effect during a lifetime.

(ii) Not consider post-land-disposal controls.

(4) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) natural background concentrations at the site where the contaminated soil will land disposed.

(5) Public notice and a reasonable opportunity for public comment must be provided before granting or denying a petition.

(i) Each application for a site-specific variance from a treatment standard must include the information in §260.20(b)(1)–(4);

(j) After receiving an application for a site-specific variance from a treatment standard, the Assistant Administrator, or his delegated representative, may request any additional information or samples which may be required to evaluate the application.

(k) A generator, treatment facility, or disposal facility that is managing a waste covered by a site-specific variance from a treatment standard must comply with the waste analysis requirements for restricted wastes found under §268.7.

(l) During the application review process, the applicant for a site-specific variance must comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

(m) For all variances, the petitioner must also demonstrate that compliance with any given treatment variance is sufficient to minimize threats to human health and the environment posed by land disposal of the waste. In evaluating this demonstration, EPA may take into account whether a treatment variance should be approved if the subject waste is to be used in a manner constituting disposal pursuant to 40 CFR 266.20 through 266.23.

(n) [Reserved]

(o) The following facilities are excluded from the treatment standards under §268.40, and are subject to the following constituent concentrations:

TABLE: WASTES EXCLUDED FROM TREATMENT STANDARDS

[51 FR 40642, Nov. 7, 1986, as amended at 52 FR 21017, June 4, 1987; 53 FR 31221, Aug. 17, 1988; 54 FR 36972, Sept. 6, 1989; 56 FR 12355, Mar. 25, 1991; 61 FR 55727, Oct. 28, 1996; 62 FR 26025, May 12, 1997; 62 FR 64509, Dec. 5, 1997; 63 FR 28738, May 26, 1998; 64 FR 28391, May 26, 1999; 66 FR 33890, June 26, 2001; 67 FR 35928, May 22, 2002; 67 FR 36818, May 28, 2002; 69 FR 6575, Feb. 11, 2004; 69 FR 67653, Nov. 19, 2004; 70 FR 34589, June 14, 2005; 70 FR 44511, Aug. 3, 2005; 71 FR 6212, Feb. 7, 2006; 71 FR 40279, July 14, 2006]

§ 268.45 Treatment standards for hazardous debris.

(a) *Treatment standards*. Hazardous debris must be treated prior to land disposal as follows unless EPA determines under §261.3(f)(2) of this chapter that the debris is no longer contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard provided in this subpart for the waste contaminating the debris:

(1) *General.* Hazardous debris must be treated for each “contaminant subject to treatment” defined by paragraph (b) of this section using the technology or technologies identified in Table 1 of this section.

(2) *Characteristic debris.* Hazardous debris that exhibits the characteristic of ignitability, corrosivity, or reactivity identified under §§261.21, 261.22, and 261.23 of this chapter, respectively, must be deactivated by treatment using one of the technologies identified in Table 1 of this section.

(3) *Mixtures of debris types.* The treatment standards of Table 1 in this section must be achieved for each type of debris contained in a mixture of debris types. If an

immobilization technology is used in a treatment train, it must be the last treatment technology used.

(4) *Mixtures of contaminant types.* Debris that is contaminated with two or more contaminants subject to treatment identified under paragraph (b) of this section must be treated for each contaminant using one or more treatment technologies identified in Table 1 of this section. If an immobilization technology is used in a treatment train, it must be the last treatment technology used.

(5) *Waste PCBs.* Hazardous debris that is also a waste PCB under 40 CFR part 761 is subject to the requirements of either 40 CFR part 761 or the requirements of this section, whichever are more stringent.

(b) *Contaminants subject to treatment.* Hazardous debris must be treated for each "contaminant subject to treatment." The contaminants subject to treatment must be determined as follows:

(1) *Toxicity characteristic debris.* The contaminants subject to treatment for debris that exhibits the Toxicity Characteristic (TC) by §261.24 of this chapter are those EP constituents for which the debris exhibits the TC toxicity characteristic.

(2) *Debris contaminated with listed waste.* The contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents or wastes for which treatment standards are established for the waste under §268.40.

(3) *Cyanide reactive debris.* Hazardous debris that is reactive because of cyanide must be treated for cyanide.

(c) *Conditioned exclusion of treated debris.* Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table 1 of this section and that does not exhibit a characteristic of hazardous waste identified under subpart C, part 261, of this chapter after treatment is not a hazardous waste and need not be managed in a subtitle C facility. Hazardous debris contaminated with a listed waste that is treated by an immobilization technology specified in Table 1 is a hazardous waste and must be managed in a subtitle C facility.

(d) *Treatment residuals*—(1) *General requirements.* Except as provided by paragraphs (d)(2) and (d)(4) of this section:

(i) Residue from the treatment of hazardous debris must be separated from the treated debris using simple physical or mechanical means; and

(ii) Residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by subpart D of this part for the waste contaminating the debris.

(2) *Nontoxic debris.* Residue from the deactivation of ignitable, corrosive, or reactive characteristic hazardous debris (other than cyanide-reactive) that is not contaminated with a contaminant subject to treatment defined by paragraph (b) of this section, must be deactivated prior to land disposal and is not subject to the waste-specific treatment standards of subpart D of this part.

(3) *Cyanide-reactive debris*. Residue from the treatment of debris that is reactive because of cyanide must meet the treatment standards for D003 in "Treatment Standards for Hazardous Wastes" at §268.40.

(4) *Ignitable nonwastewater residue*. Ignitable nonwastewaster residue containing equal to or greater than 10% total organic carbon is subject to the technology specified in the treatment standard for D001: Ignitable Liquids.

(5) *Residue from spalling.* Layers of debris removed by spalling are hazardous debris that remain subject to the treatment standards of this section.

TABLE: ALTERNATIVE TREATMENT STANDARDS FOR HAZARDOUS DEBRIS

[57 FR 37277, Aug. 18, 1992, as amended at 59 FR 48103, Sept. 19, 1994; 63 FR 28738, May 26, 1998]

§ 268.46 Alternative treatment standards based on HTMR.

For the treatment standards previously found in this section, refer to §268.40.

[59 FR 48103, Sept. 19, 1994]

§ 268.48 Universal treatment standards.

(a) Table UTS identifies the hazardous constituents, along with the nonwastewater and wastewater treatment standard levels, that are used to regulate most prohibited hazardous wastes with numerical limits. For determining compliance with treatment standards for underlying hazardous constituents as defined in §268.2(i), these treatment standards may not be exceeded. Compliance with these treatment standards is measured by an analysis of grab samples, unless otherwise noted in the following Table UTS.

TABLE: UNIVERSAL TREATMENT STANDARDS

[59 FR 48103, Sept. 19, 1994, as amended by 60 FR 302, Jan. 3, 1995; 61 FR 15654, Apr. 8 1996; 61 FR 33690, June 28, 1996; 62 FR 7596, Feb. 19, 1997; 63 FR 24626, May 4, 1998; 63 FR 28739, May 26, 1998; 63 FR 47417, Sept. 4, 1998; 64 FR 25417, May 11, 1999; 65 FR 14475, Mar. 17, 2000; 70 FR 34590, June 14, 2005; 70 FR 9178, Feb. 24, 2005; 71 FR 40279, July 14, 2006]

§ 268.49 Alternative LDR treatment standards for contaminated soil.

(a) *Applicability.* You must comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste, or exhibited a characteristic of hazardous waste at the time it was generated, into a land disposal unit. The following chart describes whether you must comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

CHART: APPLICABILITY

(b) Prior to land disposal, contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be treated according to the applicable treatment standards specified in paragraph (c) of this section or according to the Universal Treatment Standards specified in 40 CFR 268.48 applicable to the contaminating listed hazardous waste and/or the applicable characteristic of hazardous waste if the soil is characteristic. The treatment standards specified in paragraph (c) of this section and the Universal Treatment Standards may be modified through a treatment variance approved in accordance with 40 CFR 268.44.

(c) *Treatment standards for contaminated soils.* Prior to land disposal, contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be treated according to all the standards specified in this paragraph or according to the Universal Treatment Standards specified in 40 CFR 268.48.

(1) *All soils.* Prior to land disposal, all constituents subject to treatment must be treated as follows:

(A) For non-metals except carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in total constituent concentrations, except as provided by paragraph (c)(1)(C) of this section.

(B) For metals and carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in constituent concentrations as measured in leachate from the treated media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by paragraph (c)(1)(C)of this section.

(C) When treatment of any constituent subject to treatment to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the universal treatment standard is not required. Universal Treatment Standards are identified in 40 CFR 268.48 Table UTS.

(2) *Soils that exhibit the characteristic of ignitability, corrosivity or reactivity.* In addition to the treatment required by paragraph (c)(1) of this section, prior to land disposal, soils

that exhibit the characteristic of ignitability, corrosivity, or reactivity must be treated to eliminate these characteristics.

(3) *Soils that contain nonanalyzable constituents.* In addition to the treatment requirements of paragraphs (c)(1) and (2) of this section, prior to land disposal, the following treatment is required for soils that contain nonanalyzable constituents:

(A) For soil that contains only analyzable and nonanalyzable organic constituents, treatment of the analyzable organic constituents to the levels specified in paragraphs (c)(1) and (2) of this section; or,

(B) For soil that contains only nonanalyzable constituents, treatment by the method(s) specified in §268.42 for the waste contained in the soil.

(d) *Constituents subject to treatment.* When applying the soil treatment standards in paragraph (c) of this section, constituents subject to treatment are any constituents listed in §268.48 Table UTS-Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium, zinc, and that are present at concentrations greater than ten times the universal treatment standard. PCBs are not constituent subject to treatment in any given volume of soil which exhibits the toxicity characteristic solely because of the presence of metals.

(e) *Management of treatment residuals.* Treatment residuals from treating contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be managed as follows:

(1) Soil residuals are subject to the treatment standards of this section;

(2) Non-soil residuals are subject to:

(A) For soils contaminated by listed hazardous waste, the RCRA Subtitle C standards applicable to the listed hazardous waste; and

(B) For soils that exhibit a characteristic of hazardous waste, if the non-soil residual also exhibits a characteristic of hazardous waste, the treatment standards applicable to the characteristic hazardous waste.

[63 FR 28751, May 26, 1998, as amended at 64 FR 25417, May 11, 1999; 64 FR 56472, Oct. 20, 1999; 65 FR 81381, Dec. 26, 2000; 71 FR 40279, July 14, 2006]

Subpart E—Prohibitions on Storage

§ 268.50 Prohibitions on storage of restricted wastes.

(a) Except as provided in this section, the storage of hazardous wastes restricted from land disposal under subpart C of this part of RCRA section 3004 is prohibited, unless the following conditions are met:

(1) A generator stores such wastes in tanks, containers, or containment buildings on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and the generator complies with the requirements in §262.34 and parts 264 and 265 of this chapter.

(2) An owner/operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and:

(i) Each container is clearly marked to identify its contents and the date each period of accumulation begins;

(ii) Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility. Regardless of whether the tank itself is marked, an owner/operator must comply with the operating record requirements specified in §264.73 or §265.73.

(3) A transporter stores manifested shipments of such wastes at a transfer facility for 10 days or less.

(b) An owner/operator of a treatment, storage or disposal facility may store such wastes for up to one year unless the Agency can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

(c) An owner/operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner/operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

(d) If a generator's waste is exempt from a prohibition on the type of land disposal utilized for the waste (for example, because of an approved case-by-case extension under §268.5, an approved §268.6 petition, or a national capacity variance under subpart C), the prohibition in paragraph (a) of this section does not apply during the period of such exemption.

(e) The prohibition in paragraph (a) of this section does not apply to hazardous wastes that meet the treatment standards specified under §§268.41, 268.42, and 268.43 or the treatment standards specified under the variance in §268.44, or, where treatment

standards have not been specified, is in compliance with the applicable prohibitions specified in §268.32 or RCRA section 3004.

(f) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm must be stored at a facility that meets the requirements of 40 CFR 761.65(b) and must be removed from storage and treated or disposed as required by this part within one year of the date when such wastes are first placed into storage. The provisions of paragraph (c) of this section do not apply to such PCB wastes prohibited under §268.32 of this part.

(g) The prohibition and requirements in this section do not apply to hazardous remediation wastes stored in a staging pile approved pursuant to §264.554 of this chapter.

[51 FR 40642, Nov. 7, 1986; 52 FR 21017, June 4, 1987, as amended at 52 FR 25791, July 8, 1987; 54 FR 36972, Sept. 6, 1989; 57 FR 37281, Aug. 18, 1992; 63 FR 65940, Nov. 30, 1998; 71 FR 40279, July 14, 2006]

Appendixes I-II to Part 268 [Reserved]

Appendix III to Part 268- List of Halogenated Organize Compounds Regulated under §268.32

Appendix IV to Part 268—Wastes Excluded From Lab Packs Under the Alternative Treatment Standards of §268.42(c)

Appendix V to Part 268 [Reserved]

Appendix VI to Part 268—Recommended Technologies To Achieve Deactivation of Characteristics in Section 268.42

Appendix VIII to Part 268—LDR Effective Dates of Injected Prohibited Hazardous Wastes
Appendix IX to Part 268—Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test (Method 1310B)

Appendix X to Part 268 [Reserved]

Appendix XI to Part 268—Metal Bearing Wastes Prohibited From Dilution in a Combustion Unit According to 40 CFR 268.3(c)

Related Resources:

- Land Disposal Restrictions: Summary of Requirements
- Land Disposal Restrictions
- Land Disposal Restrictions for F001-F005 Solvent Wastes
- Land Disposal Restriction Requirements For Characteristic Wastes

- Land Disposal Restrictions Notification Requirements for Decharacterized Waste
- LDR Notification for Listed and Characteristic Wastes
- Questions Regarding the Land Disposal Restrictions (LDR) Notification Regulations at 40 CFR 268.7
- Land Disposal Restrictions Notification Requirements for Contaminated Soil
- One-Time Notification Requirement Under §268.7(a)(6)
- Land Disposal Restrictions- Land Disposal Definition, Lab Packs, Conditionally Exempt SQG Waste, Empty Containers

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Pre-transport Requirements

Subpart C—Pre-Transport Requirements

§ 262.30: Packaging.

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must package the waste in accordance with the applicable Department of Transportation regulations on packaging under 49 CFR parts 173, 178, and 179.

§ 262.31: Labeling.

Before transporting or offering hazardous waste for transportation off- site, a generator must label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR part 172.

§ 262.32: Marking.

(a) Before transporting or offering hazardous waste for transportation off- site, a generator must mark each package of hazardous waste in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR part 172;

(b) Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must mark each container of 119 gallons or less used in such transportation with the following words and information in accordance with the requirements of 49 CFR 172.304:
HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency. Generator's Name and Address_____. Generator's EPA Identification Number llll. Manifest Tracking Number _____.

§ 262.33: Placarding.

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards

according to Department of Transportation regulations for hazardous materials under 49 CFR part 172, subpart F.

Related Resources:

- Hazardous Waste Transport Between Contiguous Properties
- Manifest Exemption for Shipments Between Sites on Certain Contiguous Properties
- Labeling of Steel Drums Need Not Include Previous Contents
- Hazardous Waste Container Labeling Requirements

Manifest

Subpart B—The Manifest

§ 262.20: General requirements.

(a)(1) A generator who transports, or offers for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected hazardous waste load, must prepare a Manifest (OMB Control number 2050–0039) on EPA Form 8700–22, and, if necessary, EPA Form 8700–22A, according to the instructions included in the appendix to this part.

(2) The revised manifest form and procedures in 40 CFR 260.10, 261.7, 262.20, 262.21, 262.27, 262.32, 262.34, 262.54, 262.60, and the appendix to part 262, shall not apply until September 5, 2006. The manifest form and procedures in 40 CFR 260.10, 261.7, 262.20, 262.21, 262.32, 262.34, 262.54, 262.60, and the Appendix to part 262, contained in the 40 CFR, parts 260 to 265, edition revised as of July 1, 2004, shall be applicable until September 5, 2006.

(b) A generator must designate on the manifest one facility which is permitted to handle the waste described on the manifest.

(c) A generator may also designate on the manifest one alternate facility which is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.

(d) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste.

(e) The requirements of this subpart do not apply to hazardous waste produced by generators of greater than 100 kg but less than 1000 kg in a calendar month where:

(1) The waste is reclaimed under a contractual agreement pursuant to which:

(i) The type of waste and frequency of shipments are specified in the agreement;

(ii) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and

(2) The generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement.

(f) The requirements of this subpart and §262.32(b) do not apply to the transport of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Notwithstanding 40 CFR 263.10(a), the generator or transporter must comply with the requirements for transporters set forth in 40 CFR 263.30 and 263.31 in the event of a discharge of hazardous waste on a public or private right-of-way.

* **Note to Reader**: The regulations found at 262.21 relate to generators, and other entities not even in the business of hazardous waste management, who intend to **actually print** the new manifest form. Generators who do not actually print the manifest form should obtain this form from an approved source registered with EPA. Please visit http://www.epa.gov/epaoswer/hazwaste/gener/manifest/registry/index.htm and mouse-click on the link titled "Approved Registered Printers."

§ 262.21: Manifest tracking numbers, manifest printing, and obtaining manifests.

(a)(1) A registrant may not print, or have printed, the manifest for use or distribution unless it has received approval from the EPA Director of the Office of Solid Waste to do so under paragraphs (c) and (e) of this section.
(2) The approved registrant is responsible for ensuring that the organizations identified in its application are in compliance with the procedures of its approved application and the requirements of this section. The registrant is responsible for assigning manifest tracking numbers to its manifests.
(b) A registrant must submit an initial application to the EPA Director of the Office of Solid Waste that contains the following information:
(1) Name and mailing address of registrant;
(2) Name, telephone number and email address of contact person;
(3) Brief description of registrant's government or business activity;
(4) EPA identification number of the registrant, if applicable;
(5) Description of the scope of the operations that the registrant plans to undertake in printing, distributing, and using its manifests, including:

(i) A description of the printing operation. The description should include an explanation of whether the registrant intends to print its manifests in-house (*i.e.*, using its own printing establishments) or through a separate (*i.e.*, unaffiliated) printing company. If the registrant intends to use a separate printing company to print the manifest on its behalf, the application must identify this printing company and discuss how the registrant will oversee the company. If this includes the use of intermediaries (*e.g.*, prime and

subcontractor relationships), the role of each must be discussed. The application must provide the name and mailing address of each company. It also must provide the name and telephone number of the contact person at each company.

(ii) A description of how the registrant will ensure that its organization and unaffiliated companies, if any, comply with the requirements of this section. The application must discuss how the registrant will ensure that a unique manifest tracking number will be pre-printed on each manifest. The application must describe the internal control procedures to be followed by the registrant and unaffiliated companies to ensure that numbers are tightly controlled and remain unique. In particular, the application must describe how the registrant will assign manifest tracking numbers to its manifests. If computer systems or other infrastructure will be used to maintain, track, or assign numbers, these should be indicated. The application must also indicate how the printer will pre-print a unique number on each form (*e.g.*, crash or press numbering). The application also must explain the other quality procedures to be followed by each establishment and printing company to ensure that all required print specifications are consistently achieved and that printing violations are identified and corrected at the earliest practicable time.

(iii) An indication of whether the registrant intends to use the manifests for its own business operations or to distribute the manifests to a separate company or to the general public (*e.g.*, for purchase).

(6) A brief description of the qualifications of the company that will print the manifest. The registrant may use readily available information to do so (*e.g.*, corporate brochures, product samples, customer references, documentation of ISO certification), so long as such information pertains to the establishments or company being proposed to print the manifest.

(7) Proposed unique three-letter manifest tracking number suffix. If the registrant is approved to print the manifest, the registrant must use this suffix to pre-print a unique manifest tracking number on each manifest.

(8) A signed certification by a duly authorized employee of the registrant that the organizations and companies in its application will comply with the procedures of its approved application and the requirements of this Section and that it will notify the EPA Director of the Office of Solid Waste of any duplicated manifest tracking numbers on manifests that have been used or distributed to other parties as soon as this becomes known.

(c) EPA will review the application submitted under paragraph (b) of this section and either approve it or request additional information or modification before approving it.

(d)(1) Upon EPA approval of the application under paragraph (c) of this section, EPA will provide the registrant an electronic file of the manifest, continuation sheet, and manifest instructions and ask the registrant to submit three fully assembled manifests and continuation sheet samples, except as noted in paragraph (d)(3) of this section. The registrant’s samples must meet all of the specifications in paragraph (f) of this section and be printed by the company that will print the manifest as identified in the application

approved under paragraph (c) of this section.
(2) The registrant must submit a description of the manifest samples as follows:

(i) Paper type (*i.e.*, manufacturer and grade of the manifest paper);
(ii) Paper weight of each copy;
(iii) Ink color of the manifest's instructions. If screening of the ink was used, the registrant must indicate the extent of the screening; and
(iv) Method of binding the copies.

(3) The registrant need not submit samples of the continuation sheet if it will print its continuation sheet using the same paper type, paper weight of each copy, ink color of the instructions, and binding method as its manifest form samples.

(e) EPA will evaluate the forms and either approve the registrant to print them as proposed or request additional information or modification to them before approval. EPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its forms until EPA approves them. An approved registrant must print the manifest and continuation sheet according to its application approved under paragraph (c) of this section and the manifest specifications in paragraph (f) of this section. It also must print the forms according to the paper type, paper weight, ink color of the manifest instructions and binding method of its approved forms.

(f) Paper manifests and continuation sheets must be printed according to the following specifications:
(1) The manifest and continuation sheet must be printed with the exact format and appearance as EPA Forms 8700–22 and 8700–22A, respectively. However, information required to complete the manifest may be pre-printed on the manifest form.
(2) A unique manifest tracking number assigned in accordance with a numbering system approved by EPA must be pre-printed in Item 4 of the manifest. The tracking number must consist of a unique three-letter suffix following nine digits.
(3) The manifest and continuation sheet must be printed on 8 ½ x 11-inch white paper, excluding common stubs (*e.g.*, top- or side-bound stubs). The paper must be durable enough to withstand normal use.
(4) The manifest and continuation sheet must be printed in black ink that can be legibly photocopied, scanned, and faxed, except that the marginal words indicating copy distribution must be in red ink.
(5) The manifest and continuation sheet must be printed as six-copy forms. Copy-to-copy registration must be exact within 1.32nd of an inch. Handwritten and typed impressions on the form must be legible on all six copies. Copies must be bound together by one or more common stubs that reasonably ensure that they will not become detached inadvertently during normal use.
(6) Each copy of the manifest and continuation sheet must indicate how the copy must be distributed, as follows:
(i) Page 1 (top copy): ''Designated facility to destination State (if required)''.
(ii) Page 2: ''Designated facility to generator State (if required)''.
(iii) Page 3: ''Designated facility to generator''.

(iv) Page 4: ‘‘Designated facility’s copy’’.
(v) Page 5: ‘‘Transporter’s copy’’.
(vi) Page 6 (bottom copy): ‘‘Generator’s initial copy’’.

(7) The instructions in the appendix to 40 CFR part 262 must appear legibly on the back of the copies of the manifest and continuation sheet as provided in this paragraph (f). The instructions must not be visible through the front of the copies when photocopied or faxed.
(i) Manifest Form 8700–22.
(A) The ‘‘Instructions for Generators’’ on Copy 6;
(B) The ‘‘Instructions for International Shipment Block’’ and ‘‘Instructions for Transporters’’ on Copy 5; and (C) The ‘‘Instructions for Treatment, Storage, and Disposal Facilities’’ on Copy 4.
(ii) Manifest Form 8700–22A.
(A) The ‘‘Instructions for Generators’’ on Copy 6;
(B) The ‘‘Instructions for Transporters’’ on Copy 5; and
(C) The ‘‘Instructions for Treatment, Storage, and Disposal Facilities’’ on Copy 4.

(g)(1) A generator may use manifests printed by any source so long as the source of the printed form has received approval from EPA to print the manifest under paragraphs (c) and (e) of this section. A registered source may be a:
(i) State agency;
(ii) Commercial printer;
(iii) Hazardous waste generator, transporter or TSDF; or
(iv) Hazardous waste broker or other preparer who prepares or arranges shipments of hazardous waste for transportation.
(2) A generator must determine whether the generator state or the consignment state for a shipment regulates any additional wastes (beyond those regulated Federally) as hazardous wastes under these states’ authorized programs. Generators also must determine whether the consignment state or generator state requires the generator to submit any copies of the manifest to these states. In cases where the generator must supply copies to either the generator’s state or the consignment state, the generator is responsible for supplying legible photocopies of the manifest to these states.

(h)(1) If an approved registrant would like to update any of the information provided in its application approved under paragraph (c) of this section (*e.g.*, to update a company phone number or name of contact person), the registrant must revise the application and submit it to the EPA Director of the Office of Solid Waste, along with an indication or explanation of the update, as soon as practicable after the change occurs. The Agency either will approve or deny the revision. If the Agency denies the revision, it will explain the reasons for the denial, and it will contact the registrant and request further modification before approval.

(2) If the registrant would like a new tracking number suffix, the registrant must submit a proposed suffix to the EPA Director of the Office of Solid Waste, along with the reason for requesting it. The Agency will either approve the suffix or deny the suffix and provide

an explanation why it is not acceptable.
(3) If a registrant would like to change the paper type, paper weight, ink color of the manifest instructions, or binding method of its manifest or continuation sheet subsequent to approval under paragraph (e) of this section, then the registrant must submit three samples of the revised form for EPA review and approval. If the approved registrant would like to use a new printer, the registrant must submit three manifest samples printed by the new printer, along with a brief description of the printer's qualifications to print the manifest. EPA will evaluate the manifests and either approve the registrant to print the forms as proposed or request additional information or modification to them before approval. EPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its revised forms until EPA approves them.
(i) If, subsequent to its approval under paragraph (e) of this section, a registrant typesets its manifest or continuation sheet instead of using the electronic file of the forms provided by EPA, it must submit three samples of the manifest or continuation sheet to the registry for approval. EPA will evaluate the manifests or continuation sheets and either approve the registrant to print them as proposed or request additional information or modification to them before approval. EPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its typeset forms until EPA approves them.

(j) EPA may exempt a registrant from the requirement to submit form samples under paragraph (d) or (h)(3) of this section if the Agency is persuaded that a separate review of the registrant's forms would serve little purpose in informing an approval decision (*e.g.*, a registrant certifies that it will print the manifest using the same paper type, paper weight, ink color of the instructions and binding method of the form samples approved for some other registrant). A registrant may request an exemption from EPA by indicating why an exemption is warranted.

(k) An approved registrant must notify EPA by phone or email as soon as it becomes aware that it has duplicated tracking numbers on any manifests that have been used or distributed to other parties.

(l) If, subsequent to approval of a registrant under paragraph (e) of this section, EPA becomes aware that the approved paper type, paper weight, ink color of the instructions, or binding method of the registrant's form is unsatisfactory, EPA will contact the registrant and require modifications to the form.

(m)(1) EPA may suspend and, if necessary, revoke printing privileges if we find that the registrant: (i) Has used or distributed forms that deviate from its approved form samples in regard to paper weight, paper type, ink color of the instructions, or binding method; or (ii) Exhibits a continuing pattern of behavior in using or distributing manifests that contain duplicate manifest tracking numbers.
(2) EPA will send a warning letter to the registrant that specifies the date by which it must come into compliance with the requirements. If the registrant does not come in compliance by the specified date, EPA will send a second letter notifying the registrant that EPA has suspended or revoked its printing privileges. An approved registrant must provide information on its printing activities to EPA if requested.

§ 262.22: Number of copies.

The manifest consists of at least the number of copies which will provide the generator, each transporter, and the owner or operator of the designated facility with one copy each for their records and another copy to be returned to the generator.

§ 262.23: Use of the manifest.

(a) The generator must: (1) Sign the manifest certification by hand; and (2) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest; and (3) Retain one copy, in accordance with § 262.40(a).

(b) The generator must give the transporter the remaining copies of the manifest.
(c) For shipments of hazardous waste within the United States solely by water (bulk shipments only), the generator must send three copies of the manifest dated and signed in accordance with this section to the owner or operator of the designated facility or the last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.

(d) For rail shipments of hazardous waste within the United States which originate at the site of generation, the generator must send at least three copies of the manifest dated and signed in accordance with this section to: (1) The next non-rail transporter, if any; or (2) The designated facility if transported solely by rail; or (3) The last rail transporter to handle the waste in the United States if exported by rail.

(e) For shipments of hazardous waste to a designated facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, the generator must assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

NOTE: See § 263.20(e) and (f) for special provisions for rail or water (bulk shipment) transporters. [45 FR 33142, May 19, 1980, as amended at 45 FR 86973, Dec. 31, 1980; 55 FR 2354, Jan. 23, 1990]

§ 262.27: Waste minimization certification.

A generator who initiates a shipment of hazardous waste must certify to one of the following statements in Item 15 of the uniform hazardous waste manifest: (a) ‘‘I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;’’ or (b) ‘‘I am a small quantity generator. I have made a good faith effort to

minimize my waste generation and select the best waste management method that is available to me and that I can afford.'' [70 FR 10817, Mar. 4, 2005] EFFECTIVE DATE NOTE: At 70 FR 10817, Mar. 4, 2005, subpart B was amended by adding new § 262.27, effective Sept. 6, 2005.

Related Resources:

- Instructions for Completing the Hazardous Waste Manifest
- Environmental Fact Sheet: Hazardous Waste Manifest System Streamlined
- Instructions for Preparing Application Materials for Submittal to EPA's Manifest Registry
- Federal Policy on Several Issues Related to the Use of the Hazardous Waste Manifest by Hazardous Waste Transporters
- Off-Site Shipments of Hazardous Waste to Designated Facilities
- Use of the Hazardous Waste Manifest for Import Shipments of Maquiladora Hazardous Wastes
- DOT Manifest Requirements
- Uniform Manifest Form, Use of Continuation Sheet
- Manifesting Requirements
- Date of Shipment Determines Time Period for Exemption Reporting
- The Hazardous Waste Manifest System

Exports

Subpart E - Exports of Hazardous Waste

Source: 51 FR 28682, Aug. 8, 1986, unless otherwise noted.

§262.50: Applicability.

This subpart establishes requirements applicable to exports of hazardous waste. Except to the extent Sec. 262.58 provides otherwise, a primary exporter of hazardous waste must comply with the special requirements of this subpart and a transporter transporting hazardous waste for export must comply with applicable requirements of part 263. Section 262.58 sets forth the requirements of international agreements between the United States and receiving countries which establish different notice, export, and enforcement procedures for the transportation, treatment, storage and disposal of hazardous waste for shipments between the United States and those countries.

§262.51: Definitions.

In addition to the definitions set forth at 40 CFR 260.10, the following definitions apply to this subpart:

Consignee means the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste will be sent.

EPA Acknowledgement of Consent means the cable sent to EPA from the U.S. Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.

Primary Exporter means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with 40 CFR part 262, subpart B, or equivalent State provision, which specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.

Receiving country means a foreign country to which a hazardous waste is sent for the purpose of treatment, storage or disposal (except short-term storage incidental to transportation).

Transit country means any foreign country, other than a receiving country, through which a hazardous waste is transported.

[53 FR 27164, July 19, 1988]

§262.52: General requirements.

Exports of hazardous waste are prohibited except in compliance with the applicable requirements of this subpart and part 263. Exports of hazardous waste are prohibited unless:

(a) Notification in accordance with Sec. 262.53 has been provided;

(b) The receiving country has consented to accept the hazardous waste;

(c) A copy of the EPA Acknowledgment of Consent to the shipment accompanies the hazardous waste shipment and, unless exported by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).

(d) The hazardous waste shipment conforms to the terms of the receiving country's written consent as reflected in the EPA Acknowledgment of Consent.

§262.53: Notification of intent to export.

(a) A primary exporter of hazardous waste must notify EPA of an intended export before such waste is scheduled to leave the United States. A complete notification should be submitted sixty (60) days before the initial shipment is intended to be shipped off site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification must be in writing, signed by the primary exporter, and include the following information:

(1) Name, mailing address, telephone number and EPA ID number of the primary exporter;

(2) By consignee, for each hazardous waste type:

(i) A description of the hazardous waste and the EPA hazardous waste number (from 40 CFR part 261, subparts C and D), U.S. DOT proper shipping name, hazard class and ID number (UN/NA) for each hazardous waste as identified in 49 CFR parts 171 through 177;

(ii) The estimated frequency or rate at which such waste is to be exported and the period of time over which such waste is to be exported.

(iii) The estimated total quantity of the hazardous waste in units as specified in the instructions to the Uniform Hazardous Waste Manifest Form (8700-22);

(iv) All points of entry to and departure from each foreign country through which the hazardous waste will pass;

(v) A description of the means by which each shipment of the hazardous waste will be transported (e.g., mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.));

(vi) A description of the manner in which the hazardous waste will be treated, stored or disposed of in the receiving country (e.g., land or ocean incineration, other land disposal, ocean dumping, recycling);

(vii) The name and site address of the consignee and any alternate consignee; and

(viii) The name of any transit countries through which the hazardous waste will be sent and a description of the approximate length of time the hazardous waste will remain in such country and the nature of its handling while there;

(b) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting, and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting, and Data Division (2222A), Environmental Protection Agency, Ariel Rios Bldg., 12th St. and Pennsylvania Ave., NW., Washington, DC. In both cases, the following shall be prominently displayed on the front of the envelope: ``Attention: Notification of Intent to Export."

(c) Except for changes to the telephone number in paragraph (a)(1) of this section, changes to paragraph (a)(2)(v) of this section and decreases in the quantity indicated pursuant to paragraph (a)(2)(iii) of this section when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous waste specified in the original notification), the primary exporter must provide EPA with a written renotification of the change. The shipment cannot take place until consent of the receiving country to the changes (except for changes to paragraph (a)(2)(viii) of this section and in the ports of entry to and departure from transit countries pursuant to paragraph (a)(2)(iv) of this section) has been obtained and the primary exporter receives an EPA Acknowledgment of Consent reflecting the receiving country's consent to the changes.

(d) Upon request by EPA, a primary exporter shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(e) In conjunction with the Department of State, EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of paragraph (a) of this section. Where a claim of confidentiality is asserted with respect to any notification information required by paragraph (a) of this section, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.

(f) Where the receiving country consents to the receipt of the hazardous waste, EPA will forward an EPA Acknowledgment of Consent to the primary exporter for purposes of Sec. 262.54(h). Where the receiving country objects to receipt of the hazardous waste or withdraws a prior consent, EPA will notify the primary exporter in writing. EPA will also notify the primary exporter of any responses from transit countries.

[51 FR 28682, Aug. 8, 1986, as amended at 56 FR 43705, Sept. 4, 1991; 61 FR 16309, Apr. 12, 1996]

§262.54: Special manifest requirements.

A primary exporter must comply with the manifest requirements of 40 CFR 262.20 through 262.23 except that:

(a) In lieu of the name, site address and EPA ID number of the designated permitted facility, the primary exporter must enter the name and site address of the consignee;

(b) In lieu of the name, site address and EPA ID number of a permitted alternate facility, the primary exporter may enter the name and site address of any alternate consignee.

(c) In the International Shipments block, the primary exporter must check the export box and enter the point of exit (city and State) from the United States.

(d) The following statement must be added to the end of the first sentence of the certification set forth in Item 16 of the Uniform Hazardous Waste Manifest Form: ``and conforms to the terms of the attached EPA Acknowledgment of Consent";

(e) The primary exporter may obtain the manifest from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers).

(f) The primary exporter must require the consignee to confirm in writing the delivery of the hazardous waste to that facility and to describe any significant discrepancies (as defined in 40 CFR 264.72(a)) between the manifest and the shipment. A copy of the manifest signed by such facility may be used to confirm delivery of the hazardous waste.

(g) In lieu of the requirements of Sec. 262.20(d), where a shipment cannot be delivered for any reason to the designated or alternate consignee, the primary exporter must:

(1) Renotify EPA of a change in the conditions of the original notification to allow shipment to a new consignee in accordance with Sec. 262.53(c) and obtain an EPA Acknowledgment of Consent prior to delivery; or

(2) Instruct the transporter to return the waste to the primary exporter in the United States or designate another facility within the United States; and

(3) Instruct the transporter to revise the manifest in accordance with the primary exporter's instructions.

(h) The primary exporter must attach a copy of the EPA Acknowledgment of Consent to the shipment to the manifest which must accompany the hazardous waste shipment. For exports by rail or water (bulk shipment), the primary exporter must provide the transporter with an EPA Acknowledgment of Consent which must accompany the hazardous waste but which need not be attached to the manifest except that for exports by water (bulk shipment) the primary exporter must attach the copy of the EPA Acknowledgment of Consent to the shipping paper.

(i) The primary exporter shall provide the transporter with an additional copy of the manifest for delivery to the U.S. Customs official at the point the hazardous waste leaves the United States in accordance with Sec. 263.20(g)(4).

§262.55: Exception reports.

In lieu of the requirements of Sec. 262.42, a primary exporter must file an exception report with the Administrator if:

(a) He has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within forty-five (45) days from the date it was accepted by the initial transporter;

(b) Within ninety (90) days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received;

(c) The waste is returned to the United States.

§262.56: Annual reports.

(a) Primary exporters of hazardous waste shall file with the Administrator no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year. Such reports shall include the following:

(1) The EPA identification number, name, and mailing and site address of the exporter;

(2) The calendar year covered by the report;

(3) The name and site address of each consignee;

(4) By consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from 40 CFR part 261, subpart C or D), DOT hazard class, the name and US EPA ID number (where applicable) for each transporter used, the total amount of waste shipped and number of shipments pursuant to each notification;

(5) Except for hazardous waste produced by exporters of greater than 100 kg but less than 1000 kg in a calendar month, unless provided pursuant to Sec. 262.41, in even numbered years:

(i) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

(ii) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

(6) A certification signed by the primary exporter which states: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

(b) Annual reports submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting, and Data Division (2222A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Hand-delivered reports should be sent to: Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting, and Data Division (2222A), Environmental Protection Agency, Ariel Rios Bldg., 12th St. and Pennsylvania Ave., NW., Washington, DC.

[51 FR 28682, Aug. 8, 1986, as amended at 56 FR 43705, Sept. 4, 1991; 61 FR 16309, Apr. 12, 1996]

§262.57: Recordkeeping.

(a) For all exports a primary exporter must:
(1) Keep a copy of each notification of intent to export for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(2) Keep a copy of each EPA Acknowledgment of Consent for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;
(3) Keep a copy of each confirmation of delivery of the hazardous waste from the consignee for at least three years from the date the hazardous waste was accepted by the initial transporter; and
(4) Keep a copy of each annual report for a period of at least three years from the due date of the report.
(b) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

§262.58: International agreements.

(a) Any person who exports or imports hazardous waste subject to Federal manifest requirements of Part 262, or subject to the universal waste management standards of 40 CFR Part 273, or subject to State requirements analogous to 40 CFR Part 273, to or from designated member countries of the Organization for Economic Cooperation and Development (OECD) as defined in paragraph (a)(1) of this section for purposes of recovery is subject to Subpart H of this part. The requirements of Subparts E and F do not apply.
(1) For the purposes of this Subpart, the designated OECD countries consist of Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.
(2) For the purposes of this Subpart, Canada and Mexico are considered OECD member countries only for the purpose of transit.
(b) Any person who exports hazardous waste to or imports hazardous waste from: a designated OECD member country for purposes other than recovery (e.g., incineration,

disposal), Mexico (for any purpose), or Canada (for any purpose) remains subject to the requirements of subparts E and F of this part.

[61 FR 16310, Apr. 12, 1996]

Related Resources:

- Applicability of Transporter Requirements to Hazardous Waste Imports and Exports
- Generator as Primary Exporter
- Facts on Hazardous Waste Exports
- Broker as Intermediary Arranging for Export
- Tolling Agreements and Exports
- Export Requirements for Transportation Through Transit Countries
- Notification Requirements for Exported Wastes
- Exportation of Hazardous Waste
- Land Disposal Restrictions Applied to Exported Wastes
- Exporters of Hazardous Waste to Mexico, Responsibilities of
- Hazardous and Municipal Waste Imports and Exports Between the U.S. and Canada

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Imports

Subpart F - Imports of Hazardous Waste

§262.60: Imports of hazardous waste.

(a) Any person who imports hazardous waste from a foreign country into the United States must comply with the requirements of this part and the special requirements of this subpart.

(b) When importing hazardous waste, a person must meet all the requirements of Sec. 262.20(a) for the manifest except that:

(1) In place of the generator's name, address and EPA identification number, the name and address of the foreign generator and the importer's name, address and EPA identification number must be used.

(2) In place of the generator's signature on the certification statement, the U.S. importer or his agent must sign and date the certification and obtain the signature of the initial transporter.

(c) A person who imports hazardous waste may obtain the manifest form from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers).

(d) In the International Shipments block, the importer must check the import box and enter the point of entry (city and State) into the United States.

(e) The importer must provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with Sec. 264.71(a)(3) and Sec. 265.71(a)(3) of this chapter.

[51 FR 28685, Aug. 8, 1986]

Related Resources:

- Hazardous and Municipal Waste Imports and Exports Between the U.S. and Canada
- RCRA Hazardous Waste Import Requirements
- Concerns About Importing of Toxic Waste
- Accumulation Time for Hazardous Waste Importers

Transfrontier Shipments of Hazardous Waste for Recovery within the OECD

Subpart H -Transfrontier Shipments of Hazardous Waste for Recovery within the OECD

Source: 61 FR 16310, Apr. 12, 1996, unless otherwise noted.

§262.80: Applicability.

(a) The requirements of this subpart apply to imports and exports of wastes that are considered hazardous under U.S. national procedures and are destined for recovery operations in the countries listed in Sec. 262.58(a)(1). A waste is considered hazardous under U.S. national procedures if it meets the Federal definition of hazardous waste in 40 CFR 261.3 and it is subject to either the Federal manifesting requirements at 40 CFR Part 262, Subpart B, to the universal waste management standards of 40 CFR Part 273, or to State requirements analogous to 40 CFR Part 273.

(b) Any person (notifier, consignee, or recovery facility operator) who mixes two or more wastes (including hazardous and non-hazardous wastes) or otherwise subjects two or more wastes (including hazardous and non-hazardous wastes) to physical or chemical transformation operations, and thereby creates a new hazardous waste, becomes a generator and assumes all subsequent generator duties under RCRA and any notifier duties, if applicable, under this subpart.

§262.81: Definitions.

The following definitions apply to this subpart.

(a) *Competent authorities* means the regulatory authorities of concerned countries having jurisdiction over transfrontier movements of wastes destined for recovery operations.

(b) *Concerned countries* means the exporting and importing OECD member countries and any OECD member countries of transit.

(c) *Consignee* means the person to whom possession or other form of legal control of the waste is assigned at the time the waste is received in the importing country.

(d) *Country of transit* means any designated OECD country in Sec. 262.58(a)(1) and (a)(2) other than the exporting or importing country across which a transfrontier movement of wastes is planned or takes place.

(e) *Exporting country* means any designated OECD member country in Sec. 262.58(a)(1) from which a transfrontier movement of wastes is planned or has commenced.

(f) *Importing country* means any designated OECD country in Sec. 262.58(a)(1) to which a transfrontier movement of wastes is planned or takes place for the purpose of submitting the wastes to recovery operations therein.

(g) *Notifier* means the person under the jurisdiction of the exporting country who has, or will have at the time the planned transfrontier movement commences, possession or other forms of legal control of the wastes and who proposes their transfrontier movement for the ultimate purpose of submitting them to recovery operations. When the United States (U.S.) is the exporting country, notifier is interpreted to mean a person domiciled in the U.S.

(h) *OECD area* means all land or marine areas under the national jurisdiction of any designated OECD member country in Sec. 262.58. When the regulations refer to shipments to or from an OECD country, this means OECD area.

(i) *Recognized trader* means a person who, with appropriate authorization of concerned countries, acts in the role of principal to purchase and subsequently sell wastes; this person has legal control of such wastes from time of purchase to time of sale; such a person may act to arrange and facilitate transfrontier movements of wastes destined for recovery operations.

(j) *Recovery facility* means an entity which, under applicable domestic law, is operating or is authorized to operate in the importing country to receive wastes and to perform recovery operations on them.

(k) *Recovery operations* means activities leading to resource recovery, recycling, reclamation, direct re-use or alternative uses as listed in Table 2.B of the Annex of OECD Council Decision C(88)90(Final) of 27 May 1988, (available from the Environmental Protection Agency, RCRA Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW., Washington, DC 20460 (Docket # F–94–IEHF-FFFFF) and the Organisation for Economic Co-operation and Development, Environment Direcorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France) which include:

R1 Use as a fuel (other than in direct incineration) or other means to generate energy
R2 Solvent reclamation/regeneration
R3 Recycling/reclamation of organic substances which are not used as solvents
R4 Recycling/reclamation of metals and metal compounds
R5 Recycling/reclamation of other inorganic materials
R6 Regeneration of acids or bases
R7 Recovery of components used for pollution control
R8 Recovery of components from catalysts
R9 Used oil re-refining or other reuses of previously used oil
R10 Land treatment resulting in benefit to agriculture or ecological improvement
R11 Uses of residual materials obtained from any of the operations numbered R1-R10
R12 Exchange of wastes for submission to any of the operations numbered R1-R11

6R13 Accumulation of material intended for any operation in Table 2.B

(l) *Transfrontier movement* means any shipment of wastes destined for recovery operations from an area under the national jurisdiction of one OECD member country to an area under the national jurisdiction of another OECD member country.

[61 FR 16310, Apr. 12, 1996, as amended at 71 FR 40271, July 14, 2006]

§262.82: General conditions.

(a*) Scope.* The level of control for exports and imports of waste is indicated by assignment of the waste to a green, amber, or red list and by U.S. national procedures as defined in Sec. 262.80(a). The green, amber, and red lists are incorporated by reference in Sec. 262.89 (e).

(1) Wastes on the green list are subject to existing controls normally applied to commercial transactions, except as provided below:

(i) Green-list wastes that are considered hazardous under U.S. national procedures are subject to amber-list controls.

(ii) Green-list wastes that are sufficiently contaminated or mixed with amber-list wastes, such that the waste or waste mixture is considered hazardous under U.S. national procedures, are subject to amber-list controls.

(iii) Green-list wastes that are sufficiently contaminated or mixed with other wastes subject to red-list controls such that the waste or waste mixture is considered hazardous under U.S. national procedures must be handled in accordance with the red-list controls.

(2) Wastes on the amber list that are considered hazardous under U.S. national procedures as defined in Sec. 262.80(a) are subject to the amber-list controls of this Subpart.

(i) If amber-list wastes are sufficiently contaminated or mixed with other wastes subject to red-list controls such that the waste or waste mixture is considered hazardous under U.S. national procedures, the wastes must be handled in accordance with the red-list controls.

(ii) [Reserved]

(3) Wastes on the red list that are considered hazardous under U.S. national procedures as defined in Sec. 262.80(a) are subject to the red-list controls of this subpart.

Note to paragraph (a)(3): Some wastes on the amber or red lists are not listed or otherwise identified as hazardous under RCRA (e.g., polychlorinated biphenyls) and therefore are not subject to the amber- or red-list controls of this subpart. Regardless of the status of the waste under RCRA, however, other Federal environmental statutes (e.g., the Toxic Substances Control Act) may restrict certain waste imports or exports. Such restrictions continue to apply without regard to this Subpart.

(4) Wastes not yet assigned to a list are eligible for transfrontier movements, as follows:

(i) If such wastes are considered hazardous under U.S. national procedures as defined in Sec. 262.80(a), these wastes are subject to the red-list controls; or

(ii) If such wastes are not considered hazardous under U.S. national procedures as defined in Sec. 262.80(a), such wastes may move as though they appeared on the green list.

(b) General conditions applicable to transfrontier movements of hazardous waste.

(1) The waste must be destined for recovery operations at a facility that, under applicable domestic law, is operating or is authorized to operate in the importing country;

(2) The transfrontier movement must be in compliance with applicable international transport agreements; and

Note to paragraph (b)(2): These international agreements include, but are not limited to, the Chicago Convention (1944), ADR (1957), ADNR (1970), MARPOL Convention (1973/1978), SOLAS Convention (1974), IMDG Code (1985), COTIF (1985), and RID (1985).

(3) Any transit of waste through a non-OECD member country must be conducted in compliance with all applicable international and national laws and regulations.

(c) Provisions relating to re-export for recovery to a third country. (1) Re-export of wastes subject to the amber-list control system from the U.S., as the importing country, to a third country listed in Sec. 262.58(a)(1) may occur only after a notifier in the U.S. provides notification to and obtains consent of the competent authorities in the third country, the original exporting country, and new transit countries. The notification must comply with the notice and consent procedures in Sec. 262.83 for all concerned countries and the original exporting country. The competent authorities of the original exporting country as well as the competent authorities of all other concerned countries have 30 days to object to the proposed movement.

(i) The 30-day period begins once the competent authorities of both the initial exporting country and new importing country issue Acknowledgements of Receipt of the notification.

(ii) The transfrontier movement may commence if no objection has been lodged after the 30-day period has passed or immediately after written consent is received from all relevant OECD importing and transit countries.

(2) Re-export of waste subject to the red-list control system from the original importing country to a third country listed in Sec. 262.58(a)(1) may occur only following notification of the competent authorities of the third country, the original exporting country, and new transit countries by a notifier in the original importing country in accordance with Sec. 262.83. The transfrontier movement may not proceed until receipt by the original importing country of written consent from the competent authorities of the third country, the original exporting country, and new transit countries.

(3) In the case of re-export of amber or red-list wastes to a country other than those in Sec. 262.58(a)(1), notification to and consent of the competent authorities of the original OECD member country of export and any OECD member countries of transit is required as specified in paragraphs (c)(1) and (c)(2) of this section in addition to compliance with all international agreements and arrangements to which the first importing OECD member country is a party and all applicable regulatory requirements for exports from the first importing country.

§262.83: Notification and consent.

(a*) Applicability*. Consent must be obtained from the competent authorities of the relevant OECD importing and transit countries prior to exporting hazardous waste destined for recovery operations subject to this Subpart. Hazardous wastes subject to amber-list controls are subject to the requirements of paragraph (b) of this section; hazardous wastes subject to red-list controls are subject to the requirements of paragraph (c) of this section; and wastes not identified on any list are subject to the requirements of paragraph (d) of this section.

(b*) Amber-list wastes.* The export from the U.S. of hazardous wastes as described in Sec. 262.80(a) that appear on the amber list is prohibited unless the notification and consent requirements of paragraph (b)(1) or paragraph (b)(2) of this section are met.

(1) Transactions requiring specific consent:

(i) *Notification.* At least 45 days prior to commencement of the transfrontier movement, the notifier must provide written notification in English of the proposed transfrontier movement to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, with the words “Attention: OECD Export Notification” prominently displayed on the envelope. This notification must include all of the information identified in paragraph (e) of this section. In cases where wastes having similar physical and chemical characteristics, the same United Nations classification, and the same RCRA waste codes are to be sent periodically to the same recovery facility by the same notifier, the notifier may submit one notification of intent to export these wastes in multiple shipments during a period of up to one year.

(ii) *Tacit consent*. If no objection has been lodged by any concerned country (i.e., exporting, importing, or transit countries) to a notification provided pursuant to paragraph (b)(1)(i) of this section within 30 days after the date of issuance of the Acknowledgment of Receipt of notification by the competent authority of the importing country, the transfrontier movement may commence. Tacit consent expires one calendar year after the close of the 30 day period; renotification and renewal of all consents is required for exports after that date.

(iii) *Written consent.* If the competent authorities of all the relevant OECD importing and transit countries provide written consent in a period less than 30 days, the transfrontier movement may commence immediately after all necessary consents are received. Written consent expires for each relevant OECD importing and transit country one calendar year after the date of that country's consent unless otherwise specified; renotification and renewal of each expired consent is required for exports after that date.

(2) Shipments to facilities pre-approved by the competent authorities of the importing countries to accept specific wastes for recovery:

(i) The notifier must provide EPA the information identified in paragraph (e) of this section in English, at least 10 days in advance of commencing shipment to a pre-approved facility. The notification should indicate that the recovery facility is pre-

approved, and may apply to a single specific shipment or to multiple shipments as described in paragraph (b)(1)(i) of this section. This information must be sent to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, with the words "Attention: OECD Export Notification—Pre-approved Facility" prominently displayed on the envelope.

(ii) Shipments may commence after the notification required in paragraph (b)(1)(i) of this section has been received by the competent authorities of all concerned countries, unless the notifier has received information indicating that the competent authorities of one or more concerned countries objects to the shipment.

(c*) Red-list wastes.* The export from the U.S. of hazardous wastes as described in Sec. 262.80(a) that appear on the red list is prohibited unless notice is given pursuant to paragraph (b)(1)(i) of this section and the notifier receives written consent from the importing country and any transit countries prior to commencement of the transfrontier movement.

(d) *Unlisted wastes.* Wastes not assigned to the green, amber, or red list that are considered hazardous under U.S. national procedures as defined in Sec. 262.80(a) are subject to the notification and consent requirements established for red-list wastes in accordance with paragraph (c) of this section. Unlisted wastes that are not considered hazardous under U.S. national procedures as defined in Sec. 262.80(a) are not subject to amber or red controls when exported or imported.

(e) *Notification information*. Notifications submitted under this section must include:

(1) Serial number or other accepted identifier of the notification form;

(2) Notifier name and EPA identification number (if applicable), address, and telephone and telefax numbers;

(3) Importing recovery facility name, address, telephone and telefax numbers, and technologies employed;

(4) Consignee name (if not the owner or operator of the recovery facility) address, and telephone and telefax numbers; whether the consignee will engage in waste exchange or storage prior to delivering the waste to the final recovery facility and identification of recovery operations to be employed at the final recovery facility;

(5) Intended transporters and/or their agents;

(6) Country of export and relevant competent authority, and point of departure;

(7) Countries of transit and relevant competent authorities and points of entry and departure;

(8) Country of import and relevant competent authority, and point of entry;

(9) Statement of whether the notification is a single notification or a general notification. If general, include period of validity requested;

(10) Date foreseen for commencement of transfrontier movement;

(11) Designation of waste type(s) from the appropriate list (amber or red and waste list code), descriptions of each waste type, estimated total quantity of each, RCRA waste code, and United Nations number for each waste type; and

(12) Certification/Declaration signed by the notifier that states:

I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, and that any applicable insurance or other financial guarantees are or shall be in force covering the transfrontier movement.

Name: _____
Signature: _____
Date: _____

Note to paragraph (e)(12): The U.S. does not currently require financial assurance; however, U.S. exporters may be asked by other governments to provide and certify to such assurance as a condition of obtaining consent to a proposed movement.

[61 FR 16310, Apr. 12, 1996, as amended at 71 FR 40271, July 14, 2006]

§262.84: Tracking document.

(a) All U.S. parties subject to the contract provisions of Sec. 262.85 must ensure that a tracking document meeting the conditions of Sec. 262.84(b) accompanies each transfrontier shipment of wastes subject to amber-list or red-list controls from the initiation of the shipment until it reaches the final recovery facility, including cases in which the waste is stored and/or exchanged by the consignee prior to shipment to the final recovery facility, except as provided in Sec. Sec. 262.84(a)(1) and (2).

(1) For shipments of hazardous waste within the U.S. solely by water (bulk shipments only) the generator must forward the tracking document with the manifest to the last water (bulk shipment) transporter to handle the waste in the U.S. if exported by water, (in accordance with the manifest routing procedures at Sec. 262.23(c)).

(2) For rail shipments of hazardous waste within the U.S. which originate at the site of generation, the generator must forward the tracking document with the manifest (in accordance with the routing procedures for the manifest in Sec. 262.23(d)) to the next non-rail transporter, if any, or the last rail transporter to handle the waste in the U.S. if exported by rail.

(b) The tracking document must include all information required under Sec. 262.83 (for notification), and the following:

(1) Date shipment commenced.

(2) Name (if not notifier), address, and telephone and telefax numbers of primary exporter.

(3) Company name and EPA ID number of all transporters.

(4) Identification (license, registered name or registration number) of means of transport, including types of packaging.

(5) Any special precautions to be taken by transporters.

(6) Certification/declaration signed by notifier that no objection to the shipment has been lodged as follows:

I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have

been entered into, that any applicable insurance or other financial guarantees are or shall be in force covering the transfrontier movement, and that:

1. All necessary consents have been received; OR
2. The shipment is directed at a recovery facility within the OECD area and no objection has been received from any of the concerned countries within the 30 day tacit consent period; OR
3. The shipment is directed at a recovery facility pre-authorized for that type of waste within the OECD area; such an authorization has not been revoked, and no objection has been received from any of the concerned countries.

(delete sentences that are not applicable)

Name: _____
Signature: _____
Date: _____

(7) Appropriate signatures for each custody transfer (e.g. transporter, consignee, and owner or operator of the recovery facility).

(c) Notifiers also must comply with the special manifest requirements of 40 CFR 262.54(a), (b), (c), (e), and (i) and consignees must comply with the import requirements of 40 CFR part 262, subpart F.

(d) Each U.S. person that has physical custody of the waste from the time the movement commences until it arrives at the recovery facility must sign the tracking document (e.g. transporter, consignee, and owner or operator of the recovery facility).

(e) Within three working days of the receipt of imports subject to this Subpart, the owner or operator of the U.S. recovery facility must send signed copies of the tracking document to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, and to the competent authorities of the exporting and transit countries.

[61 FR 16310, Apr. 12, 1996, as amended at 71 FR 40271, July 14, 2006]

§262.85: Contracts.

(a) Transfrontier movements of hazardous wastes subject to amber or red control procedures are prohibited unless they occur under the terms of a valid written contract, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). Such contracts or equivalent arrangements must be executed by the notifier and the owner or operator of the recovery facility, and must specify responsibilities for each. Contracts or equivalent arrangements are valid for the purposes of this section only if persons assuming obligations under the contracts or equivalent arrangements have appropriate legal status to conduct the operations specified in the contract or equivalent arrangement.

(b) Contracts or equivalent arrangements must specify the name and EPA ID number, where available, of:

(1) The generator of each type of waste;

(2) Each person who will have physical custody of the wastes;

(3) Each person who will have legal control of the wastes; and

(4) The recovery facility.

(c) Contracts or equivalent arrangements must specify which party to the contract will assume responsibility for alternate management of the wastes if its disposition cannot be carried out as described in the notification of intent to export. In such cases, contracts must specify that:

(1) The person having actual possession or physical control over the wastes will immediately inform the notifier and the competent authorities of the exporting and importing countries and, if the wastes are located in a country of transit, the competent authorities of that country; and

(2) The person specified in the contract will assume responsibility for the adequate management of the wastes in compliance with applicable laws and regulations including, if necessary, arranging their return to the original country of export.

(d) Contracts must specify that the consignee will provide the notification required in Sec. 262.82(c) prior to re-export of controlled wastes to a third country.

(e) Contracts or equivalent arrangements must include provisions for financial guarantees, if required by the competent authorities of any concerned country, in accordance with applicable national or international law requirements.

Note to paragraph (e): Financial guarantees so required are intended to provide for alternate recycling, disposal or other means of sound management of the wastes in cases where arrangements for the shipment and the recovery operations cannot be carried out as foreseen. The U.S. does not require such financial guarantees at this time; however, some OECD countries do. It is the responsibility of the notifier to ascertain and comply with such requirements; in some cases, transporters or consignees may refuse to enter into the necessary contracts absent specific references or certifications to financial guarantees.

(f) Contracts or equivalent arrangements must contain provisions requiring each contracting party to comply with all applicable requirements of this subpart.

(g) Upon request by EPA, U.S. notifiers, consignees, or recovery facilities must submit to EPA copies of contracts, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). Information contained in the contracts or equivalent arrangements for which a claim of confidentiality is asserted accordance with 40 CFR 2.203(b) will be treated as confidential and will be disclosed by EPA only as provided in 40 CFR 260.2.

Note to paragraph (g): Although the U.S. does not require routine submission of contracts at this time, OECD Council Decision C(92)39/FINAL allows members to impose such requirements. When other OECD countries require submission of partial or complete copies of the contract as a condition to granting consent to proposed movements, EPA will request the required information; absent submission of such information, some OECD countries may deny consent for the proposed movement.

§262.86: Provisions relating to recognized traders.

(a) A recognized trader who takes physical custody of a waste and conducts recovery operations (including storage prior to recovery) is acting as the owner or operator of a recovery facility and must be so authorized in accordance with all applicable Federal laws.

(b) A recognized trader acting as a notifier or consignee for transfrontier shipments of waste must comply with all the requirements of this Subpart associated with being a notifier or consignee.

§262.87: Reporting and recordkeeping.

(a) *Annual reports.* For all waste movements subject to this Subpart, persons (e.g., notifiers, recognized traders) who meet the definition of primary exporter in §262.51 shall file an annual report with the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, no later than March 1 of each year summarizing the types, quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year. (If the primary exporter is required to file an annual report for waste exports that are not covered under this Subpart, he may include all export information in one report provided the following information on exports of waste destined for recovery within the designated OECD member countries is contained in a separate section). Such reports shall include the following:

(1) The EPA identification number, name, and mailing and site address of the notifier filing the report;

(2) The calendar year covered by the report;

(3) The name and site address of each final recovery facility;

(4) By final recovery facility, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from 40 CFR part 261, subpart C or D), designation of waste type(s) from OECD waste list and applicable waste code from the OECD lists, DOT hazard class, the name and U.S. EPA identification number (where applicable) for each transporter used, the total amount of hazardous waste shipped pursuant to this Subpart, and number of shipments pursuant to each notification;

(5) In even numbered years, for each hazardous waste exported, except for hazardous waste produced by exporters of greater than 100 kg but less than 1000 kg in a calendar month, and except for hazardous waste for which information was already provided pursuant to Sec. 262.41:

(i) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

(ii) A description of the changes in volume and toxicity of the waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984; and

(6) A certification signed by the person acting as primary exporter that states:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

(b) *Exception reports.* Any person who meets the definition of primary exporter in Sec. 262.51 must file an exception report in lieu of the requirements of Sec. 262.42 with the Administrator if any of the following occurs:

(1) He has not received a copy of the tracking documentation signed by the transporter stating point of departure of the waste from the United States, within forty-five (45) days from the date it was accepted by the initial transporter;

(2) Within ninety (90) days from the date the waste was accepted by the initial transporter, the notifier has not received written confirmation from the recovery facility that the hazardous waste was received;

(3) The waste is returned to the United States.

(c) *Recordkeeping.* (1) Persons who meet the definition of primary exporter in Sec. 262.51 shall keep the following records: Sec. 262.89

(i) A copy of each notification of intent to export and all written consents obtained from the competent authorities of concerned countries for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(ii) A copy of each annual report for a period of at least three years from the due date of the report; and

(iii) A copy of any exception reports and a copy of each confirmation of delivery (i.e., tracking documentation) sent by the recovery facility to the notifier for at least three years from the date the hazardous waste was accepted by the initial transporter or received by the recovery facility, whichever is applicable.

(2) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

[61 FR 16310, Apr. 12, 1996, as amended at 71 FR 40272, July 14, 2006]

§262.88: Pre-approval for U.S. Recovery Facilities (Reserved)

§262.89: OECD Waste Lists.

(a) General. For the purposes of this Subpart, a waste is considered hazardous under U.S. national procedures, and hence subject to this Subpart, if the waste:

(1) Meets the Federal definition of hazardous waste in 40 CFR 261.3; and

(2) Is subject to either the Federal RCRA manifesting requirements at 40 CFR part 262, subpart B, to the universal waste management standards of 40 CFR part 273, or to State requirements analogous to 40 CFR part 273.

(b) If a waste is hazardous under paragraph (a) of this section and it appears on the amber or red list, it is subject to amber- or red-list requirements respectively;

(c) If a waste is hazardous under paragraph (a) of this section and it does not appear on either amber or red lists, it is subject to red-list requirements.

(d) The appropriate control procedures for hazardous wastes and hazardous waste mixtures are addressed in Sec. 262.82.

(e) The OECD Green List of Wastes (revised May 1994), Amber List of Wastes and Red List of Wastes (both revised May 1993) as set forth in Appendix 3, Appendix 4 and Appendix 5, respectively, to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 on July 11, 1996. These materials are incorporated as they exist on the date of the approval and a notice of any change in these materials will be published in the Federal Register. The materials are available for inspection at: the U.S. Environmental Protection Agency, RCRA Information Center (RIC), 1235 Jefferson-Davis Highway, first floor, Arlington, VA 22203 (Docket F-94-IEHF-FFFFF) or at the National Archives and Records Administration (NARA), and may be obtained from the Organisation for Economic Co-operation and Development, Environment Direcorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France. For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal--register/code--of--federal--regulations/ibr--locations.html.

[61 FR 16310, Apr. 12, 1996, as amended at 69 FR 18803, Apr. 9, 2004]

Related Resources:

- Frequently Asked Questions on Imports and Exports of Hazardous Waste Between Members of the Organization for Economic Cooperation and Development (OECD)
- Frequently Asked Questions on the Basel Convention

Farmers

Subpart G: Farmers

§262.70: Farmers.

A farmer disposing of waste pesticides from his own use which are hazardous wastes is not required to comply with the standards in this part or other standards in 40 CFR parts 264, 265, 268, or 270 for those wastes provided he triple rinses each emptied pesticide container in accordance with Sec. 261.7(b)(3) and disposes of the pesticide residues on his own farm in a manner consistent with the disposal instructions on the pesticide label.

[53 FR 27165, July 19, 1988]

Related Resources:

- Scope of Farmer Exemption at 40 CFR §262.10(D) and 262.51

Accumulation Requirements for Storage Tanks: Drip Pads

Subpart W—Drip Pads

SOURCE: 55 FR 50486, Dec. 6, 1990, unless otherwise noted.

§ 265.440: Applicability.

(a) The requirements of this subpart apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water run-off to an associated collection system. Existing drip pads are those constructed before December 6, 1990 and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads. The requirement at § 265.443(b)(3) to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992 except for those constructed after December 24, 1992 for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 24, 1992.
(b) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither run-off nor runon is generated is not subject to regulation under § 265.443(e) or § 265.443(f), as appropriate.
(c) The requirements of this subpart are not applicable to the management of infrequent and incidental drippage in storage yards provided that:
(1) The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage. At a minimum, the contingency plan must describe how the facility will do the following:
(i) Clean up the drippage;
(ii) Document the cleanup of the drippage;
(iii) Retain documents regarding cleanup for three years; and
(iv) Manage the contaminated media in a manner consistent with Federal regulations.

[55 FR 50486, Dec. 6, 1990, as amended by 56 FR 30198, July 1, 1991; 57 FR 61503, Dec. 24, 1992]

§ 265.441: Assessment of existing drip pad integrity.

(a) For each existing drip pad as defined in §265.440, the owner or operator must evaluate the drip pad and determine that it meets all of the requirements of this subpart, except the requirements for liners and leak detection systems of §265.443(b). No later than the effective date of this rule, the owner or operator must obtain and keep on file at

the facility a written assessment of the drip pad, reviewed and certified by a qualified Professional Engineer that attests to the results of the evaluation. The assessment must be reviewed, updated, and re-certified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all the standards of §265.443 are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of §265.443, except the standards for liners and leak detection systems, specified in §265.443(b).

(b) The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of §265.443(b), and submit the plan to the Regional Administrator no later than 2 years before the date that all repairs, upgrades, and modifications are complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of §265.443. The plan must be reviewed and certified by a qualified Professional Engineer.

(c) Upon completion of all repairs and modifications, the owner or operator must submit to the Regional Administrator or State Director, the as-built drawings for the drip pad together with a certification by a qualified Professional Engineer attesting that the drip pad conforms to the drawings.

(d) If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of § 265.443(m) of this subpart or close the drip pad in accordance with § 265.445 of this subpart.

[55 FR 50486, Dec. 6, 1990, as amended at 57 FR 61504, Dec. 24, 1992; 71 FR 16912, Apr. 4, 2006; 71 FR 40276, July 14, 2006]

§ 265.442: Design and installation of new drip pads.

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with one of the following:
(a) All of the applicable requirements of §§265.443 (except § 265.443(a)(4)), 265.444 and 265.445 of this subpart, or (b) All of the applicable requirements of §§ 265.443 (except § 265.443(b)), 265.444 and 265.445 of this subpart.

[57 FR 61504, Dec. 24, 1992]

§ 265.443: Design and operating requirements.

(a) Drip pads must:
(1) Be constructed of non-earthen materials, excluding wood and non-structurally supported asphalt;
(2) Be sloped to free-drain treated wood drippage, rain and other waters, or solutions of drippage and water or other wastes to the associated collection system;
(3) Have a curb or berm around the perimeter;
(4)(i) Have a hydraulic conductivity of less than or equal to $1x10^{-7}$ centimeters per

second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to $1x10^{-7}$ centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with § 265.442(b) instead of § 265.442(a).

(ii) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by a qualified Professional Engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this section, except for paragraph (b) of this section.

(5) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation, and the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

NOTE: EPA will generally consider applicable standards established by professional organizations generally recognized by industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirement of this paragraph.
(b) If an owner/operator elects to comply with §265.442(a) instead of § 265.442(b), the drip pad must have:
(1) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and prevent releases into the adjacent subsurface soil or ground water or surface water during the active life of the facility. The liner must be:
(i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);
(ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and
(iii) Installed to cover all surrounding earth that could come in contact with the waste or leakage; and
(2) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection

system must be:
(i) Constructed of materials that are:
(A) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and
(B) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad; and
(ii) Designed and operated to function without clogging through the scheduled closure of the drip pad.
(iii) Designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.
(3) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.
(c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad. NOTE: See § 265.443(m) for remedial action required if deterioration or leakage is detected.
(d) The drip pad and associated collection system must be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.
(e) Unless protected by a structure, as described in § 265.440(b) of this subpart, the owner or operator must design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm unless the system has sufficient excess capacity to contain any run-on that might enter the system, or the drip pad is protected by a structure or cover, as described in § 265.440(b) of this subpart.
(f) Unless protected by a structure or cover, as described in § 265.440(b) of this subpart, the owner or operator must design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
(g) The drip pad must be evaluated to determine that it meets the requirements of paragraphs (a) through (f) of this section and the owner or operator must obtain a statement from a qualified Professional Engineer certifying that the drip pad design meets the requirements of this section.
(h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.
(i) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log.
(j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities

by personnel or equipment.
(k) After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with this requirement.
(l) Collection and holding units associated with run-on and run-off control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.
(m) Throughout the active life of the drip pad, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:
(1) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage by the leak detection system), the owner or operator must:

(i) Enter a record of the discovery in the facility operating log;
(ii) Immediately remove the portion of the drip pad affected by the condition from service;
(iii) Determine what steps must be taken to repair the drip pad, remove any leakage from below the drip pad, and establish a schedule for accomplishing the clean up and repairs;
(iv) Within 24 hours after discovery of the condition, notify the Regional Administrator of the condition and, within 10 working days, provide a written notice to the Regional Administrator with a description of the steps that will be taken to repair the drip pad, and clean up any leakage, and the schedule for accomplishing this work.
(2) The Regional Administrator will review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete, and notify the owner or operator of the determination and the underlying rationale in writing.
(3) Upon completing all repairs and clean up, the owner or operator must notify the Regional Administrator in writing and provide a certification, signed by an independent qualified, registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with paragraph (m)(1)(iv) of this section.
(n) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

[55 FR 50486, Dec. 6, 1990, as amended at 56 FR 30198, July 1, 1991; 57 FR 5861, Feb. 18, 1992; 57 FR 61504, Dec. 24, 1992; 71 FR 16912, Apr. 4, 2006; 71 FR 40276, July 14, 2006]

§ 265.444: Inspections.

(a) During construction or installation, liners and cover systems (e.g., membranes, sheets,

or coatings) must be inspected for uniformity, damage and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners must be inspected and certified as meeting the requirements of §265.443 by a qualified Professional Engineer. This certification must be maintained at the facility as part of the facility operating record. After installation, liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.
(b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:
(1) Deterioration, malfunctions or improper operation of run-on and runoff control systems;
(2) The presence of leakage in and proper functioning of leakage detection system.
(3) Deterioration or cracking of the drip pad surface.
NOTE: See § 265.443(m) for remedial action required if deterioration or leakage is detected.

[55 FR 50486, Dec. 6, 1990, as amended at 71 FR 16912, Apr. 4, 2006]

§ 265.445: Closure.

(a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.
(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in paragraph (a) of this section, the owner or operator finds that not all contaminated subsoils can be practically removed or decontaminated, he must close the facility and perform post-closure care in accordance with closure and post-closure care requirements that apply to landfills (§ 265.310). For permitted units, the requirement to have a permit continues throughout the post-closure period.
(c)(1) The owner or operator of an existing drip pad, as defined in § 265.440 of this subpart, that does not comply with the liner requirements of § 265.443(b)(1) must:
(i) Include in the closure plan for the drip pad under § 265.112 both a plan for complying with paragraph (a) of this section and a contingent plan for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure; and
(ii) Prepare a contingent post-closure plan under § 265.118 of this part for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure.
(2) The cost estimates calculated under §§ 265.112 and 265.144 of this part for closure and post-closure care of a drip pad subject to this paragraph must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under paragraph (a) of this section.

Related Resources:

- Options for CCA Wood Treatment Plants Converting to Preservatives That Do

Not Generate Hazardous Waste
- Drip Pad Leakage Collection System Requirements
- Drip Pad Closure Notification and Certification Requirements
- LQG Compliance with Part 265

Accumulation Requirements for Storage Units: Containment Buildings

Subpart DD—Containment Buildings

SOURCE: 57 FR 37268, Aug. 18, 1992, unless otherwise noted.

§ 265.1100: Applicability.

The requirements of this subpart apply to owners or operators who store or treat hazardous waste in units designed and operated under §265.1101 of this subpart. The owner or operator is not subject to the definition of land disposal in RCRA section 3004(k) provided that the unit:
(a) Is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the units, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls;
(b) Has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel and handling equipment within the unit;
(c) If the unit is used to manage liquids, has:
(1) A primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;
(2) A liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and
(3) A secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest possible time, unless the unit has been granted a variance from the secondary containment system requirements under § 265.1101(b)(4);
(d) Has controls as needed to prevent fugitive dust emissions; and
(e) Is designed and operated to ensure containment and prevent the tracking of materials from the unit by personnel or equipment.

[57 FR 37268, Aug. 18, 1992, as amended at 71 FR 16912, Apr. 4, 2006; 71 FR 40276, July 14, 2006]

§ 265.1101: Design and operating standards.

(a) All containment buildings must comply with the following design standards:

(1) The containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, run-on), and to assure containment of managed wastes.
(2) The floor and containment walls of the unit, including the secondary containment system if required under paragraph (b) of this section, must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. EPA will consider standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirements of this paragraph. If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:
(i) They provide an effective barrier against fugitive dust emissions under paragraph (c)(1)(iv); and
(ii) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.
(3) Incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail.
(4) A containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.
(b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include:
(1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g. a geomembrane covered by a concrete wear surface).
(2) A liquid collection and removal system to prevent the accumulation of liquid on the primary barrier of the containment building:
(i) The primary barrier must be sloped to drain liquids to the associated collection system; and (ii) Liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time that protects human health and the environment.
(3) A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.

(i) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum:
(A) Constructed with a bottom slope of 1 percent or more; and
(B) Constructed of a granular drainage material with a hydraulic conductivity of $1x10^{-2}$ cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of $3 x10^{-5}$ m^2/sec or more.
(ii) If treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building.
(iii) The secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. EPA will consider standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirements of this paragraph. If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:
(i) They provide an effective barrier against fugitive dust emissions under paragraph (c)(1)(iv); and
(ii) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.
(3) Incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail.
(4) A containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.
(b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include:
(1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g. a geomembrane covered by a concrete wear surface).
(2) A liquid collection and removal system to prevent the accumulation of liquid on the primary barrier of the containment building:

(i) The primary barrier must be sloped to drain liquids to the associated collection system; and (ii) Liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time that protects human health and the environment.
(3) A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.
(i) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum:
(A) Constructed with a bottom slope of 1 percent or more; and
(B) Constructed of a granular drainage material with a hydraulic conductivity of $1x10^{-2}$ cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of $3x10^{-5}$ m^2/sec or more.
(ii) If treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building.
(iii) The secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building.
(Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of § 265.193(e)(1). In addition, the containment building must meet the requirements of § 265.193 (b) and (c) to be considered an acceptable secondary containment system for a tank.)
(4) For existing units other than 90-day generator units, the Regional Administrator may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of this Subpart. In making this demonstration, the owner or operator must:
(i) Provide written notice to the Regional Administrator of their request by February 18, 1993. This notification must describe the unit and its operating practices with specific reference to the performance of existing containment systems, and specific plans for retrofitting the unit with secondary containment;
(ii) Respond to any comments from the Regional Administrator on these plans within 30 days; and
(iii) Fulfill the terms of the revised plans, if such plans are approved by the Regional Administrator.
(c) Owners or operators of all containment buildings must:
(1) Use controls and practices to ensure containment of the hazardous waste within the unit; and, at a minimum:
(i) Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier;
(ii) Maintain the level of the stored/treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;
(iii) Take measures to prevent the tracking of hazardous waste out of the unit by

personnel or by equipment used in handling the waste. An area must be designated to decontaminate equipment and any rinsate must be collected and properly managed; and
(iv) Take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions. In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator) must be operated and maintained with sound air pollution control practices. This state of no visible emissions must be maintained effectively at all times during normal operating conditions, including when vehicles and personnel are entering and exiting the unit.
(2) Obtain and keep on-site a certification by a qualified Professional Engineer that the containment building design meets the requirements of paragraphs (a), (b), and (c) of this section.
(3) Throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, the owner or operator must repair the condition promptly, in accordance with the following procedures.
(i) Upon detection of a condition that has led to a release of hazardous waste (e.g., upon detection of leakage from the primary barrier) the owner or operator must:
(A) Enter a record of the discovery in the facility operating record;
(B) Immediately remove the portion of the containment building affected by the condition from service;
(C) Determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and
(D) Within 7 days after the discovery of the condition, notify the Regional Administrator of the condition, and within 14 working days, provide a written notice to the Regional Administrator with a description of the steps taken to repair the containment building, and the schedule for accomplishing the work.
(ii) The Regional Administrator will review the information submitted, make a determination regarding whether the containment building must be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing.
(iii) Upon completing all repairs and cleanup the owner or operator must notify the Regional Administrator in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with paragraph (c)(3)(i)(D) of this section.
(4) Inspect and record in the facility's operating record at least once every seven days, except for Performance Track member facilities, that must inspect up to once each month, upon approval of the director, data gathered from monitoring and leak detection equipment as well as the containment building and the area immediately surrounding the containment building to detect signs of releases of hazardous waste. To apply for reduced inspection frequency, the Performance Track member facility must follow the procedures described in §265.15(b)(5).
(d) For a containment building that contains both areas with and without secondary containment, the owner or operator must:
(1) Design and operate each area in accordance with the requirements enumerated in

paragraphs (a) through (c) of this section;
(2) Take measures to prevent the release of liquids or wet materials into areas without secondary containment; and
(3) Maintain in the facility's operating log a written description of the operating procedures used to maintain the integrity of areas without secondary containment.
(e) Notwithstanding any other provision of this subpart, the Regional Administrator may waive requirements for secondary containment for a permitted containment building where the owner or operator demonstrates that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system.

[57 FR 37268, Aug. 18, 1992, as amended at 71 FR 16912, Apr. 4, 2006; 71 FR 40276, July 14, 2006]

§ 265.1102 Closure and post-closure care.

(a) At closure of a containment building, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless §261.3(d) of this chapter applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for containment buildings must meet all of the requirements specified in subparts G and H of this part.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in paragraph (a) of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (§265.310). In addition, for the purposes of closure, post-closure, and financial responsibility, such a containment building is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in subparts G and H of this part.

Related Resources:

- Containment Buildings as Secondary Containment
- Containment Building Certification
- Containment Buildings as Generator Accumulation Units
- LQG Compliance with Part 265

Air Emissions

Subpart AA: Air Emission Standards for Process Vents

§265.1030: Applicability.

Source: 55 FR 25507, June 21, 1990, unless otherwise noted.

(a) The regulations in this subpart apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in Sec. 265.1).
(b) Except for Sec. Sec. 265.1034, paragraphs (d) and (e), this subpart applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in one of the following:
(1) A unit that is subject to the permitting requirements of 40 CFR part 270, or
(2) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a hazardous waste recycling unit that is not a 90-day tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of 40 CFR part 270, or
(3) A unit that is exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a ``90-day" tank or container) and is not a recycling unit under the requirements of 40 CFR 261.6.
Note: The requirements of Sec. Sec. 265.1032 through 265.1036 apply to process vents on hazardous waste recycling units previously exempt under paragraph 261.6(c)(1). Other exemptions under Sec. Sec. 261.4, and 265.1(c) are not affected by these requirements.]
(c) The requirements of this subpart do not apply to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, Elkton, Virginia, provided that facility is operated in compliance with the requirements contained in a Clean Air Act permit issued pursuant to 40 CFR 52.2454. The requirements of this subpart shall apply to the facility upon termination of the Clean Air Act permit issued pursuant to 40 CFR 52.2454.
(d) The requirements of this subpart do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to this subpart are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with, or made readily available with, the facility operating record.
[55 FR 25507, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991; 61 FR 59968, Nov. 25, 1996; 62 FR 52642, Oct. 8, 1997; 62 FR 64661, Dec. 8, 1997]

§265.1031: Definitions.

As used in this subpart, all terms shall have the meaning given them in Sec. 264.1031, the Act, and parts 260-266.

§265.1032: Standards: Process vents.

(a) The owner or operator of a facility with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction or air or steam stripping operations managing hazardous wastes with organic concentrations at least 10 ppmw shall either:
(1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr), or
(2) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.
(b) If the owner or operator installs a closed-vent system and control device to comply with the provisions of paragraph (a) of this section, the closed-vent system and control device must meet the requirements of Sec. 265.1033.
(c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests must conform with the requirements of Sec. 265.1034(c).
(d) When an owner or operator and the Regional Administrator do not agree on determinations of vent emissions and/or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the test methods in Sec. 265.1034(c) shall be used to resolve the disagreement.

§265.1033: Standards: Closed-vent systems and control devices.

(a)(1) Owners or operators of closed-vent systems and control devices used to comply with provisions of this part shall comply with the provisions of this section.
(2)(i) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the requirements of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.
(ii) Any unit that begins operation after December 21, 1990, and is subject to the requirements of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.
(iii) The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any

testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.
(iv) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997, due to an action other than those described in paragraph (a)(2)(iii) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).
(b) A control device involving vapor recovery (e.g., a condenser or adsorber) shall be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of Sec.265.1032(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.
(c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 [deg]C. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame combustion zone of the boiler or process heater.
(d)(1) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (e)(1) of this section, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
(2) A flare shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f)(2)(iii) of this section.
(3) A flare shall be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater, if the flare is steam-assisted or air-assisted; or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (e)(2) of this section.
(4)(i) A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, of less than 18.3 m/s (60 ft/s), except as provided in paragraphs (d)(4) (ii) and (iii) of this section.
(ii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
(iii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, less than the velocity, Vmax, as determined by the method specified in paragraph (e)(4) of this section, and less than 122 m/s (400 ft/s) is allowed.
(5) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in paragraph (e)(5) of this section.

(6) A flare used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.
(e)(1) Reference Method 22 in 40 CFR part 60 shall be used to determine the compliance of a flare with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
(2) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K\left[\sum_{i=1}^{n} C_i H_i\right]$$

where:
H_T=Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol is 20 °C;
K=Constant, 1.74×10¥7 (1/ppm) (g mol/scm) (MJ/kcal) where standard temperature for (g mol/scm) is 20 °C;
C_i=Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR part 60 and measured for hydrogen and carbon monoxide by ASTM D 1946–82 (incorporated by reference as specified in § 260.11); and
H_i=Net heat of combustion of sample component i, kcal/g mol at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D 2382–83 (incorporated by reference as specified in § 260.11) if published values are not available or cannot be calculated.

(3) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A,2C, or 2D in 40 CFR part 60 as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.
(4) The maximum allowed velocity in m/s, Vmax, for a flare complying with paragraph (d)(4)(iii) of this section shall be determined by the following equation:

$$\mathrm{Log}_{10}(V_{max})=(H_T+28.8)/31.7$$

where:

H_T=The net heating value as determined in paragraph (e)(2) of this section.
28.8=Constant,
31.7=Constant.

(5) The maximum allowed velocity in m/s, Vmax, for an air-assisted flare shall be determined by the following equation:

$$V_{max} = 8.706 + 0.7084\ (H_T)$$

where:

8.706 = Constant.
0.7084 = Constant.
H_T = The net heating value as determined in paragraph (e)(2) of this section.

(f) The owner or operator shall monitor and inspect each control device required to comply with this section to ensure proper operation and maintenance of the control device by implementing the following requirements:
(1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet, but before being combined with other vent streams.
(2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:
(i) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of <±1 percent of the temperature being monitored in ° C or <±.5 ° C, whichever is greater. The temperature sensor shall be installed at a location in the combustion chamber downstream of the combustion zone.
(ii) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations and have an accuracy of <±1 percent of the temperature being monitored in ° C or <±0.5 ° C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.
(iii) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.
(iv) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of 1 percent of the temperature being monitored in ° C or <±0.5 °C, whichever is greater. The temperature sensor shall be installed at a location in the furnace downstream of the combustion zone.
(v) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.
(vi) For a condenser, either:
(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or
(B) A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of <±1 percent of the temperature being monitored in degrees Celsius (° C) or <±.5 ° C, whichever is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser exit (i.e., product side).
(vii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly in the control device, either:

(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or
(B) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.
(3) Inspect the readings from each monitoring device required by paragraphs (f) (1) and (2) of this section at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this section.
(g) An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device, shall replace the existing carbon in the control device with fresh carbon at a regular, pre determined time interval that is no longer than the carbon service life established as a requirement of Sec. 265.1035(b)(4)(iii)(F).
(h) An owner or operator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:
(1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of Sec. 265.1035(b)(4)(iii)(G), whichever is longer.
(2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of Sec. 265.1035(b)(4)(iii)(G).
(i) An owner or operator of an affected facility seeking to comply with the provisions of this part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.
(j) A closed-vent system shall meet either of the following design requirements:
(1) A closed-vent system shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in Sec. 265.1034(b) of this subpart, and by visual inspections; or
(2) A closed-vent system shall be designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.
(k) The owner or operator shall monitor and inspect each closed-vent system required to comply with this section to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

(1) Each closed-vent system that is used to comply with paragraph (j)(1) of this section shall be inspected and monitored in accordance with the following requirements:
(i) An initial leak detection monitoring of the closed-vent system shall be conducted by the owner or operator on or before the date that the system becomes subject to this section. The owner or operator shall monitor the closed-vent system components and connections using the procedures specified in Sec. 265.1034(b) of this subpart to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.
(ii) After initial leak detection monitoring required in paragraph (k)(1)(i) of this section, the owner or operator shall inspect and monitor the closed-vent system as follows:
(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The owner or operator shall monitor a component or connection using the procedures specified in Sec. 265.1034(b) of this subpart to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).
(B) Closed-vent system components or connections other than those specified in paragraph (k)(1)(ii)(A) of this section shall be monitored annually and at other times as requested by the Regional Administrator, except as provided for in paragraph (n) of this section, using the procedures specified in Sec. 265.1034(b) of this subpart to demonstrate that the components or connections operate with no detectable emissions.
(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect or leak in accordance with the requirements of paragraph (k)(3) of this section.
(iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in Sec. 265.1035 of this subpart.
(2) Each closed-vent system that is used to comply with paragraph (j)(2) of this section shall be inspected and monitored in accordance with the following requirements:
(i) The closed-vent system shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.
(ii) The owner or operator shall perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year.
(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k)(3) of this section.
(iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in Sec. 265.1035 of this subpart.
(3) The owner or operator shall repair all detected defects as follows:
(i) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in paragraph (k)(3)(iii) of this section.
(ii) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected.

(iii) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.
(iv) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in Sec. 265.1035 of this subpart.
(l) Closed-vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
(m) The owner or operator using a carbon adsorption system to control air pollutant emissions shall document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon:
(1) Regenerated or reactivated in a thermal treatment unit that meets one of the following:
(i) The owner or operator of the unit has been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 264 subpart X; or
(ii) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of subparts AA and CC of either this part or of 40 CFR part 264; or
(iii) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR part 61 or 40 CFR part 63.
(2) Incinerated in a hazardous waste incinerator for which the owner or operator either:
(i) Has been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 264, subpart O; or
(ii) Has designed and operates the incinerator in accordance with the interim status requirements of subpart O of this part.
(3) Burned in a boiler or industrial furnace for which the owner or operator either:
(i) Has been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 266, subpart H; or
(ii) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of 40 CFR part 266, subpart H.
(n) Any components of a closed-vent system that are designated, as described in Sec. 265.1035(c)(9) of this subpart, as unsafe to monitor are exempt from the requirements of paragraph (k)(1)(ii)(B) of this section if:
(1) The owner or operator of the closed-vent system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (k)(1)(ii)(B) of this section; and
(2) The owner or operator of the closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in paragraph (k)(1)(ii)(B) of this section as frequently as practicable during safe-to-monitor times.

[59 FR 62935, Dec. 6, 1994, as amended at 61 FR 4913, Feb. 9, 1996; 61 FR 59969, Nov. 25, 1996; 62 FR 64661, Dec. 8, 1997]

Sec. 265.1034: Test methods and procedures.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.
(b) When a closed-vent system is tested for compliance with no detectable emissions, as required in Sec. 265.1033(k) of this subpart, the test shall comply with the following requirements:
(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.
(2) The detection instrument shall meet the performance criteria of Reference Method 21.
(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.
(4) Calibration gases shall be:
(i) Zero air (less than 10 ppm of hydrocarbon in air).
(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
(5) The background level shall be determined as set forth in Reference Method 21.
(6) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.
(7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
(c) Performance tests to determine compliance with Sec. 265.1032(a) and with the total organic compound concentration limit of Sec.265.1033(c) shall comply with the following:
(1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:
(i) Method 2 in 40 CFR part 60 for velocity and volumetric flow rate.
(ii) Method 18 or Method 25A in 40 CFR part 60, appendix A, for organic content. If Method 25A is used, the organic HAP used as the calibration gas must be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.
(iii) Each performance test shall consist of three separate runs; each run conducted for at least 1 hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.
(iv) Total organic mass flow rates shall be determined by the following equation:
(A) For sources utilizing Method 18.

$$E_h = Q_{sd}\left[\sum_{i=1}^{n} C_i MW_i\right][0.0416][10^{-6}]$$

Where:

E_h = Total organic mass flow rate, kg/h;
Q_{sd} = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;
n = Number of organic compounds in the vent gas;
C_i = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;
MW_i = Molecular weight of organic compound i in the vent gas, kg/kg-mol;
0.0416 = Conversion factor for molar volume, kg-mol/m3 (@ 293 K and 760 mm Hg);
10^{-6} = Conversion from ppm

(v) The annual total organic emission rate shall be determined by the following equation:

$E_A=(E_h)\ (H)$

where:

E_A=Total organic mass emission rate, kg/y;
E_h=Total organic mass flow rate for the process vent, kg/h;
H=Total annual hours of operations for the affected unit, h.

(vi) Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates (E_h, as determined in paragraph (c)(1)(iv) of this section) and by summing the annual total organic mass emission rates (E_A, as determined in paragraph (c)(1)(v) of this section) for all affected process vents at the facility.
(2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.
(3) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
(i) Sampling ports adequate for the test methods specified in paragraph (c)(1) of this section.
(ii) Safe sampling platform(s).
(iii) Safe access to sampling platform(s).
(iv) Utilities for sampling and testing equipment.
(4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Regional Administrator's approval, be determined using the average of the results of the two other runs.

(d) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this subpart, the owner or operator must make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one of the following two methods:
(1) Direct measurement of the organic concentration of the waste using the following procedures:
(i) The owner or operator must take a minimum of four grab samples of waste for each waste stream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.
(ii) For waste generated onsite, the grab samples must be collected at a point before the waste is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated offsite, the grab samples must be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.
(iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060A (incorporated by reference under Sec. 260.11 of this chapter) of ``Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846; or analyzed for its individual organic constituents.
(iv) The arithmetic mean of the results of the analyses of the four samples shall apply for each waste stream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each waste stream managed in the unit.
(2) Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a waste stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.
(e) The determination that distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous wastes with time-weighted annual average total organic concentrations less than 10 ppmw shall be made as follows:
(1) By the effective date that the facility becomes subject to the provisions of this subpart or by the date when the waste is first managed in a waste management unit, whichever is later; and
(2) For continuously generated waste, annually; or

(3) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.
(f) When an owner or operator and the Regional Administrator do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the dispute may be resolved using direct measurement as specified at paragraph (d)(1) of this section.

§265.1035: Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
(2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.
(b) Owners and operators must record the following information in the facility operating record:
(1) For facilities that comply with the provisions of Sec. 265.1033(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be in the facility operating record by the effective date that the facility becomes subject to the provisions of this subpart.
(2) Up-to-date documentation of compliance with the process vent standards in Sec. 265.1032, including:
(i) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan); and
(ii) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action (e.g., managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.
(3) Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan must include:

(i) A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.
(ii) A detailed engineering description of the closed-vent system and control device including:
(A) Manufacturer's name and model number of control device.
(B) Type of control device.
(C) Dimensions of the control device.
(D) Capacity.
(E) Construction materials.
(iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.
(4) Documentation of compliance with Sec. 265.1033 shall include the following information:
(i) A list of all information references and sources used in preparing the documentation.
(ii) Records, including the dates, of each compliance test required by Sec. 265.1033(j).
(iii) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of ``APTI Course 415: Control of Gaseous Emissions'' (incorporated by reference as specified in Sec. 260.11) or other engineering texts acceptable to the Regional Administrator that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with paragraphs (b)(4)(iii)(A) through (b)(4)(iii)(G) of this section may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.
(A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.
(B) For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.
(C) For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.
(D) For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in Sec. 265.1033(d).
(E) For a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design

analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.
(F) For a carbon adsorption system such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.
(G) For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.
(iv) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.
(v) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of Sec. 265.1032(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of Sec. 265.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.
(vi) If performance tests are used to demonstrate compliance, all test results.
(c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of this part shall be recorded and kept up-to-date in the facility operating record. The information shall include:
(1) Description and date of each modification that is made to the closed-vent system or control device design.
(2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Sec. 265.1033(f)(1) and (f)(2).
(3) Monitoring, operating and inspection information required by paragraphs (f) through (k) of Sec. 265.1033 of this subpart.
(4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

(i) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 seconds at a minimum temperature of 760 [deg]C, period when the combustion temperature is below 760 [deg]C.
(ii) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 percent or greater, period when the combustion zone temperature is more than 28 [deg]C below the design average combustion zone temperature established as a requirement of paragraph (b)(4)(iii)(A) of this section.
(iii) For a catalytic vapor incinerator, period when:
(A) Temperature of the vent stream at the catalyst bed inlet is more than 28 [deg]C below the average temperature of the inlet vent stream established as a requirement of paragraph (b)(4)(iii)(B) of this section; or
(B) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of paragraph (b)(4)(iii)(B) of this section.
(iv) For a boiler or process heater, period when:
(A) Flame zone temperature is more than 28 [deg]C below the design average flame zone temperature established as a requirement of paragraph (b)(4)(iii)(C) of this section; or
(B) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of paragraph (b)(4)(iii)(C) of this section.
(v) For a flare, period when the pilot flame is not ignited.
(vi) For a condenser that complies with Sec. 265.1033(f)(2)(vi)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(E) of this section.
(vii) For a condenser that complies with Sec. 265.1033(f)(2)(vi)(B), period when:
(A) Temperature of the exhaust vent stream from the condenser is more than 6 [deg]C above the design average exhaust vent stream temperature established as a requirement of paragraph (b)(4)(iii)(E) of this section; or
(B) Temperature of the coolant fluid exiting the condenser is more than 6 [deg]C above the design average coolant fluid temperature at the condenser outlet established as a requirement of paragraph (b)(4)(iii)(E) of this section.
(viii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Sec. 265.1033(f)(2)(vii)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(F) of this section.
(ix) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Sec. 265.1033(f)(2)(vii)(B), period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of paragraph (b)(4)(iii)(F) of this section.
(5) Explanation for each period recorded under paragraph (c)(4) of this section of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

(6) For carbon adsorption systems operated subject to requirements specified in Sec. 265.1033(g) or Sec. 265.1033(h)(2), date when existing carbon in the control device is replaced with fresh carbon.
(7) For carbon adsorption systems operated subject to requirements specified in Sec. 265.1033(h)(1), a log that records:
(i) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.
(ii) Date when existing carbon in the control device is replaced with fresh carbon.
(8) Date of each control device startup and shutdown.
(9) An owner or operator designating any components of a closed-vent system as unsafe to monitor pursuant to Sec. 265.1033(n) of this subpart shall record in a log that is kept in the facility operating record the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of Sec. 265.1033(n) of this subpart, an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.
(10) When each leak is detected as specified in Sec. 265.1033(k) of this subpart, the following information shall be recorded:
(i) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.
(ii) The date the leak was detected and the date of first attempt to repair the leak.
(iii) The date of successful repair of the leak.
(iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.
(v) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
(A) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
(B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
(d) Records of the monitoring, operating, and inspection information required by paragraphs (c)(3) through (c)(10) of this section shall be maintained by the owner or operator for at least 3 years following the date of each occurrence, measurement, maintenance, corrective action, or record.
(e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device must be recorded in the facility operating record.
(f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in Sec. 265.1032 including supporting documentation as required by Sec. 265.1034(d)(2) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used, shall be recorded in a log that is kept in the facility operating record.

[55 FR 25507, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991;
61 FR 59970, Nov. 25, 1996]

§265.1036-265.1049: [Reserved]

Subpart BB: Air Emission Standards for Equipment Leaks

§265.1050: Applicability.

Source: 55 FR 25512, June 21, 1990, unless otherwise noted.

(a) The regulations in this subpart apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in Sec. 265.1).
(b) Except as provided in Sec. 265.1064(k), this subpart applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following:
(1) A unit that is subject to the permitting requirements of 40 CFR part 270, or
(2) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a hazardous waste recycling unit that is not a 90-day tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of 40 CFR part 270, or
(3) A unit that is exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a ``90-day'' tank or container) and is not a recycling unit under the provisions of 40 CFR 261.6.
(c) Each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.
(d) Equipment that is in vacuum service is excluded from the requirements of Sec. 265.1052 to Sec. 265.1060 if it is identified as required in Sec. 265.1064(g)(5).
(e) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year is excluded from the requirements of Sec. Sec. 265.1052 through 265.1060 of this subpart if it is identified, as required in Sec. 265.1064(g)(6) of this subpart.
(f) The requirements of this subpart do not apply to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, Elkton, Virginia, provided that facility is operated in compliance with the requirements contained in a Clean Air Act permit issued pursuant to 40 CFR 52.2454. The requirements of this subpart shall apply to the facility upon termination of the Clean Air Act permit issued pursuant to 40 CFR 52.2454.
(g) Purged coatings and solvents from surface coating operations subject to the national emission standards for hazardous air pollutants (NESHAP) for the surface coating of automobiles and light-duty trucks at 40 CFR part 63, subpart IIII, are not subject to the requirements of this subpart.

[Note: The requirements of Sec. Sec. 265.1052 through 265.1064 apply to equipment associated with hazardous waste recycling units previously exempt under paragraph

261.6(c)(1). Other exemptions under Sec. Sec. 261.4 and 265.1(c) are not affected by these requirements.]

[55 FR 25512, June 21, 1990, as amended at 61 FR 59970, Nov. 25, 1996; 62 FR 52642, Oct. 8, 1997; 62 FR 64661, Dec. 8, 1997; 69 FR 22661, Apr. 26, 2004]

§265.1051: Definitions.

As used in this subpart, all terms shall have the meaning given them in Sec. 264.1031, the Act, and parts 260-266.

§265.1052: Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in Sec. 265.1063(b), except as provided in paragraphs (d), (e), and (f) of this section.
(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(2) If there are indications of liquids dripping from the pump seal, a leak is detected.
(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 265.1059.
(2) A first attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected.
(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), provided the following requirements are met:
(1) Each dual mechanical seal system must be:
(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure, or
(ii) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of Sec. 265.1060, or
(iii) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere.
(2) The barrier fluid system must not be a hazardous waste with organic concentrations 10 percent or greater by weight.
(3) Each barrier fluid system must be equipped with a sensor that will detect failure of the seal system, the barrier fluid system or both.
(4) Each pump must be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
(5)(i) Each sensor as described in paragraph (d)(3) of this section must be checked daily or be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly.
(ii) The owner or operator must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii) of this section, a leak is detected.
(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 265.1059.
(iii) A first attempt at repair (e.g., relapping the seal) shall be made no later than 5 calendar days after each leak is detected.
(e) Any pump that is designated, as described in Sec. 265.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump meets the following requirements:
(1) Must have no externally actuated shaft penetrating the pump housing.
(2) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Sec. 265.1063(c).
(3) Must be tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.
(f) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Sec. 265.1060, it is exempt from the requirements of paragraphs (a) through (e) of this section.

[55 FR 25512, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991]

§. 265.1053: Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in paragraphs (h) and (i) of this section.
(b) Each compressor seal system as required in paragraph (a) of this section shall be:
(1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure, or
(2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of Sec. 265.1060, or
(3) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to atmosphere.
(c) The barrier fluid must not be a hazardous waste with organic concentrations 10 percent or greater by weight.
(d) Each barrier fluid system as described in paragraphs (a) through (c) of this section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
(e)(1) Each sensor as required in paragraph (d) of this section shall be checked daily or shall be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor must be checked daily.

(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system or both.
(f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.
(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 265.1059.
(2) A first attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected.
(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of Sec. 265.1060, except as provided in paragraph (i) of this section.
(i) Any compressor that is designated, as described in Sec. 265.1064(g)(2), for no detectable emission as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of paragraphs (a) through (h) of this section if the compressor:
(1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Sec. 265.1063(c).
(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.

§265.1054: Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Sec. 265.1063(c).
(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Sec. 265.1059.
(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Sec. 265.1063(c).
(c) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Sec. 265.1060 is exempt from the requirements of paragraphs (a) and (b) of this section.

§265.1055: Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. This system shall collect the sample purge for return to the process

or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured.
(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall:
(1) Return the purged process fluid directly to the process line; or
(2) Collect and recycle the purged process fluid; or
(3) Be designed and operated to capture and transport all the purged process fluid to a waste management unit that complies with the applicable requirements of Sec. 265.1085 through Sec. 265.1087 of this subpart or a control device that complies with the requirements of Sec. 265.1060 of this subpart.
(c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

[61 FR 59971, Nov. 25, 1996]

§265.1056: Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.
(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line.
(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the hazardous waste stream end is closed before the second valve is closed.
(c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of this section at all other times.

§265.1057: Standards: Valves in gas/vapor service or in light liquid service.

(a) Each valve in gas/vapor or light liquid service shall be monitored monthly to detect leaks by the methods specified in Sec. 265.1063(b) and shall comply with paragraphs (b) through (e) of this section, except as provided in paragraphs (f), (g), and (h) of this section, and Sec. Sec. 265.1061 and 265.1062.
(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(c)(1) Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.
(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Sec. 265.1059.
(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:
(1) Tightening of bonnet bolts.
(2) Replacement of bonnet bolts.
(3) Tightening of packing gland nuts.
(4) Injection of lubricant into lubricated packing.
(f) Any valve that is designated, as described in Sec. 265.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this section if the valve:
(1) Has no external actuating mechanism in contact with the hazardous waste stream.
(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in Sec. 265.1063(c).
(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.
(g) Any valve that is designated, as described in Sec. 265.1064(h)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:
(1) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section.
(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
(h) Any valve that is designated, as described in Sec. 265.1064(h)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:
(1) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
(2) The hazardous waste management unit within which the valve is located was in operation before June 21, 1990.
(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

§265.1058: Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors.

(a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in Sec. 265.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.
(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 265.1059.
(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(d) First attempts at repair include, but are not limited to, the best practices described under Sec. 265.1057(e).

(e) Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined) is exempt from the monitoring requirements of paragraph (a) of this section and from the recordkeeping requirements of Sec. 265.1064 of this subpart.

[55 FR 25512, June 21, 1990, as amended at 61 FR 59971, Nov. 25, 1996]

§265.1059: Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a hazardous waste management unit shutdown. In such a case, repair of this equipment shall occur before the end of the next hazardous waste management unit shutdown.
(b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the hazardous waste management unit and that does not continue to contain or contact hazardous waste with organic concentrations at least 10 percent by weight.
(c) Delay of repair for valves will be allowed if:
(1) The owner or operator determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair.
(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Sec. 265.1060.
(d) Delay of repair for pumps will be allowed if:
(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system.
(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
(e) Delay of repair beyond a hazardous waste management unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the hazardous waste management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous waste management unit shutdown will not be allowed unless the next hazardous waste management unit shutdown occurs sooner than 6 months after the first hazardous waste management unit shutdown.

§265.1060: Standards: Closed-vent systems and control devices.

(a) Owners and operators of closed-vent systems and control devices subject to this subpart shall comply with the provisions of Sec. 265.1033 of this part.
(b)(1) The owner or operator of an existing facility who can not install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.
(2) Any units that begin operation after December 21, 1990, and are subject to the provisions of this subpart when operation begins, must comply with the rules

immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.
(3) The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.
(4) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997 due to an action other than those described in paragraph (b)(3) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

[62 FR 64662, Dec. 8, 1997]

§265.1061: Alternative standards for valves in gas/vapor service or in light liquid service: percentage of valves allowed to leak.

(a) An owner or operator subject to the requirements of Sec. 265.1057 may elect to have all valves within a hazardous waste management unit comply with an alternative standard which allows no greater than 2 percent of the valves to leak.
(b) The following requirements shall be met if an owner or operator decides to comply with the alternative standard of allowing 2 percent of valves to leak:
(1) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Regional Administrator.
(2) If a valve leak is detected, it shall be repaired in accordance with Sec. 265.1057 (d) and (e).
(c) Performance tests shall be conducted in the following manner:
(1) All valves subject to the requirements in Sec. 265.1057 within the hazardous waste management unit shall be monitored within 1 week by the methods specified in Sec. 265.1063(b).
(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(3) The leak percentage shall be determined by dividing the number of valves subject to the requirements in Sec. 265.1057 for which leaks are detected by the total number of valves subject to the requirements in Sec. 265.1057 within the hazardous waste management unit.

[55 FR 25512, June 21, 1990, as amended at 71 FR 16912, Apr. 4, 2006]

§265.1062: Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair.

(a)An owner or operator subject to the requirements of Sec. 265.1057 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in paragraphs (b) (2) and (3) of this section.
(b)(1) An owner or operator shall comply with the requirements for valves, as described in Sec. 265.1057, except as described in paragraphs (b)(2) and (b)(3) of this section.
(2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip one of the quarterly leak detection periods (i.e., monitor for leaks once every six months) for the valves subject to the requirements in Sec. 265.1057 of this subpart.
(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip three of the quarterly leak detection periods (i.e., monitor for leaks once every year) for the valves subject to the requirements in Sec. 265.1057 of this subpart.
(4) If the percentage of valves leaking is greater than 2 percent, the owner or operators shall monitor monthly in compliance with the requirements in Sec. 265.1057, but may again elect to use this section after meeting the requirements of Sec. 265.1057(c)(1).

[55 FR 25512, June 21, 1990, as amended at 62 FR 64662, Dec. 8, 1997; 71 FR 16912, Apr. 4, 2006]

§265.1063: Test methods and procedures.

(a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.
(b) Leak detection monitoring, as required in Sec. Sec. 265.1052 through 265.1062, shall comply with the following requirements:
(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.
(2) The detection instrument shall meet the performance criteria of Reference Method 21.
(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.
(4) Calibration gases shall be:
(i) Zero air (less than 10 ppm of hydrocarbon in air).
(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
(5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.
(c) When equipment is tested for compliance with no detectable emissions, as required in Sec. Sec. 265.1052(e), 265.1053(i), 265.1054, and 265.1057(f), the test shall comply with the following requirements:
(1) The requirements of paragraphs (b) (1) through (4) of this section shall apply.
(2) The background level shall be determined, as set forth in Reference Method 21.

(3) The instrument probe shall be traversed around all potential leak in ter faces as close to the interface as possible as described in Reference Method 21.
(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
(d) In accordance with the waste analysis plan required by Sec. 265.13(b), an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:
(1) Methods described in ASTM Methods D 2267-88, E 169-87, E 168-88, E 260-85 (incorporated by reference under Sec. 260.11);
(2) Method 9060A (incorporated by reference under Sec. 260.11 of this chapter) of ``Test Methods for Evaluating Solid Waste," EPA Publication SW-846 or analyzed for its individual organic constituents; or
(3) Application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.
(e) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in paragraph (d)(1) or (d)(2) of this section.
(f) When an owner or operator and the Regional Administrator do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in paragraph (d)(1) or (d)(2) of this section can be used to resolve the dispute.
(g) Samples used in determining the percent organic content shall be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.
(h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D-2879-86 (incorporated by reference under Sec. 260.11).
(i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction shall comply with the procedures of Sec. 265.1034 (c)(1) through (c)(4).

[55 FR 25512, June 21, 1990, as amended at 62 FR 32463, June 13, 1997]

§265.1064: Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
(2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.
(b) Owners and operators must record the following information in the facility operating record:
(1) For each piece of equipment to which subpart BB of part 265 applies:
(i) Equipment identification number and hazardous waste management unit identification.
(ii) Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan).
(iii) Type of equipment (e.g., a pump or pipeline valve).
(iv) Percent-by-weight total organics in the hazardous waste stream at the equipment.
(v) Hazardous waste state at the equipment (e.g., gas/vapor or liquid).
(vi) Method of compliance with the standard (e.g., ``monthly leak detection and repair'' or ``equipped with dual mechanical seals'').
(2) For facilities that comply with the provisions of Sec. 265.1033(a)(2), an implementation schedule as specified in Sec. 265.1033(a)(2).
(3) Where an owner or operator chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan as specified in Sec. 265.1035(b)(3).
(4) Documentation of compliance with Sec. 265.1060, including the detailed design documentation or performance test results specified in Sec. 265.1035(b)(4).
(c) When each leak is detected as specified in Sec. Sec. 265.1052, 265.1053, 265.1057, and 265.1058, the following requirements apply:
(1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with Sec. 265.1058(a), and the date the leak was detected, shall be attached to the leaking equipment.
(2) The identification on equipment, except on a valve, may be removed after it has been repaired.
(3) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in Sec. 265.1057(c) and no leak has been detected during those 2 months.
(d) When each leak is detected as specified in Sec. Sec. 265.1052, 265.1053, 265.1057, and 265.1058, the following information shall be recorded in an inspection log and shall be kept in the facility operating record:
(1) The instrument and operator identification numbers and the equipment identification number.
(2) The date evidence of a potential leak was found in accordance with Sec. 265.1058(a).
(3) The date the leak was detected and the dates of each attempt to repair the leak.
(4) Repair methods applied in each attempt to repair the leak.
(5) ``Above 10,000'' if the maximum instrument reading measured by the methods specified in Sec. 265.1063(b) after each repair attempt is equal to or greater than 10,000 ppm.

(6) ``Repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
(7) Documentation supporting the delay of repair of a valve in compliance with Sec. 265.1059(c).
(8) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown.
(9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
(10) The date of successful repair of the leak.
(e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Sec. 265.1060 shall be recorded and kept up-to-date in the facility operating record as specified in Sec. 265.1035(c). Design documentation is specified in Sec. 265.1035 (c)(1) and (c)(2) and monitoring, operating, and inspection information in Sec. 265.1035 (c)(3)-(c)(8).
(f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device must be recorded in the facility operating record.
(g) The following information pertaining to all equipment subject to the requirements in Sec. Sec. 265.1052 through 265.1060 shall be recorded in a log that is kept in the facility operating record:
(1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart.
(2)(i) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Sec. Sec. 265.1052(e), 265.1053(i), and 265.1057(f).
(ii) The designation of this equipment as subject to the requirements of Sec. Sec. 265.1052(e), 265.1053(i), or 265.1057(f) shall be signed by the owner or operator.
(3) A list of equipment identification numbers for pressure relief devices required to comply with Sec. 265.1054(a).
(4)(i) The dates of each compliance test required in Sec. Sec. 265.1052(e), 265.1053(i), 265.1054, and 265.1057(f).
(ii) The background level measured during each compliance test.
(iii) The maximum instrument reading measured at the equipment during each compliance test.
(5) A list of identification numbers for equipment in vacuum service.
(6) Identification, either by list or location (area or group) of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year.
(h) The following information pertaining to all valves subject to the requirements of Sec. 265.1057 (g) and (h) shall be recorded in a log that is kept in the facility operating record:
(1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

(2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
(i) The following information shall be recorded in the facility operating record for valves complying with Sec. 265.1062:
(1) A schedule of monitoring.
(2) The percent of valves found leaking during each monitoring period.
(j) The following information shall be recorded in a log that is kept in the facility operating record:
(1) Criteria required in Sec. Sec. 265.1052 (d)(5)(ii) and 265.1053(e)(2) and an explanation of the criteria.
(2) Any changes to these criteria and the reasons for the changes.
(k) The following information shall be recorded in a log that is kept in the facility operating record for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:
(1) An analysis determining the design capacity of the hazardous waste management unit.
(2) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in Sec. Sec. 265.1052 through 265.1060 and an analysis determining whether these hazardous wastes are heavy liquids.
(3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in Sec. Sec. 265.1052 through 265.1060. The record shall include supporting documentation as required by Sec. 265.1063(d)(3) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used. If the owner or operator takes any action (e.g., changing the process that produced the waste) that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be subject to the requirements in Sec. Sec. 265.1052 through 265.1060, then a new determination is required.
(l) Records of the equipment leak information required by paragraph (d) of this section and the operating information required by paragraph (e) of this section need be kept only 3 years.
(m) The owner or operator of any facility with equipment that is subject to this subpart and to leak detection, monitoring, and repair requirements under regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with this subpart either by documentation pursuant to Sec. 265.1064 of this subpart, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulation at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available with the facility operating record.

[55 FR 25512, June 21, 1990, as amended at 56 FR 19290, Apr. 26, 1991;
61 FR 59971, Nov. 25, 1996; 62 FR 64662, Dec. 8, 1997]

Subpart CC: Air Emission Standards for Tanks, Surface Impoundments, and Containers

§265.1080: Applicability.

Source: 59 FR 62935, Dec. 6, 1994, unless otherwise noted.

(a) The requirements of this subpart apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to either subpart I, J, or K of this part except as Sec. 265.1 and paragraph (b) of this section provide otherwise.
(b) The requirements of this subpart do not apply to the following waste management units at the facility:
(1) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.
(2) A container that has a design capacity less than or equal to 0.1 m\3\.
(3) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.
(4) A surface impoundment in which an owner or operator has stopped adding hazardous waste (except to implement an approved closure plan) and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.
(5) A waste management unit that is used solely for on-site treatment or storage of hazardous waste that is placed in the unit as a result of implementing remedial activities required under the corrective action authorities of RCRA sections 3004(u), 3004(v), or 3008(h); CERCLA authorities; or similar Federal or State authorities.
(6) A waste management unit that is used solely for the management of radioactive mixed waste in accordance with all applicable regulations under the authority of the Atomic Energy Act and the Nuclear Waste Policy Act.
(7) A hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. For the purpose of complying with this paragraph, a tank for which the air emission control includes an enclosure, as opposed to a cover, must be in compliance with the enclosure and control device requirements of Sec. 265.1085(i), except as provided in Sec. 265.1083(c)(5).
(8) A tank that has a process vent as defined in 40 CFR 264.1031.
(c) For the owner and operator of a facility subject to this subpart who has received a final permit under RCRA section 3005 prior to December 6, 1996, the following requirements apply:
(1) The requirements of 40 CFR part 264, subpart CC shall be incorporated into the permit when the permit is reissued in accordance with the requirements of 40 CFR 124.15 or reviewed in accordance with the requirements of 40 CFR 270.50(d).
(2) Until the date when the permit is reissued in accordance with the requirements of 40 CFR 124.15 or reviewed in accordance with the requirements of 40 CFR 270.50(d), the owner and operator is subject to the requirements of this subpart.
(d) The requirements of this subpart, except for the recordkeeping requirements specified in Sec. 265.1090(i) of this subpart, are administratively stayed for a tank or a container used for the management of hazardous waste generated by organic peroxide

manufacturing and its associated laboratory operations when the owner or operator of the unit meets all of the following conditions:
(1) The owner or operator identifies that the tank or container receives hazardous waste generated by an organic peroxide manufacturing process producing more than one functional family of organic peroxides or multiple organic peroxides within one functional family, that one or more of these organic peroxides could potentially undergo self-accelerating thermal decomposition at or below ambient temperatures, and that organic peroxides are the predominant products manufactured by the process. For the purpose of meeting the conditions of this paragraph, ``organic peroxide" means an organic compound that contains the bivalent -O-O- structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.
(2) The owner or operator prepares documentation, in accordance with the requirements of Sec. 265.1090(i) of this subpart, explaining why an undue safety hazard would be created if air emission controls specified in Sec. Sec. 265.1085 through 265.1088 of this subpart are installed and operated on the tanks and containers used at the facility to manage the hazardous waste generated by the organic peroxide manufacturing process or processes meeting the conditions of paragraph (d)(1) of this section.
(3) The owner or operator notifies the Regional Administrator in writing that hazardous waste generated by an organic peroxide manufacturing process or processes meeting the conditions of paragraph (d)(1) of this section are managed at the facility in tanks or containers meeting the conditions of paragraph (d)(2) of this section. The notification shall state the name and address of the facility, and be signed and dated by an authorized representative of the facility owner or operator.
(e)(1) Except as provided in paragraph (e)(2) of this section, the requirements of this subpart do not apply to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, Elkton, Virginia, provided that facility is operated in compliance with the requirements contained in a Clean Air Act permit issued pursuant to 40 CFR 52.2454. The requirements of this subpart shall apply to the facility upon termination of the Clean Air Act permit issued pursuant to 40 CFR 52.2454.
(2) Notwithstanding paragraph (e)(1) of this section, any hazardous waste surface impoundment operated at the Stonewall Plant is subject to the standards in Sec. 265.1086 and all requirements related to hazardous waste surface impoundments that are referenced in or by Sec. 265.1086, including the closed-vent system and control device requirements of Sec. 265.1088 and the recordkeeping requirements of Sec. 265.1090(c).
(f) This section applies only to the facility commonly referred to as the OSi Specialties Plant, located on State Route 2, Sistersville, West Virginia (“Sistersville Plant").
(1)(i) Provided that the Sistersville Plant is in compliance with the requirements of paragraph (f)(2) of this section, the requirements referenced in paragraph (f)(1)(iii) of this section are temporarily deferred, as specified in paragraph (f)(3) of this section, with respect to the two hazardous waste surface impoundments at the Sistersville Plant. Beginning on the date that paragraph (f)(1)(ii) of this section is first implemented, the temporary deferral of this paragraph shall no longer be effective.
(ii)(A) In the event that a notice of revocation is issued pursuant to paragraph (f)(3)(iv) of this section, the requirements referenced in paragraph (f)(1)(iii) of this section are

temporarily deferred, with respect to the two hazardous waste surface impoundments, provided that the Sistersville Plant is in compliance with the requirements of paragraphs (f)(2)(ii), (f)(2)(iii), (f)(2)(iv), (f)(2)(v), (f)(2)(vi) and (g) of this section, except as provided under paragraph (f)(1)(ii)(B) of this section. The temporary deferral of the previous sentence shall be effective beginning on the date the Sistersville Plant receives written notification of revocation, and continuing for a maximum period of 18 months from that date, provided that the Sistersville Plant is in compliance with the requirements of paragraphs (f)(2)(ii), (f)(2)(iii), (f)(2)(iv), (f)(2)(v), (f)(2)(vi) and (g) of this section at all times during that 18-month period. In no event shall the temporary deferral continue to be effective after the MON Compliance Date.

(B) In the event that a notification of revocation is issued pursuant to paragraph (f)(3)(iv) of this section as a result of the permanent removal of the capper unit from methyl capped polyether production service, the requirements referenced in paragraph (f)(1)(iii) of this section are temporarily deferred, with respect to the two hazardous waste surface impoundments, provided that the Sistersville Plant is in compliance with the requirements of paragraphs (f)(2)(vi), and (g) of this section. The temporary deferral of the previous sentence shall be effective beginning on the date the Sistersville Plant receives written notification of revocation, and continuing for a maximum period of 18 months from that date, provided that the Sistersville Plant is in compliance with the requirements of paragraphs (f)(2)(vi) and (g) of this section at all times during that 18-month period. In no event shall the temporary deferral continue to be effective after the MON Compliance Date.

(iii) The standards in Sec. 265.1086 of this part, and all requirements referenced in or by Sec. 265.1086 that otherwise would apply to the two hazardous waste surface impoundments, including the closed-vent system and control device requirements of Sec. 265.1088 of this part.

(2) Notwithstanding the effective period and revocation provisions in paragraph (f)(3) of this section, the temporary deferral provided in paragraph (f)(1)(i) of this section is effective only if the Sistersville Plant meets the requirements of paragraph (f)(2) of this section.

(i) The Sistersville Plant shall install an air pollution control device on the polyether methyl capper unit (“capper unit”), implement a methanol recovery operation, and implement a waste minimization/pollution prevention (“WMPP”) project. The installation and implementation of these requirements shall be conducted according to the schedule described in paragraphs (f)(2)(i) and (f)(2)(vi) of this section.

(A) The Sistersville Plant shall complete the initial start-up of a thermal incinerator on the capper unit's process vents from the first stage vacuum pump, from the flash pot and surge tank, and from the water stripper, no later than April 1, 1998.

(B) The Sistersville Plant shall provide to the EPA and the West Virginia Department of Environmental Protection, written notification of the actual date of initial start-up of the thermal incinerator, and commencement of the methanol recovery operation. The Sistersville Plant shall submit this written notification as soon as practicable, but in no event later than 15 days after such events.

(ii) The Sistersville Plant shall install and operate the capper unit process vent thermal incinerator according to the requirements of paragraphs (f)(2)(ii)(A) through (f)(2)(ii)(D) of this section.

(A) Capper unit process vent thermal incinerator.
(1) Except as provided under paragraph (f)(2)(ii)(D) of this section, the Sistersville Plant shall operate the process vent thermal incinerator such that the incinerator reduces the total organic compounds (“TOC”) from the process vent streams identified in paragraph (f)(2)(i)(A) of this section, by 98 weight-percent, or to a concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent.
(i) Prior to conducting the initial performance test required under paragraph (f)(2)(ii)(B) of this section, the Sistersville Plant shall operate the thermal incinerator at or above a minimum temperature of 1600 Fahrenheit.
(ii) After the initial performance test required under paragraph (f)(2)(ii)(B) of this section, the Sistersville Plant shall operate the thermal incinerator at or above the minimum temperature established during that initial performance test.
(iii) The Sistersville Plant shall operate the process vent thermal incinerator at all times that the capper unit is being operated to manufacture product.
(2) The Sistersville Plant shall install, calibrate, and maintain all air pollution control and monitoring equipment described in paragraphs (f)(2)(i)(A) and (f)(2)(ii)(B)(3) of this section, according to the manufacturer's specifications, or other written procedures that provide adequate assurance that the equipment can reasonably be expected to control and monitor accurately, and in a manner consistent with good engineering practices during all periods when emissions are routed to the unit.
(B) The Sistersville Plant shall comply with the requirements of paragraphs (f)(2)(ii)(B)(1) through (f)(2)(ii)(B)(3) of this section for performance testing and monitoring of the capper unit process vent thermal incinerator.
(1) Within 120 days after thermal incinerator initial start-up, the Sistersville Plant shall conduct a performance test to determine the minimum temperature at which compliance with the emission reduction requirement specified in paragraph (f)(4) of this section is achieved. This determination shall be made by measuring TOC minus methane and ethane, according to the procedures specified in paragraph (f)(2)(ii)(B) of this section.
(2) The Sistersville Plant shall conduct the initial performance test in accordance with the standards set forth in paragraph (f)(4) of this section.
(3) Upon initial start-up, the Sistersville Plant shall install, calibrate, maintain and operate, according to manufacturer's specifications and in a manner consistent with good engineering practices, the monitoring equipment described in paragraphs (f)(2)(ii)(B)(3)(i) through (f)(2)(ii)(B)(3)(iii) of this section.
(i) A temperature monitoring device equipped with a continuous recorder. The temperature monitoring device shall be installed in the firebox or in the duct work immediately downstream of the firebox in a position before any substantial heat exchange is encountered.
(ii) A flow indicator that provides a record of vent stream flow to the incinerator at least once every fifteen minutes. The flow indicator shall be installed in the vent stream from the process vent at a point closest to the inlet of the incinerator.
(iii) If the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device shall be equipped with either a bypass flow indicator or a seal or locking device as specified in this paragraph. For the purpose of complying with this paragraph, low leg

drains, high point bleeds, analyzer vents, open-ended valves or lines, spring-loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices. If a bypass flow indicator is used to comply with this paragraph, the bypass flow indicator shall be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. If a seal or locking device (e.g. car-seal or lock-and-key configuration) is used to comply with this paragraph, the device shall be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle, damper levels) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. The Sistersville Plant shall visually inspect the seal or locking device at least once every month to verify that the bypass mechanism is maintained in the closed position.
(C) The Sistersville Plant shall keep on-site an up-to-date, readily accessible record of the information described in paragraphs (f)(2)(ii)(C)(1) through (f)(2)(ii)(C)(4) of this section.
(1) Data measured during the initial performance test regarding the firebox temperature of the incinerator and the percent reduction of TOC achieved by the incinerator, and/or such other information required in addition to or in lieu of that information by the WVDEP in its approval of equivalent test methods and procedures.
(2) Continuous records of the equipment operating procedures specified to be monitored under paragraph (f)(2)(ii)(B)(3) of this section, as well as records of periods of operation during which the firebox temperature falls below the minimum temperature established under paragraph (f)(2)(ii)(A)(1) of this section.
(3) Records of all periods during which the vent stream has no flow rate to the extent that the capper unit is being operated during such period.
(4) Records of all periods during which there is flow through a bypass device.
(D) The Sistersville Plant shall comply with the start-up, shutdown, maintenance and malfunction requirements contained in paragraphs (f)(2)(ii)(D)(1) through (f)(2)(ii)(D)(6) of this section, with respect to the capper unit process vent incinerator.
(1) The Sistersville Plant shall develop and implement a Start-up, Shutdown and Malfunction Plan as required by the provisions set forth in paragraph (f)(2)(ii)(D) of this section. The plan shall describe, in detail, procedures for operating and maintaining the thermal incinerator during periods of start-up, shutdown and malfunction, and a program of corrective action for malfunctions of the thermal incinerator.
(2) The plan shall include a detailed description of the actions the Sistersville Plant will take to perform the functions described in paragraphs (f)(2)(ii)(D)(2)(i) through (f)(2)(ii)(D)(2)(iii) of this section.
(i) Ensure that the thermal incinerator is operated in a manner consistent with good air pollution control practices.
(ii) Ensure that the Sistersville Plant is prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions.
(iii) Reduce the reporting requirements associated with periods of start-up, shutdown and malfunction.
(3) During periods of start-up, shutdown and malfunction, the Sistersville Plant shall maintain the process unit and the associated thermal incinerator in accordance with the procedures set forth in the plan.

(4) The plan shall contain record keeping requirements relating to periods of start-up, shutdown or malfunction, actions taken during such periods in conformance with the plan, and any failures to act in conformance with the plan during such periods.
(5) During periods of maintenance or malfunction of the thermal incinerator, the Sistersville Plant may continue to operate the capper unit, provided that operation of the capper unit without the thermal incinerator shall be limited to no more than 240 hours each calendar year.
(6) For the purposes of paragraph (f)(2)(iii)(D) of this section, the Sistersville Plant may use its operating procedures manual, or a plan developed for other reasons, provided that plan meets the requirements of paragraph (f)(2)(iii)(D) of this section for the start-up, shutdown and malfunction plan.
(iii) The Sistersville Plant shall operate the closed-vent system in accordance with the requirements of paragraphs (f)(2)(iii)(A) through (f)(2)(iii)(D) of this section.
(A) Closed-vent system.
(1) At all times when the process vent thermal incinerator is operating, the Sistersville Plant shall route the vent streams identified in paragraph (f)(2)(i) of this section from the capper unit to the thermal incinerator through a closed-vent system.
(2) The closed-vent system will be designed for and operated with no detectable emissions, as defined in paragraph (f)(6) of this section.
(B) The Sistersville Plant will comply with the performance standards set forth in paragraph (f)(2)(iii)(A)(1) of this section on and after the date on which the initial performance test referenced in paragraph (f)(2)(ii)(B) of this section is completed, but no later than sixty (60) days after the initial start-up date.
(C) The Sistersville Plant shall comply with the monitoring requirements of paragraphs (f)(2)(iii)(C)(1) through (f)(2)(iii)(C)(3) of this section, with respect to the closed-vent system.
(1) At the time of the performance test described in paragraph (f)(2)(ii)(B) of this section, the Sistersville Plant shall inspect the closed-vent system as specified in paragraph (f)(5) of this section.
(2) At the time of the performance test described in paragraph (f)(2)(ii)(B) of this section, and annually thereafter, the Sistersville Plant shall inspect the closed-vent system for visible, audible, or olfactory indications of leaks.
(3) If at any time a defect or leak is detected in the closed-vent system, the Sistersville Plant shall repair the defect or leak in accordance with the requirements of paragraphs (f)(2)(iii)(C)(3)(i) and (f)(2)(iii)(C)(3)(ii) of this section.
(i) The Sistersville Plant shall make first efforts at repair of the defect no later than five (5) calendar days after detection, and repair shall be completed as soon as possible but no later than forty-five (45) calendar days after detection.
(ii) The Sistersville Plant shall maintain a record of the defect repair in accordance with the requirements specified in paragraph (f)(2)(iii)(D) of this section.
(D) The Sistersville Plant shall keep on-site up-to-date, readily accessible records of the inspections and repairs required to be performed by paragraph (f)(2)(iii) of this section.
(iv) The Sistersville Plant shall operate the methanol recovery operation in accordance with paragraphs (f)(2)(iv)(A) through (f)(2)(iv)(C) of this section.

(A) The Sistersville Plant shall operate the condenser associated with the methanol recovery operation at all times during which the capper unit is being operated to manufacture product.
(B) The Sistersville Plant shall comply with the monitoring requirements described in paragraphs (f)(2)(B)(1) through (f)(2)(B)(3) of this section, with respect to the methanol recovery operation.
(1) The Sistersville Plant shall perform measurements necessary to determine the information described in paragraphs (f)(2)(iv)(B)(1)(i) and (f)(2)(iv)(B)(1)(ii) of this section to demonstrate the percentage recovery by weight of the methanol contained in the influent gas stream to the condenser.
(i) Information as is necessary to calculate the annual amount of methanol generated by operating the capper unit.
(ii) The annual amount of methanol recovered by the condenser associated with the methanol recovery operation.
(2) The Sistersville Plant shall install, calibrate, maintain and operate according to manufacturer specifications, a temperature monitoring device with a continuous recorder for the condenser associated with the methanol recovery operation, as an indicator that the condenser is operating.
(3) The Sistersville Plant shall record the dates and times during which the capper unit and the condenser are operating.
(C) The Sistersville Plant shall keep on-site up-to-date, readily-Accessible records of the parameters specified to be monitored under paragraph (f)(2)(iv)(B) of this section.
(v) The Sistersville Plant shall comply with the requirements of paragraphs (f)(2)(v)(A) through (f)(2)(v)(C) of this section for the disposition of methanol collected by the methanol recovery operation.
(A) On an annual basis, the Sistersville Plant shall ensure that a minimum of 95% by weight of the methanol collected by the methanol recovery operation (also referred to as the ``collected methanol'') is utilized for reuse, recovery, or thermal recovery/treatment. The Sistersville Plant may use the methanol on-site, or may transfer or sell the methanol for reuse, recovery, or thermal recovery/treatment at other facilities.
(1) Reuse. To the extent reuse of all of the collected methanol destined for reuse, recovery, or thermal recovery is not economically feasible, the Sistersville Plant shall ensure the residual portion is sent for recovery, as defined in paragraph (f)(6) of this section, except as provided in paragraph (f)(2)(v)(A)(2) of this section.
(2) Recovery. To the extent that reuse or recovery of all the collected methanol destined for reuse, recovery, or thermal recovery is not economically feasible, the Sistersville Plant shall ensure that the residual portion is sent for thermal recovery/treatment, as defined in paragraph (f)(6) of this section.
(3) The Sistersville Plant shall ensure that, on an annual basis, no more than 5% of the methanol collected by the methanol recovery operation is subject to bio-treatment.
(4) In the event the Sistersville Plant receives written notification of revocation pursuant to paragraph (f)(3)(iv) of this section, the percent limitations set forth under paragraph (f)(2)(v)(A) of this section shall no longer be applicable, beginning on the date of receipt of written notification of revocation.

(B) The Sistersville Plant shall perform such measurements as are necessary to determine the pounds of collected methanol directed to reuse, recovery, thermal recovery/treatment and bio-treatment, respectively, on a monthly basis.
(C) The Sistersville Plant shall keep on-site up-to-date, readily accessible records of the amounts of collected methanol directed to reuse, recovery, thermal recovery/treatment and bio-treatment necessary for the measurements required under paragraph (f)(2)(iv)(B) of this section.
(vi) The Sistersville Plant shall perform a WMPP project in accordance with the requirements and schedules set forth in paragraphs (f)(2)(vi)(A) through (f)(2)(vi)(C) of this section.
(A) In performing the WMPP Project, the Sistersville Plant shall use a Study Team and an Advisory Committee as described in paragraphs (f)(2)(vi)(A)(1) through (f)(2)(vi)(A)(6) of this section.
(1) At a minimum, the multi-functional Study Team shall consist of Sistersville Plant personnel from appropriate plant departments (including both management and employees) and an independent contractor. The Sistersville Plant shall select a contractor that has experience and training in WMPP in the chemical manufacturing industry.
(2) The Sistersville Plant shall direct the Study Team such that the team performs the functions described in paragraphs (f)(2)(vi)(A)(2)(i) through (f)(2)(vi)(A)(2)(v) of this section.
(i) Review Sistersville Plant operations and waste streams.
(ii) Review prior WMPP efforts at the Sistersville Plant.
(iii) Develop criteria for the selection of waste streams to be evaluated for the WMPP Project.
(iv) Identify and prioritize the waste streams to be evaluated during the study phase of the WMPP Project, based on the criteria described in paragraph (f)(2)(vi)(A)(2)(iii) of this section.
(v) Perform the WMPP Study as required by paragraphs (f)(2)(vi)(A)(3) through (f)(2)(vi)(A)(5), paragraph (f)(2)(vi)(B), and paragraph (f)(2)(vi)(C) of this section.
(3)(i) The Sistersville Plant shall establish an Advisory Committee consisting of a representative from EPA, a representative from WVDEP, the Sistersville Plant Manager, the Sistersville Plant Director of Safety, Health and Environmental Affairs, and a stakeholder representative(s).
(ii) The Sistersville Plant shall select the stakeholder representative(s) by mutual agreement of EPA, WVDEP and the Sistersville Plant no later than 20 days after receiving from EPA and WVDEP the names of their respective committee members.
(4) The Sistersville Plant shall convene a meeting of the Advisory Committee no later than thirty days after selection of the stakeholder representatives, and shall convene meetings periodically thereafter as necessary for the Advisory Committee to perform its assigned functions. The Sistersville Plant shall direct the Advisory Committee to perform the functions described in paragraphs (f)(2)(vi)(A)(4)(i) through (f)(2)(vi)(A)(4)(iii) of this section.
(i) Review and comment upon the Study Team's criteria for selection of waste streams, and the Study Team's identification and prioritization of the waste streams to be evaluated during the WMPP Project.
(ii) Review and comment upon the Study Team progress reports and the

draft WMPP Study Report.
(iii) Periodically review the effectiveness of WMPP opportunities implemented as part of the WMPP Project, and, where appropriate, WMPP opportunities previously determined to be infeasible by the Sistersville Plant but which had potential for feasibility in the future.
(5) Beginning on January 15, 1998, and every ninety (90) days thereafter until submission of the final WMPP Study Report required by paragraph (f)(2)(vi)(C) of this section, the Sistersville Plant shall direct the Study Team to submit a progress report to the Advisory Committee detailing its efforts during the prior ninety (90) day period.
(B) The Sistersville Plant shall ensure that the WMPP Study and the WMPP Study Report meet the requirements of paragraphs (f)(2)(vi)(B)(1) through (f)(2)(vi)(B)(3) of this section.
(1) The WMPP Study shall consist of a technical, economic, and regulatory assessment of opportunities for source reduction and for environmentally sound recycling for waste streams identified by the Study Team.
(2) The WMPP Study shall evaluate the source, nature, and volume of the waste streams; describe all the WMPP opportunities identified by the Study Team; provide a feasibility screening to evaluate the technical and economical feasibility of each of the WMPP opportunities; identify any cross-media impacts or any anticipated transfers of risk associated with each feasible WMPP opportunity; and identify the projected economic savings and projected quantitative waste reduction estimates for each WMPP opportunity identified.
(3) No later than October 19, 1998, the Sistersville Plant shall prepare and submit to the members of the Advisory Committee a draft WMPP Study Report which, at a minimum, includes the results of the WMPP Study, identifies WMPP opportunities the Sistersville Plant determines to be feasible, discusses the basis for excluding other opportunities as not feasible, and makes recommendations as to whether the WMPP Study should be continued. The members of the Advisory Committee shall provide any comments to the Sistersville Plant within thirty (30) days of receiving the WMPP Study Report.
(C) Within thirty (30) days after receipt of comments from the members of the Advisory Committee, the Sistersville Plant shall submit to EPA and WVDEP a final WMPP Study Report which identifies those WMPP opportunities the Sistersville Plant determines to be feasible and includes an implementation schedule for each such WMPP opportunity. The Sistersville Plant shall make reasonable efforts to implement all feasible WMPP opportunities in accordance with the priorities identified in the implementation schedule.
(1) For purposes of this section, a WMPP opportunity is feasible if the Sistersville Plant considers it to be technically feasible (taking into account engineering and regulatory factors, product line specifications and customer needs) and economically practical (taking into account the full environmental costs and benefits associated with the WMPP opportunity and the company's internal requirements for approval of capital projects). For purposes of the WMPP Project, the Sistersville Plant shall use ``An Introduction to Environmental Accounting as a Business Management Tool," (EPA 742/R-95/001) as one tool to identify the full environmental costs and benefits of each WMPP opportunity.
(2) In implementing each WMPP opportunity, the Sistersville Plant shall, after consulting with the other members of the Advisory Committee, develop appropriate protocols and methods for determining the information required by paragraphs (f)(2)(vi)(2)(i) through

(f)(2)(vi)(2)(iii) of this section.
(i) The overall volume of wastes reduced.
(ii) The quantities of each constituent identified in paragraph (f)(8) of this section reduced in the wastes.
(iii) The economic benefits achieved.
(3) No requirements of paragraph (f)(2)(vi) of this section are intended to prevent or restrict the Sistersville Plant from evaluating and implementing any WMPP opportunities at the Sistersville Plant in the normal course of its operations or from implementing, prior to the completion of the WMPP Study, any WMPP opportunities identified by the Study Team.
(vii) The Sistersville Plant shall maintain on-site each record required by paragraph (f)(2) of this section, through the MON Compliance Date.
(viii) The Sistersville Plant shall comply with the reporting requirements of paragraphs (f)(2)(viii)(A) through (f)(2)(viii)(G) of this section.
(A) At least sixty days prior to conducting the initial performance test of the thermal incinerator, the Sistersville Plant shall submit to EPA and WVDEP copies of a notification of performance test, as described in 40 CFR 63.7(b). Following the initial performance test of the thermal incinerator, the Sistersville Plant shall submit to EPA and WVDEP copies of the performance test results that include the information relevant to initial performance tests of thermal incinerators contained in 40 CFR 63.7(g)(1), 40 CFR 63.117(a)(4)(i), and 40 CFR 63.117(a)(4)(ii).
(B) Beginning in 1999, on January 31 of each year, the Sistersville Plant shall submit a semiannual written report to the EPA and WVDEP, with respect to the preceding six month period ending on December 31, which contains the information described in paragraphs (f)(2)(viii)(B)(1) through (f)(2)(viii)(B)(10) of this section.
(1) Instances of operating below the minimum operating temperature established for the thermal incinerator under paragraph (f)(2)(ii)(A)(1) of this section which were not corrected within 24 hours of onset.
(2) Any periods during which the capper unit was being operated to manufacture product while the flow indicator for the vent streams to the thermal incinerator showed no flow.
(3) Any periods during which the capper unit was being operated to manufacture product while the flow indicator for any bypass device on the closed vent system to the thermal incinerator showed flow.
(4) Information required to be reported during that six month period under the preconstruction permit issued under the state permitting program approved under subpart XX of 40 CFR Part 52--Approval and Promulgation of Implementation Plans for West Virginia.
(5) Any periods during which the capper unit was being operated to manufacture product while the condenser associated with the methanol recovery operation was not in operation.
(6) The amount (in pounds and by month) of methanol collected by the methanol recovery operation during the six month period.
(7) The amount (in pounds and by month) of collected methanol utilized for reuse, recovery, thermal recovery/treatment, or bio-treatment, respectively, during the six month period.

(8) The calculated amount (in pounds and by month) of methanol generated by operating the capper unit.
(9) The status of the WMPP Project, including the status of developing the WMPP Study Report.
(10) Beginning in the year after the Sistersville Plant submits the final WMPP Study Report required by paragraph (f)(2)(vi)(C) of this section, and continuing in each subsequent Semiannual Report required by paragraph (f)(2)(viii)(B) of this section, the Sistersville Plant shall report on theprogress of the implementation of feasible WMPP opportunities identified in the WMPP Study Report. The Semiannual Report required by paragraph (f)(2)(viii)(B) of this section shall identify any cross-media impacts or impacts to worker safety or community health issues that have occurred as a result of implementation of the feasible WMPP opportunities.
(C) Beginning in 1999, on July 31 of each year, the Sistersville Plant shall provide an Annual Project Report to the EPA and WVDEP Project XL contacts containing the information required by paragraphs (f)(2)(viii)(C)(1) through (f)(2)(viii)(C)(8) of this section.
(1) The categories of information required to be submitted under paragraphs (f)(2)(viii)(B)(1) through (f)(2)(viii)(B)(8) of this section, for the preceding 12 month period ending on June 30.
(2) An updated Emissions Analysis for January through December of the preceding calendar year. The Sistersville Plant shall submit the updated Emissions Analysis in a form substantially equivalent to the previous Emissions Analysis prepared by the Sistersville Plant to support Project XL. The Emissions Analysis shall include a comparison of the volatile organic emissions associated with the capper unit process vents and the wastewater treatment system (using the EPA Water 8 model or other model agreed to by the Sistersville Plant, EPA and WVDEP) under Project XL with the expected emissions from those sources absent Project XL during that period.
(3) A discussion of the Sistersville Plant's performance in meeting the requirements of this section, specifically identifying any areas in which the Sistersville Plant either exceeded or failed to achieve any such standard.
(4) A description of any unanticipated problems in implementing the XL Project and any steps taken to resolve them.
(5) A WMPP Implementation Report that contains the information contained in paragraphs paragraphs (f)(2)(viii)(C)(5)(i) through (viii)(C)(5)(vi) of this section.
(i) A summary of the WMPP opportunities selected for implementation.
(ii) A description of the WMPP opportunities initiated and/or completed.
(iii) Reductions in volume of waste generated and amounts of each constituent reduced in wastes including any constituents identified in paragraph (f)(8) of this section.
(iv) An economic benefits analysis.
(v) A summary of the results of the Advisory Committee's review of implemented WMPP opportunities.
(vi) A reevaluation of WMPP opportunities previously determined to be infeasible by the Sistersville Plant but which had potential for future feasibility.
(6) An assessment of the nature of, and the successes or problems associated with, the Sistersville Plant's interaction with the federal and state agencies under the Project.
(7) An update on stakeholder involvement efforts.

(8) An evaluation of the Project as implemented against the Project XL Criteria and the baseline scenario.
(D) The Sistersville Plant shall submit to the EPA and WVDEP Project XL contacts a written Final Project Report covering the period during which the temporary deferral was effective, as described in paragraph (f)(3) of this section.
(1) The Final Project Report shall contain the information required to be submitted for the Semiannual Report required under paragraph (f)(2)(viii)(B) of this section, and the Annual Project Report required under paragraph (f)(2)(viii)(C) of this section.
(2) The Sistersville Plant shall submit the Final Project Report to EPA and WVDEP no later than 180 days after the temporary deferral of paragraph (f)(1) of this section is revoked, or 180 days after the MON Compliance Date, whichever occurs first.
(E)(1) The Sistersville Plant shall retain on-site a complete copy of each of the report documents to be submitted to EPA and WVDEP in accordance with requirements under paragraph (f)(2) of this section. The Sistersville Plant shall retain this record until 180 days after the MON Compliance Date. The Sistersville Plant shall provide to stakeholders and interested parties a written notice of availability (to be mailed to all persons on the Project mailing list and to be provided to at least one local newspaper of general circulation) of each such document, and provide a copy of each document to any such person upon request, subject to the provisions of 40 CFR part 2.
(2) Any reports or other information submitted to EPA or WVDEP may be released to the public pursuant to the Federal Freedom of Information Act (42 U.S.C. 552 et seq.), subject to the provisions of 40 CFR part 2.
(F) The Sistersville Plant shall make all supporting monitoring results and records required under paragraph (f)(2) of this section available to EPA and WVDEP within a reasonable amount of time after receipt of a written request from those Agencies, subject to the provisions of 40 CFR Part 2.
(G) Each report submitted by the Sistersville Plant under the requirements of paragraph (f)(2) of this section shall be certified by a Responsible Corporate Officer, as defined in 40 CFR 270.11(a)(1).
(H) For each report submitted in accordance with paragraph (f)(2) of this section, the Sistersville Plant shall send one copy each to the addresses in paragraphs (f)(2)(viii) (H)(1) through (H)(3) of this section.
(1) U.S. EPA Region 3, 1650 Arch Street, Philadelphia, PA 19103-2029, Attention Tad Radzinski, Mail Code 3WC11.
(2) U.S. EPA, 1200 Pennsylvania Ave., NW., Washington, DC 20460, Attention L. Nancy Birnbaum, Mail Code 1812.
(3) West Virginia Division of Environmental Protection, Office of Air Quality, 1558 Washington Street East, Charleston, WV 25311-2599, Attention John H. Johnston.
(3) Effective period and revocation of temporary deferral.
(i) The temporary deferral contained in this section is effective from April 1, 1998, and shall remain effective until the MON Compliance Date. The temporary deferral contained in this section may be revoked prior to the MON Compliance Date, as described in paragraph (f)(3)(iv) of this section.
(ii) On the MON Compliance Date, the temporary deferral contained in this section will no longer be effective.

(iii) The Sistersville Plant shall come into compliance with those requirements deferred by this section no later than the MON Compliance Date. No later than 18 months prior to the MON Compliance Date, the Sistersville Plant shall submit to EPA an implementation schedule that meets the requirements of paragraph (g)(1)(iii) of this section.
(iv) The temporary deferral contained in this section may be revoked for cause, as determined by EPA, prior to the MON Compliance Date. The Sistersville Plant may request EPA to revoke the temporary deferral contained in this section at any time. The revocation shall be effective on the date that the Sistersville Plant receives written notification of revocation from EPA.

(v) Nothing in this section shall affect the provisions of the MON, as applicable to the Sistersville Plant.

(vi) Nothing in paragrahs (f) or (g) of this section shall affect any regulatory requirements not referenced in paragraph (f)(1)(iii) of this section, as applicable to the Sistersville Plant.

(4) The Sistersville Plant shall conduct the initial performance test required by paragraph (f)(2)(ii)(B) of this section using the procedures in paragraph (f)(4) of this section. The organic concentration and percent reduction shall be measured as TOC minus methane and ethane, according to the procedures specified in paragraph (f)(4) of this section.

(i) Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling sites.

(A) To determine compliance with the 98 percent reduction of TOC requirement of paragraph (f)(2)(ii)(A)(1) of this section, sampling sites shall be located at the inlet of the control device after the final product recovery device, and at the outlet of the control device.

(B) To determine compliance with the 20 parts per million by volume TOC limit in paragraph (f)(2)(ii)(A)(1) of this section, the sampling site shall be located at the outlet of the control device.

(ii) The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate.

(iii) To determine compliance with the 20 parts per million by volume TOC limit in paragraph (f)(2)(ii)(A)(1) of this section, the Sistersville Plant shall use Method 18 of 40 CFR part 60, appendix A to measure TOC minus methane and ethane. Alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of 40 CFR part 63, appendix A, may be used. The following procedures shall be used to calculate parts per million by volume concentration, corrected to 3 percent oxygen:

(A) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

(B) The concentration of TOC minus methane and ethane (C_{TOC}) shall be calculated as the sum of the concentrations of the individual components, and shall be computed for each run using the following equation:

$$C_{TOC} = \sum_{i=1}^{x} \frac{\left(\sum_{j=1}^{n} C_{ji}\right)}{x}$$

Where:

C_{TOC}=Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.
C_{ji}=Concentration of sample components j of sample i, dry basis, parts per million by volume.
n=Number of components in the sample.
x=Number of samples in the sample run.

(C) The concentration of TOC shall be corrected to 3 percent oxygen if a combustion device is the control device.

(1) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR part 60, appendix A shall be used to determine the oxygen concentration ($\%O_{2d}$). The samples shall be taken during the same time that the TOC (minus methane or ethane) samples are taken.

(2) The concentration corrected to 3 percent oxygen (C_c) shall be computed using the following equation:

$$C_c = C_m\left(\frac{17.9}{20.9 \quad \%O_{2d}}\right)$$

Where:

C_c=Concentration of TOC corrected to 3 percent oxygen, dry basis, parts per million by volume.
C_m=Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.
$\%O_{2d}$=Concentration of oxygen, dry basis, percent by volume.

(iv) To determine compliance with the 98 percent reduction requirement of paragraph (f)(2)(ii)(A)(1) of this section, the Sistersville Plant shall use Method 18 of 40 CFR part 60, appendix A; alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of 40 CFR part 63, appendix A may be used. The following procedures shall be used to calculate percent reduction efficiency:

(A) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time such as 15 minute intervals during the run.

(B) The mass rate of TOC minus methane and ethane (E_i, E_o) shall be computed. All organic compounds (minus methane and ethane) measured by Method 18 of 40 CFR part 60, Appendix A are summed using the following equations:

$$E_i = K_2\left(\sum_{j=1}^{n} C_{ij}M_{ij}\right)Q_i$$

$$E_o = K_2\left(\sum_{j=1}^{n} C_{oj}M_{oj}\right)Q_o$$

Where:

C_{ij}, C_{oj}=Concentration of sample component j of the gas stream at the inlet and outlet of the control device, respectively, dry basis, parts per million by volume.
E_i, E_o=Mass rate of TOC (minus methane and ethane) at the inlet and outlet of the control device, respectively, dry basis, kilogram per hour.
M_{ij}, M_{oj}=Molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole.
Q_i, Q_o=Flow rate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meter per minute.
K_2=Constant, 2.494×10^{-6} (parts per million)$^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 ° C.

(C) The percent reduction in TOC (minus methane and ethane) shall be calculated as follows:

$$R = \frac{E_i E_o}{E_i}(100)$$

where:

R=Control efficiency of control device, percent.
E_i=Mass rate of TOC (minus methane and ethane) at the inlet to the control device as calculated under paragraph (f)(4)(iv)(B) of this section, kilograms TOC per hour.
E_o=Mass rate of TOC (minus methane and ethane) at the outlet of the control device, as calculated under paragraph (f)(4)(iv)(B) of this section, kilograms TOC per hour.

(5) At the time of the initial performance test of the process vent thermal incinerator required under paragraph (f)(2)(ii)(B) of this section, the Sistersville Plant shall inspect each closed vent system according to the procedures specified in paragraphs (f)(5)(i) through (f)(5)(vi) of this section.

(i) The initial inspections shall be conducted in accordance with Method 21 of 40 CFR part 60, appendix A.

(ii)(A) Except as provided in paragraph (f)(5)(ii)(B) of this section, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 of 40

CFR part 60, appendix A shall be for the average composition of the process fluid not each individual volatile organic compound in the stream. For process streams that contain nitrogen, air, or other inerts which are not organic hazardous air pollutants or volatile organic compounds, the average stream response factor shall be calculated on an inert-free basis.

(B) If no instrument is available at the plant site that will meet the performance criteria specified in paragraph (f)(5)(ii)(A) of this section, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in paragraph (f)(5)(ii)(A) of this section.

(iii) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(iv) Calibration gases shall be as follows:

(A) Zero air (less than 10 parts per million hydrocarbon in air); and

(B) Mixtures of methane in air at a concentration less than 10,000 parts per million. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (f)(5)(ii)(A) of this section. In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(v) The Sistersville Plant may elect to adjust or not adjust instrument readings for background. If the Sistersville Plant elects to not adjust readings for background, all such instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the Sistersville Plant elects to adjust instrument readings for background, the Sistersville Plant shall measure background concentration using the procedures in 40 CFR 63.180(b) and (c). The Sistersville Plant shall subtract background reading from the maximum concentration indicated by the instrument.

(vi) The arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared with 500 parts per million for determining compliance.

(6) Definitions of terms as used in paragraphs (f) and (g) of this section.

(i) Closed vent system is defined as a system that is not open to the atmosphere and that is composed of piping, connections and, if necessary, flow-inducing devices that transport gas or vapor from the capper unit process vent to the thermal incinerator.

(ii) No detectable emissions means an instrument reading of less than 500 parts per million by volume above background as determined by Method 21 in 40 CFR part 60.

(iii) Reuse includes the substitution of collected methanol (without reclamation subsequent to its collection) for virgin methanol as an ingredient (including uses as an intermediate) or as an effective substitute for a commercial product.

(iv) Recovery includes the substitution of collected methanol for virgin methanol as an ingredient (including uses as an intermediate) or as an effective substitute for a commercial product following reclamation of the methanol subsequent to its collection.

(v) Thermal recovery/treatment includes the use of collected methanol in fuels blending or as a feed to any combustion device to the extent permitted by federal and state law.

(vi) Bio-treatment includes the treatment of the collected methanol through introduction into a biological treatment system, including the treatment of the collected methanol as a waste stream in an on-site or off-site wastewater treatment system.

Introduction of the collected methanol to the on-site wastewater treatment system will be limited to points downstream of the surface impoundments, and will be consistent with the requirements of federal and state law.

(vii) Start-up shall have the meaning set forth at 40 CFR 63.2.

(viii) Flow indicator means a device which indicates whether gas flow is present in the vent stream, and, if required by the permit for the thermal incinerator, which measures the gas flow in that stream.

(ix) Continuous Recorder means a data recording device that records an instantaneous data value at least once every fifteen minutes.

(x) MON means the National Emission Standards for Hazardous Air Pollutants for the source category Miscellaneous Organic Chemical Production and Processes (``MON''), promulgated under the authority of Section 112 of the Clean Air Act.

(xi) MON Compliance Date means the date 3 years after the effective date of the National Emission Standards for Hazardous Air Pollutants for the source category Miscellaneous Organic Chemical Production and Processes (``MON'').

(7) OSi Specialties, Incorporated, a subsidiary of Witco Corporation (``OSi''), may seek to transfer its rights and obligations under this section to a future owner of the Sistersville Plant in accordance with the requirements of paragraphs (f)(7)(i) through (f)(7)(iii) of this section.

(i) OSi will provide to EPA a written notice of any proposed transfer at least forty-five days prior to the effective date of any such transfer. The written notice will identify the proposed transferee.

(ii) The proposed transferee will provide to EPA a written request to assume the rights and obligations under this section at least forty-five days prior to the effective date of any such transfer. The written request will describe the transferee's financial and technical capability to assume the obligations under this section, and will include a statement of the transferee's intention to fully comply with the terms of this section and to sign the Final Project Agreement for this XL Project as an additional party.

(iii) Within thirty days of receipt of both the written notice and written request described in paragraphs (f)(7)(i) and (f)(7)(ii) of this section, EPA will determine, based on all relevant information, whether to approve a transfer of rights and obligations under this section from OSi to a different owner.

(8) The constituents to be identified by the Sistersville Plant pursuant to paragraphs (f)(2)(vi)(C)(2)(ii) and (f)(2)(viii)(C)(5)(iii) of this section are: 1 Naphthalenamine; 1, 2, 4 Trichlorobenzene; 1,1 Dichloroethylene; 1,1,1 Trichloroethane; 1,1,1,2 Tetrachloroethane; 1,1,2 Trichloro 1,2,2 Triflouroethane; 1,1,2 Trichloroethane; 1,1,2,2 Tetrachloroethane; 1,2 Dichlorobenzene; 1,2 Dichloroethane; 1,2 Dichloropropane; 1,2 Dichloropropanone; 1,2 Transdichloroethene; 1,2, Trans--Dichloroethene; 1,2,4,5 Tetrachlorobenzine; 1,3 Dichlorobenzene; 1,4 Dichloro 2 butene; 1,4 Dioxane; 2 Chlorophenol; 2 Cyclohexyl 4,6 dinitrophenol; 2 Methyl Pyridine; 2 Nitropropane; 2, 4-Di-nitrotoluene; Acetone; Acetonitrile; Acrylonitrile; Allyl Alcohol; Aniline; Antimony; Arsenic; Barium; Benzene; Benzotrichloride; Benzyl Chloride; Beryllium; Bis (2 ethyl Hexyl) Phthalate; Butyl Alcohol, n; Butyl Benzyl Phthalate; Cadmium; Carbon Disulfide; Carbon Tetrachloride; Chlorobenzene; Chloroform; Chloromethane; Chromium; Chrysene; Copper; Creosol; Creosol, m-; Creosol, o; Creosol, p; Cyanide;

Cyclohexanone; Di-n-octyl phthalate; Dichlorodiflouromethane; Diethyl Phthalate; Dihydrosafrole; Dimethylamine; Ethyl Acetate; Ethyl benzene; Ethyl Ether; Ethylene Glycol Ethyl Ether; Ethylene Oxide; Formaldehyde; Isobutyl Alcohol; Lead; Mercury; Methanol; Methoxychlor; Methyl Chloride; Methyl Chloroformate; Methyl Ethyl Ketone; Methyl Ethyl Ketone Peroxide; Methyl Isobutyl Ketone; Methyl Methacrylate; Methylene Bromide; Methylene Chloride; Naphthalene; Nickel; Nitrobenzene; itroglycerine; p-Toluidine; Phenol; Phthalic Anhydride; Polychlorinated Biphenyls; Propargyl Alcohol; Pyridine; Safrole; Selenium; Silver; Styrene; Tetrachloroethylene; Tetrahydrofuran; Thallium; Toluene; Toluene 2,4 Diisocyanate; Trichloroethylene; Trichloroflouromethane; Vanadium; Vinyl Chloride; Warfarin; Xylene; Zinc.

(g) This section applies only to the facility commonly referred to as the OSi Specialties Plant, located on State Route 2, Sistersville, West Virginia (``Sistersville Plant'').

(1)(i) No later than 18 months from the date the Sistersville Plant receives written notification of revocation of the temporary deferral for the Sistersville Plant under paragraph (f) of this section, the Sistersville Plant shall, in accordance with the implementation schedule submitted to EPA under paragraph (g)(1)(ii) of this section, either come into compliance with all requirements of this subpart which had been deferred by paragraph (f)(1)(i) of this section, or complete a facility or process modification such that the requirements of Sec. 265.1086 are no longer applicable to the two hazardous waste surface impoundments. In any event, the Sistersville Plant must complete the requirements of the previous sentence no later than the MON Compliance Date; if the Sistersville Plant receives written notification of revocation of the temporary deferral after the date 18 months prior to the MON Compliance Date, the date by which the Sistersville Plant must complete the requirements of the previous sentence will be the MON Compliance Date, which would be less than 18 months from the date of notification of revocation.

(ii) Within 30 days from the date the Sistersville Plant receives written notification of revocation under paragraph (f)(3)(iv) of this section, the Sistersville Plant shall enter and maintain in the facility operating record an implementation schedule. The implementation schedule shall demonstrate that within 18 months from the date the Sistersville Plant receives written notification of revocation under paragraph (f)(3)(iv) of this section (but no later than the MON Compliance Date), the Sistersville Plant shall either come into compliance with the regulatory requirements that had been deferred by paragraph (f)(1)(i) of this section, or complete facility or process modification such that the requirements of Sec. 265.1086 are no longer applicable to the two hazardous waste surface impoundments. Within 30 days from the date the Sistersville Plant receives written notification of revocation under paragraph (f)(3)(iv) of this section, the Sistersville Plant shall submit a copy of the implementation schedule to the EPA and WVDEP Project XL contacts identified in paragraph (f)(2)(viii)(H) of this section. The implementation schedule shall reflect the Sistersville Plant's effort to come into compliance as soon as practicable (but no later than 18 months after the date the Sistersville Plant receives written notification of revocation, or the MON Compliance Date, whichever is sooner) with all regulatory requirements that had been deferred under paragraph (f)(1)(i) of this section, or to complete a facility or process modification as soon as practicable (but no later than 18 months after the date the Sistersville Plant

receives written notification of revocation, or the MON Compliance Date, whichever is sooner) such that the requirements of Sec. 265.1086 are no longer applicable to the two hazardous waste surface impoundments.

(iii) The implementation schedule shall include the information described in either paragraph (g)(1)(iii)(A) or (B) of this section.

(A) Specific calendar dates for: award of contracts or issuance of purchase orders for the control equipment required by those regulatory requirements that had been deferred by paragraph (f)(1)(i) of this section; initiation of on-site installation of such control equipment; completion of the control equipment installation; performance of any testing to demonstrate that the installed control equipment meets the applicable standards of this subpart; initiation of operation of the control equipment; and compliance with all regulatory requirements that had been deferred by paragraph (f)(1)(i) of this section.

(B) Specific calendar dates for the purchase, installation, performance testing and initiation of operation of equipment to accomplish a facility or process modification such that the requirements of Sec. 265.1086 are no longer applicable to the two hazardous waste surface impoundments.

(2) Nothing in paragraphs (f) or (g) of this section shall affect any regulatory requirements not referenced in paragraph (f)(2)(i) or (ii) of this section, as applicable to the Sistersville Plant.

(3) In the event that a notification of revocation is issued pursuant to paragraph (f)(3)(iv) of this section, the requirements referenced in paragraph (f)(1)(iii) of this section are temporarily deferred, with respect to the two hazardous waste surface impoundments, provided that the Sistersville Plant is in compliance with the requirements of paragraphs (f)(2)(ii), (f)(2)(iii), (f)(2)(iv), (f)(2)(v), (f)(2)(vi) and (g) of this section, except as provided under paragraph (g)(4) of this section. The temporary deferral of the previous sentence shall be effective beginning on the date the Sistersville Plant receives written notification of revocation, and subject to paragraph (g)(5) of this section, shall continue to be effective for a maximum period of 18 months from that date, provided that the Sistersville Plant is in compliance with the requirements of paragraphs (f)(2)(ii), (f)(2)(iii), (f)(2)(iv), (f)(2)(v), (f)(2)(vi) and (g) of this section at all times during that 18-month period.

(4) In the event that a notification of revocation is issued pursuant to paragraph (f)(3)(iv) of this section as a result of the permanent removal of the capper unit from methyl capped polyether production service, the requirements referenced in paragraph (f)(1)(iii) of this section are temporarily deferred, with respect to the two hazardous waste surface impoundments, provided that the Sistersville Plant is in compliance with the requirements of paragraphs (f)(2)(vi), and (g) of this section. The temporary deferral of the previous sentence shall be effective beginning on the date the Sistersville Plant receives written notification of revocation, and subject to paragraph (g)(5) of this section, shall continue to be effective for a maximum period of 18 months from that date, provided that the Sistersville Plant is in compliance with the requirements of paragraphs (f)(2)(vi) and (g) of this section at all times during that 18-month period.

(5) In no event shall the temporary deferral provided under paragraph (g)(3) or (g)(4) of this section be effective after the MON Compliance Date.

[59 FR 62935, Dec. 6, 1994, as amended at 60 FR 26829, May 19, 1995; 60

FR 50429, Sept. 29, 1995; 60 FR 56953, Nov. 13, 1995; 61 FR 28510, June 5, 1996; 61 FR 59971, Nov. 25, 1996; 62 FR 52642, Oct. 8, 1997; 62 FR 64662, Dec. 8, 1997; 63 FR 11139, Mar. 6, 1998; 63 FR 19838, Apr. 22, 1998; 63 FR 49399, Sept. 15, 1998; 63 FR 53847, Oct. 7, 1998; 64 FR 3389, Jan. 21, 1999; 66 FR 34376, June 28, 2001]

§265.1081: Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given to them in the Act and parts 260 through 266 of this chapter.

Average volatile organic concentration or average VO concentration means the mass-weighted average volatile organic concentration of a hazardous waste as determined in accordance with the requirements of Sec. 265.1084 of this subpart.

Closure device means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover such that when the device is secured in the closed position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

Continuous seal means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

Cover means a device that provides a continuous barrier over the hazardous waste managed in a unit to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings (such as access hatches, sampling ports, gauge wells) that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment which can be detached and removed from the unit or a cover may be formed by structural features permanently integrated into the design of the unit.

Enclosure means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

External floating roof means a pontoon-type or double-deck type cover that rests on the surface of the material managed in a tank with no fixed roof.

Fixed roof means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

Floating membrane cover means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous waste being managed in a surface impoundment.

Floating roof means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the material being contained, and is equipped with a continuous seal.

Hard-piping means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

In light material service means the container is used to manage a material for which both of the following conditions apply: The vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20 ° C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 ° C is equal to or greater than 20 percent by weight.

Internal floating roof means a cover that rests or floats on the material surface (but not necessarily in complete contact with it) inside a tank that has a fixed roof.

Liquid-mounted seal means a foam or liquid-filled primary seal mounted in contact with the hazardous waste between the tank wall and the floating roof continuously around the circumference of the tank.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Maximum organic vapor pressure means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank, at the maximum vapor pressure-causing conditions (i.e., temperature, agitation, pH effects of combining wastes, etc.) reasonably expected to occur in the tank. For the purpose of this subpart, maximum organic vapor pressure is determined using the procedures specified in Sec. 265.1084(c) of this subpart.

Metallic shoe seal means a continuous seal that is constructed of metal sheets which are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and is connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

No detectable organic emissions means no escape of organics to the atmosphere as determined using the procedure specified in Sec. 265.1084(d) of this subpart.

Point of waste origination means as follows:

(1) When the facility owner or operator is the generator of the hazardous waste, the point of waste origination means the point where a solid waste produced by a system, process, or waste management unit is determined to be a hazardous waste as defined in 40 CFR part 261.

Note: In this case, this term is being used in a manner similar to the use of the term ``point of generation'' in air standards established for waste management operations under authority of the Clean Air Act in 40 CFR parts 60, 61, and 63.]

(2) When the facility owner and operator are not the generator of the hazardous waste, point of waste origination means the point where the owner or operator accepts delivery or takes possession of the hazardous waste.

Point of waste treatment means the point where a hazardous waste to be treated in accordance with Sec. 265.1083(c)(2) of this subpart exits the treatment process. Any waste determination shall be made before the waste is conveyed, handled, or otherwise managed in a manner that allows the waste to volatilize to the atmosphere.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials.

Single-seal system means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

Vapor-mounted seal means a continuous seal that is mounted such that there is a vapor space between the hazardous waste in the unit and the bottom of the seal.

Volatile organic concentration or VO concentration means the fraction by weight of the volatile organic compounds contained in a hazardous waste expressed in terms of parts per million (ppmw) as determined by direct measurement or by knowledge of the waste in accordance with the requirements of Sec. 265.1084 of this subpart. For the purpose of determining the VO concentration of a hazardous waste, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in the liquid-phase (0.1 Y/X) (which can also be expressed as $1.8x10^{-6}$

atmospheres/gram-mole/m^3) at 25 degrees Celsius must be included. Appendix VI of this subpart presents a list of compounds known to have a Henry's law constant value less than the cutoff level.

Waste determination means performing all applicable procedures in accordance with the requirements of Sec. 265.1084 of this subpart to determine whether a hazardous waste meets standards specified in this subpart. Examples of a waste determination include performing the procedures in accordance with the requirements of Sec. 265.1084 of this subpart to determine the average VO concentration of a hazardous waste at the point of waste origination; the average VO concentration of a hazardous waste at the point of waste treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous waste; the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous waste and comparing the results to the applicable standards; or the maximum volatile organic vapor pressure for a hazardous waste in a tank and comparing the results to the applicable standards.

Waste stabilization process means any physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids as determined by Test Method 9095B (Paint Filter Liquids Test) in ``Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in Sec. 260.11. A waste stabilization process includes mixing the hazardous waste with binders or other materials, and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to this process are ``waste fixation" or ``waste solidification." This does not include the adding of absorbent materials to the surface of a waste, without mixing, agitation, or subsequent curing, to absorb free liquid.

[59 FR 62935, Dec. 6, 1994, as amended at 61 FR 4914, Feb. 9, 1996; 61 FR 59971, Nov. 25, 1996; 62 FR 64662, Dec. 8, 1997]

§265.1082: Schedule for implementation of air emission standards.

(a) Owners or operators of facilities existing on December 6, 1996 and subject to subparts I, J, and K of this part shall meet the following requirements:
(1) Install and begin operation of all control equipment or waste management units required to comply with this subpart and complete modifications of production or treatment processes to satisfy exemption criteria in accordance with Sec. 265.1083(c) of this subpart by December 6, 1996, except as provided for in paragraph (a)(2) of this section.
(2) When control equipment or waste management units required to comply with this subpart cannot be installed and in operation or modifications of production or treatment processes to satisfy exemption criteria in accordance with Sec. 265.1083(c) of this subpart cannot be completed by December 6, 1996, the owner or operator shall:

(i) Install and begin operation of the control equipment and waste management units, and complete modifications of production or treatment processes as soon as possible but no later than December 8, 1997.
(ii) Prepare an implementation schedule that includes the following information: specific calendar dates for award of contracts or issuance of purchase orders for control equipment, waste management units, and production or treatment process modifications; initiation of on-site installation of control equipment or waste management units, and modifications of production or treatment processes; completion of control equipment or waste management unit installation, and production or treatment process modifications; and performance of testing to demonstrate that the installed equipment or waste management units, and modified production or treatment processes meet the applicable standards of this subpart.
(iii) For facilities subject to the recordkeeping requirements of Sec. 265.73 of this part, the owner or operator shall enter the implementation schedule specified in paragraph (a)(2)(ii) of this section in the operating record no later than December 6, 1996.
(iv) For facilities not subject to Sec. 265.73 of this part, the owner or operator shall enter the implementation schedule specified in paragraph (a)(2)(ii) of this section in a permanent, readily available file located at the facility no later than December 6, 1996.
(b) Owners or operators of facilities and units in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to subparts I, J, or K of this part shall meet the following requirements:
(1) Install and begin operation of control equipment or waste management units required to comply with this subpart, and complete modifications of production or treatment processes to satisfy exemption criteria of Sec. 265.1083(c) of this subpart by the effective date of the amendment, except as provided for in paragraph (b)(2) of this section.
(2) When control equipment or waste management units required to comply with this subpart cannot be installed and begin operation, or when modifications of production or treatment processes to satisfy exemption criteria of Sec. 265.1083(c) of this subpart cannot be completed by the effective date of the amendment, the owner or operator shall:
(i) Install and begin operation of the control equipment or waste management unit, and complete modification of production or treatment processes as soon as possible but no later than 30 months after the effective date of the amendment.
(ii) For facilities subject to the recordkeeping requirements of Sec. 265.73 of this part, enter and maintain the implementation schedule specified in paragraph (a)(2)(ii) of this section in the operating record no later than the effective date of the amendment, or
(iii) For facilities not subject to Sec. 265.73 of this part, the owner or operator shall enter and maintain the implementation schedule specified in paragraph (a)(2)(ii) of this section in a permanent, readily available file located at the facility site no later than the effective date of the amendment.
(c) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997 due to an action other than those described in paragraph (b) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

(d) The Regional Administrator may elect to extend the implementation date for control equipment at a facility, on a case by case basis, to a date later than December 8, 1997, when special circumstances that are beyond the facility owner's or operator's control delay installation or operation of control equipment, and the owner or operator has made all reasonable and prudent attempts to comply with the requirements of this subpart.

[62 FR 64662, Dec. 8, 1997]

§265.1083: Standards: General.

(a) This section applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to this subpart.
(b) The owner or operator shall control air pollutant emissions from each hazardous waste management unit in accordance with standards specified in Sec. Sec. 265.1085 through 265.1088 of this subpart, as applicable to the hazardous waste management unit, except as provided for in paragraph (c) of this section.
(c) A tank, surface impoundment, or container is exempt from standards specified in Sec. 265.1085 through Sec. 265.1088 of this subpart, as applicable, provided that the waste management unit is one of the following:
(1) A tank, surface impoundment, or container for which all hazardous waste entering the unit has an average VO concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration shall be determined using the procedures specified in Sec. 265.1084(a) of this subpart. The owner or operator shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous waste streams entering the unit.
(2) A tank, surface impoundment, or container for which the organic content of all the hazardous waste entering the waste management unit has been reduced by an organic destruction or removal process that achieves any one of the following conditions:
(i) A process that removes or destroys the organics contained in the hazardous waste to a level such that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit concentration limit (C_t) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit concentration limit for the process shall be determined using the procedures specified in Sec. 265.1084(b) of this subpart.
(ii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 100 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in Sec. 265.1084(b) of this subpart.
(iii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the actual organic mass removal rate (MR) for the process is equal to or greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process shall be determined using the procedures specified in Sec. 265.1084(b) of this subpart.

(iv) A biological process that destroys or degrades the organics contained in the hazardous waste, such that either of the following conditions is met:
(A) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (R_{bio}) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process shall be determined using the procedures specified in Sec. 265.1084(b) of this subpart.
(B) The total actual organic mass biodegradation rate (MR_{bio}) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR). The required organic mass removal rate and the actual organic mass biodegradation rate for the process shall be determined using the procedures specified in Sec. 265.1084(b) of this subpart.
(v) A process that removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:
(A) From the point of waste origination through the point where the hazardous waste enters the treatment process, the hazardous waste is managed continuously in waste management units which use air emission controls in accordance with the standards specified in Sec. 265.1085 through Sec. 265.1088 of this subpart, as applicable to the waste management unit.
(B) From the point of waste origination through the point where the hazardous waste enters the treatment process, any transfer of the hazardous waste is accomplished through continuous hard-piping or other closed system transfer that does not allow exposure of the waste to the atmosphere. The EPA considers a drain system that meets the requirements of 40 CFR part 63, subpart RR--National Emission Standards for Individual Drain Systems to be a closed system.
(C) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination determined for each of the individual waste streams entering the process or 500 ppmw, whichever value is lower. The average VO concentration of each individual waste stream at the point of waste origination shall be determined using the procedures specified in Sec. 265.1084(a) of this subpart. The average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in Sec. 265.1084(b) of this subpart.
(vi) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent and the owner or operator certifies that the average VO concentration at the point of waste origination for each of the individual waste streams entering the process is less than 10,000 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste origination shall be determined using the procedures specified in Sec. 265.1084(b) and Sec. 265.1084(a) of this subpart, respectively.
(vii) A hazardous waste incinerator for which the owner or operator has either:
(A) Been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 264, subpart O; or
(B) Has designed and operates the incinerator in accordance with the interim status requirements of subpart O of this part.

(viii) A boiler or industrial furnace for which the owner or operator has either:
(A) Been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 266, subpart H, or
(B) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of 40 CFR part 266, subpart H.
(ix) For the purpose of determining the performance of an organic destruction or removal process in accordance with the conditions in each of paragraphs (c)(2)(i) through (c)(2)(vi) of this section, the owner or operator shall account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:
(A) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A, or a value of 25 ppmw, whichever is less.
(B) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as $1.8x10^{-6}$ atmospheres/gram-mole/m^3] at 25 degrees Celsius.
(3) A tank or surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of paragraph (c)(2)(iv) of this section.
(4) A tank, surface impoundment, or container for which all hazardous waste placed in the unit either:
(i) Meets the numerical concentration limits for organic hazardous constituents, applicable to the hazardous waste, as specified in 40 CFR part 268--Land Disposal Restrictions under Table ``Treatment Standards for Hazardous Waste" in 40 CFR 268.40; or
(ii) The organic hazardous constituents in the waste have been treated by the treatment technology established by the EPA for the waste in 40 CFR 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by EPA pursuant to 40 CFR 268.42(b).
(5) A tank used for bulk feed of hazardous waste to a waste incinerator and all of the following conditions are met:
(i) The tank is located inside an enclosure vented to a control device that is designed and operated in accordance with all applicable requirements specified under 40 CFR part 61, subpart FF--National Emission Standards for Benzene Waste Operations for a facility at which the total annual benzene quantity from the facility waste is equal to or greater than 10 megagrams per year;
(ii) The enclosure and control device serving the tank were installed and began operation prior to November 25, 1996; and
(iii) The enclosure is designed and operated in accordance with the criteria for a permanent total enclosure as specified in ``Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40CFR 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical or electrical equipment; or to direct air flow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to

``Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" annually.
(d) The Regional Administrator may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of this section as follows:
(1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination shall be performed using direct measurement in accordance with the applicable requirements of Sec. 265.1084(a) of this subpart. The waste determination for a hazardous waste at the point of waste treatment shall be performed in accordance with the applicable requirements of Sec. 265.1084(b) of this subpart.
(2) In performing a waste determination pursuant to paragraph (d)(1) of this section, the sample preparation and analysis shall be conducted as follows:
(i) In accordance with the method used by the owner or operator to perform the waste analysis, except in the case specified in paragraph (d)(2)(ii) of this section.
(ii) If the Regional Administrator determines that the method used by the owner or operator was not appropriate for the hazardous waste managed in the tank, surface impoundment, or container, then the Regional Administrator may choose an appropriate method.
(3) In a case when the owner or operator is requested to perform the waste determination, the Regional Administrator may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis.
(4) In a case when the results of the waste determination performed or requested by the Regional Administrator do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste determination performed in accordance with the requirements of paragraph (d)(1) of this section shall be used to establish compliance with the requirements of this subpart.
(5) In a case when the owner or operator has used an averaging period greater than 1 hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Regional Administrator may elect to establish compliance with this subpart by performing or requesting that the owner or operator perform a waste determination using direct measurement based on waste samples collected within a 1-hour period as follows:
(i) The average VO concentration of the hazardous waste at the point of waste origination shall be determined by direct measurement in accordance with the requirements of Sec. 265.1084(a) of this subpart.
(ii) Results of the waste determination performed or requested by the Regional Administrator showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater than 500 ppmw shall constitute noncompliance with this subpart except in a case as provided for in paragraph (d)(5)(iii) of this section.
(iii) For the case when the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than 1 hour to be less than 500 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given 1-hour period may be equal to or greater than 500

ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste (e.g., test results, measurements, calculations, and other documentation) and recorded in the facility records in accordance with the requirements of Sec. 265.1084(a) and Sec. 265.1090 of this subpart shall be considered by the Regional Administrator together with the results of the waste determination performed or requested by the Regional Administrator in establishing compliance with this subpart.

[61 FR 59972, Nov. 25, 1996, as amended at 62 FR 64663, Dec. 8, 1997]

§265.1084: Waste determination procedures.

(a) Waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.
(1) An owner or operator shall determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of Sec. 265.1083(c)(1) of this subpart from using air emission controls in accordance with standards specified in Sec. 265.1085 through Sec. 265.1088 of this subpart, as applicable to the waste management unit.
(i) An initial determination of the average VO concentration of the waste stream shall be made before the first time any portion of the material in the hazardous waste stream is placed in a waste management unit exempted under the provisions of Sec. 265.1083(c)(1) of this subpart from using air emission controls, and thereafter an initial determination of the average VO concentration of the waste stream shall be made for each averaging period that a hazardous waste is managed in the unit; and
(ii) Perform a new waste determination whenever changes to the source generating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level that is equal to or greater than the VO concentration limit specified in Sec. 265.1083(c)(1) of this subpart.
(2) For a waste determination that is required by paragraph (a)(1) of this section, the average VO concentration of a hazardous waste at the point of waste origination shall be determined using either direct measurement as specified in paragraph (a)(3) of this section or by knowledge as specified in paragraph (a)(4) of this section.
(3) Direct measurement to determine average VO concentration of a hazardous waste at the point of waste origination.
(i) Identification. The owner or operator shall identify and record the point of waste origination for the hazardous waste.
(ii) Sampling. Samples of the hazardous waste stream shall be collected at the point of waste origination in a manner such that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.
(A) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the hazardous waste stream but shall not exceed 1 year.

(B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous waste determination. All of the samples for a given waste determination shall be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

(C) All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous waste stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the facility operating records. An example of acceptable sample collection and handling procedures for a total volatile organic constituent concentration may be found in Method 25D in 40 CFR part 60, appendix A.

(D) Sufficient information, as specified in the ``site sampling plan'' required under paragraph (a)(3)(ii)(C) of this section, shall be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the source or process generating the hazardous waste represented by the samples.

(iii) Analysis. Each collected sample shall be prepared and analyzed in accordance with Method 25D in 40 CFR part 60, appendix A for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius. At the owner or operator's discretion, the owner or operator may adjust test data obtained by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value of less than 0.1 Y/X at 25 degrees Celsius. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}). If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 degrees Celsius contained in the waste. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in paragraph (a)(3)(iii)(A) or (B) of this section and provided the requirement to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X [which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius, is met.

(A) Any EPA standard method that has been validated in accordance with ``Alternative Validation Procedure for EPA Waste and Wastewater Methods," 40 CFR part 63, appendix D.

(B) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR part 63, appendix A. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

(iv) Calculations.

(A) The average VO concentration (C) on a mass-weighted basis shall be calculated by using the results for all waste determinations conducted in accordance with paragraphs (a)(3) (ii) and (iii) of this section and the following equation:

$$\overline{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} (Q_i \times C_i)$$

where:

C = Average VO concentration of the hazardous waste at the point of waste origination on a mass-weighted basis, ppmw.

i = Individual waste determination ``i" of the hazardous waste.

n = Total number of waste determinations of the hazardous waste conducted for the averaging period (not to exceed 1 year).

Q_i = Mass quantity of hazardous waste stream represented by Ci, kg/hr.

Q_T = Total mass quantity of hazardous waste during the averaging period, kg/hr.

C_i = Measured VO concentration of waste determination ``i" as determined in accordance with the requirements of paragraph (a)(3)(iii) of this section (i.e. the average of the four or more samples specified in paragraph (a)(3)(ii)(B) of this section), ppmw.

(B) For the purpose of determining C_i, for individual waste samples analyzed in accordance with paragraph (a)(3)(iii) of this section, the owner or operator shall account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

(1) If Method 25D in 40 CFR part 60, Appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A.

(2) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius.

(v) Provided that the test method is appropriate for the waste as required under paragraph (a)(3)(iii) of this section, the EPA will determine compliance based on the test method used by the owner or operator as recorded pursuant to Sec. 265.1090(f)(1) of this subpart.

(4) Use of owner or operator knowledge to determine average VO concentration of a hazardous waste at the point of waste origination.
(i) Documentation shall be prepared that presents the information used as the basis for the owner's or operator's knowledge of the hazardous waste stream's average VO concentration. Examples of information that may be used as the basis for knowledge include: Material balances for the source or process generating the hazardous waste stream; constituent-specific chemical test data for the hazardous waste stream from previous testing that are still applicable to the current waste stream; previous test data for other locations managing the same type of waste stream; or other knowledge based on information included in manifests, shipping papers, or waste certification notices.
(ii) If test data are used as the basis for knowledge, then the owner or operator shall document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, an owner or operator may use organic concentration test data for the hazardous waste stream that are validated in accordance with Method 301 in 40 CFR part 63, appendix A as the basis for knowledge of the waste.
(iii) An owner or operator using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous waste may adjust the test data to the corresponding average VO concentration value which would have been obtained had the waste samples been analyzed using Method 25D in 40 CFR part 60, appendix A. To adjust these data, the measured concentration for each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}).
(iv) In the event that the Regional Administrator and the owner or operator disagree on a determination of the average VO concentration for a hazardous waste stream using knowledge, then the results from a determination of average VO concentration using direct measurement as specified in paragraph (a)(3) of this section shall be used to establish compliance with the applicable requirements of this subpart. The Regional Administrator may perform or request that the owner or operator perform this determination using direct measurement. The owner or operator may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of paragraph (a)(3)(iii) of this section.
(b) Waste determination procedures for treated hazardous waste.
(1) An owner or operator shall perform the applicable waste determination for each treated hazardous waste placed in a waste management unit exempted under the provisions of Sec. 265.1083 (c)(2)(i) through (c)(2)(vi) of this subpart from using air emission controls in accordance with standards specified in Sec. Sec. 265.1085 through 265.1088 of this subpart, as applicable to the waste management unit.
(i) An initial determination of the average VO concentration of the waste stream shall be made before the first time any portion of the material in the treated waste stream is placed in a waste management unit exempted under the provisions of Sec. 265.1083(c)(2), Sec. 265.1083(c)(3), or Sec. 265.1083(c)(4) of this subpart from using air emission controls, and thereafter update the information used for the waste determination at least once every 12 months following the date of the initial waste determination; and
(ii) Perform a new waste determination whenever changes to the process generating or treating the waste stream are reasonably likely to cause the average VO concentration of

the hazardous waste to increase to a level such that the applicable treatment conditions specified in Sec. 265.1083(c)(2), Sec. 265.1083(c)(3), or Sec. 265.1083(c)(4) of this subpart are not achieved.
(2) The owner or operator shall designate and record the specific provision in Sec. 265.1083(c)(2) of this subpart under which the waste determination is being performed. The waste determination for the treated hazardous waste shall be performed using the applicable procedures specified in paragraphs (b)(3) through (b)(9) of this section.
(3) Procedure to determine the average VO concentration of a hazardous waste at the point of waste treatment.
(i) Identification. The owner or operator shall identify and record the point of waste treatment for the hazardous waste.
(ii) Sampling. Samples of the hazardous waste stream shall be collected at the point of waste treatment in a manner such that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.
(A) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the hazardous waste stream but shall not exceed 1 year.
(B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous waste determination. All of the samples for a given waste determination shall be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the process generating or treating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.
(C) All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous waste stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the facility operating records. An example of acceptable sample collection and handling procedures for a total volatile organic constituent concentration may be found in Method 25D in 40 CFR part 60, appendix A.
(D) Sufficient information, as specified in the ``site sampling plan" required under paragraph (C) of (b)(3)(ii)this section, Sec. 265.1084(b)(3)(ii), shall be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the process treating the hazardous waste represented by the samples.
(iii) Analysis. Each collected sample shall be prepared and analyzed in accordance with Method 25D in 40 CFR part 60, appendix A for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts

for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8 x 10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius.

When the owner or operator is making a waste determination for a treated hazardous waste that is to be compared to an average VO concentration at the point of waste origination or the point of waste entry to the treatment system to determine if the conditions of Sec. 264.1082(c)(2)(i) through (c)(2)(vi) of this chapter, or Sec. 265.1083(c)(2)(i) through (c)(2)(vi) of this subpart are met, then the waste samples shall be prepared and analyzed using the same method or methods as were used in making the initial waste determinations at the point of waste origination or at the point of entry to the treatment system. At the owner or operator's discretion, the owner or operator may adjust test data obtained by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value less than 0.1 Y/X at 25 degrees Celsius. To adjust these data, the measured concentration of each individual chemical constituent in the waste is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}). If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 degrees Celsius contained in the waste. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in paragraph (a)(3)(iii)(A) or (B) of this section and provided the requirement to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X [which can also be expressed as 1.8 x 10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius, is met.

(A) Any EPA standard method that has been validated in accordance with ``Alternative Validation Procedure for EPA Waste and Wastewater Methods," 40 CFR part 63, appendix D.

(B) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR part 63, appendix A. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

(iv) Calculations. The average VO concentration (C) on a mass-weighted basis shall be calculated by using the results for all waste determinations conducted in accordance with paragraphs (b)(3)(ii) and (iii) of this section and the following equation:

$$\overline{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} (Q_i \times C_i)$$

where:

C=Average VO concentration of the hazardous waste at the point of waste treatment on a mass-weighted basis, ppmw.
i=Individual waste determination ``i'' of the hazardous waste.
n=Total number of waste determinations of the hazardous waste conductedfor the averaging period (not to exceed 1 year).
Q_i=Mass quantity of hazardous waste stream represented by C_i, kg/hr.
Q_T=Total mass quantity of hazardous waste during the averaging period, kg/hr.
C_i=Measured VO concentration of waste determination ``i'' as determined in accordance with the requirements of paragraph (b)(3)(iii) of this section (i.e. the average of the four or more samples specified in paragraph (b)(3)(ii)(B) of this section), ppmw.

(v) Provided that the test method is appropriate for the waste as required under paragraph (b)(3)(iii) of this section, compliance shall be determined based on the test method used by the owner or operator as recorded pursuant to Sec. 265.1090(f)(1) of this subpart.
(4) Procedure to determine the exit concentration limit (C_t) for a treated hazardous waste.
(i) The point of waste origination for each hazardous waste treated by the process at the same time shall be identified.
(ii) If a single hazardous waste stream is identified in paragraph (b)(4)(i) of this section, then the exit concentration limit (C_t) shall be 500 ppmw.
(iii) If more than one hazardous waste stream is identified in paragraph (b)(4)(i) of this section, then the average VO concentration of each hazardous waste stream at the point of waste origination shall be determined in accordance with the requirements of paragraph (a) of this section. The exit concentration limit (C_t) shall be calculated by using the results determined for each individual hazardous waste stream and the following equation:

$$C_t = \frac{\sum_{x=1}^{m}\left(Q_x \times \overline{C_x}\right) + \sum_{y=1}^{n}\left(Q_y \times 500\text{ ppmw}\right)}{\sum_{x=1}^{m} Q_x + \sum_{y=1}^{n} Q_y}$$

Where:

C_t = Exit concentration limit for treated hazardous waste, ppmw.
x = Individual hazardous waste stream ``x'' that has an average VO concentration less than 500 ppmw at the point of waste origination as determined in accordance with the requirements of Sec. 265.1084(a) of this subpart.
y = Individual hazardous waste stream ``y'' that has an average VO concentration equal to or greater than 500 ppmw at the point of waste origination as determined in accordance with the requirements of Sec. 265.1084(a) of this subpart.
m = Total number of ``x'' hazardous waste streams treated by process.
n = Total number of ``y'' hazardous waste streams treated by process.
Q_x = Annual mass quantity of hazardous waste stream ``x,'' kg/yr.
Q_y = Annual mass quantity of hazardous waste stream ``y,'' kg/yr.

C_x = Average VO concentration of hazardous waste stream ``x'' at the point of waste origination as determined in accordance with the requirements of Sec. 265.1084(a) of this subpart, ppmw.

(5) Procedure to determine the organic reduction efficiency (R) for a treated hazardous waste.
(i) The organic reduction efficiency (R) for a treatment process shall be determined based on results for a minimum of three consecutive runs.
(ii) All hazardous waste streams entering the treatment process and all hazardous waste streams exiting the treatment process shall be identified. The owner or operator shall prepare a sampling plan for measuring these streams that accurately reflects the retention time of the hazardous waste in the process.
(iii) For each run, information shall be determined for each hazardous waste stream identified in paragraph (b)(5)(ii) of this section using the following procedures:
(A) The mass quantity of each hazardous waste stream entering the process (Q_b) and the mass quantity of each hazardous waste stream exiting the process (Q_a) shall be determined.
(B) The average VO concentration at the point of waste origination of each hazardous waste stream entering the process (C_b) during the run shall be determined in accordance with the requirements of paragraph (a)(3) of this section. The average VO concentration at the point of waste treatment of each waste stream exiting the process (C_a) during the run shall be determined in accordance with the requirements of paragraph (b)(3) of this section.
(iv) The waste volatile organic mass flow entering the process (E_b) and the waste volatile organic mass flow exiting the process (E_a) shall be calculated by using the results determined in accordance with paragraph (b)(5)(iii) of this section and the following equations:

$$E_b = \frac{1}{10^6} \sum_{j=1}^{m} \left(Q_{bj} \times \overline{C_{bj}} \right)$$

$$E_a = \frac{1}{10^6} \sum_{j=1}^{m} \left(Q_{aj} \times \overline{C_{aj}} \right)$$

Where:

E_a = Waste volatile organic mass flow exiting process, kg/hr.
E_b = Waste volatile organic mass flow entering process, kg/hr.
m = Total number of runs (at least 3)
j = Individual run ``j''
Q_b = Mass quantity of hazardous waste entering process during run ``j,'' kg/hr.
Q_a = Average mass quantity of hazardous waste exiting process during run ``j,'' kg/hr.
C_a = Average VO concentration of hazardous waste exiting process during run ``j'' as determined in accordance with the requirements of Sec. 265.1084(b)(3) of this subpart, ppmw.

C_b = Average VO concentration of hazardous waste entering process during run ``j'' as determined in accordance with the requirements of Sec. 265.1084(a)(3) of this subpart, ppmw.

(v) The organic reduction efficiency of the process shall be calculated by using the results determined in accordance with paragraph (b)(5)(iv) of this section and the following equation:

$$R = \frac{E_b - E_a}{E_b} \times 100\%$$

Where:

R = Organic reduction efficiency, percent.
E_b = Waste volatile organic mass flow entering process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.
E_a = Waste volatile organic mass flow exiting process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.

(6) Procedure to determine the organic biodegradation efficiency (R_{bio}) for a treated hazardous waste.
(i) The fraction of organics biodegraded (F_{bio}) shall be determined using the procedure specified in 40 CFR part 63, appendix C of this chapter.
(ii) The R_{bio} shall be calculated by using the following equation:

$$R_{bio} = F_{bio} \times 100\%$$

Where:

R_{bio} = Organic biodegradation efficiency, percent.
F_{bio} = Fraction of organic biodegraded as determined in accordance with the requirements of paragraph (b)(6)(i) of this section.

(7) Procedure to determine the required organic mass removal rate (RMR) for a treated hazardous waste.
(i) All of the hazardous waste streams entering the treatment process shall be identified.
(ii) The average VO concentration of each hazardous waste stream at the point of waste origination shall be determined in accordance with the requirements of paragraph (a) of this section.
(iii) For each individual hazardous waste stream that has an average VO concentration equal to or greater than 500 ppmw at the point of waste origination, the average volumetric flow rate and the density of the hazardous waste stream at the point of waste origination shall be determined.
(iv) The RMR shall be calculated by using the average VO concentration, average volumetric flow rate, and density determined for each individual hazardous waste stream, and the following equation:

$$RMR = \sum_{y=1}^{n} \left[V_y \times k_y \times \frac{\left(\overline{C_y} - 500 \text{ ppmw}\right)}{10^6} \right]$$

Where:

RMR = Required organic mass removal rate, kg/hr.
y = Individual hazardous waste stream ``y'' that has an average VO concentration equal to or greater than 500 ppmw at the point of waste origination as determined in accordance with the requirements of Sec. 265.1084(a) of this subpart.
n = Total number of ``y'' hazardous waste streams treated by process.
V_y = Average volumetric flow rate of hazardous waste stream ``y'' at the point of waste origination, m^3/hr.
k_y = Density of hazardous waste stream ``y,'' kg/m^3
C_y = Average VO concentration of hazardous waste stream ``y'' at the point of waste origination as determined in accordance with the requirements of Sec. 265.1084(a) of this subpart, ppmw.

(8) Procedure to determine the actual organic mass removal rate (MR) for a treated hazardous waste.
(i) The MR shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be 1 hour.
(ii) The waste volatile organic mass flow entering the process (E_b) and the waste volatile organic mass flow exiting the process (E_a) shall be determined in accordance with the requirements of paragraph (b)(5)(iv) of this section.
(iii) The MR shall be calculated by using the mass flow rate determined in accordance with the requirements of paragraph (b)(8)(ii) of this section and the following equation:

$MR=E_b-E_a$

Where:
MR=Actual organic mass removal rate, kg/hr.
E_b=Waste volatile organic mass flow entering process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.
E_a=Waste volatile organic mass flow exiting process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.

(9) Procedure to determine the actual organic mass biodegradation rate (MR_{bio}) for a treated hazardous waste.
(i) The MR_{bio} shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be 1 hour.
(ii) The waste organic mass flow entering the process (E_b) shall be determined in accordance with the requirements of paragraph (b)(5)(iv) of this section.
(iii) The fraction of organic biodegraded (F_{bio}) shall be determined using the procedure specified in 40 CFR part 63, appendix C of this chapter.

(iv) The MR_{bio} shall be calculated by using the mass flow rates and fraction of organic biodegraded determined in accordance with the requirements of paragraphs (b)(9)(ii) and (b)(9)(iii) of this section, respectively, and the following equation:

$MR_{bio}=E_b x F_{bio}$

Where:

MR_{bio}=Actual organic mass biodegradation rate, kg/hr.
E_b=Waste organic mass flow entering process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.
F_{bio}=Fraction of organic biodegraded as determined in accordance with the requirements of paragraph (b)(9)(iii) of this section.

(c) Procedure to determine the maximum organic vapor pressure of a hazardous waste in a tank.
(1) An owner or operator shall determine the maximum organic vapor pressure for each hazardous waste placed in a tank using Tank Level 1 controls in accordance with the standards specified in Sec. 265.1085(c) of this subpart.
(2) An owner or operator shall use either direct measurement as specified in paragraph (c)(3) of this section or knowledge of the waste as specified by paragraph (c)(4) of this section to determine the maximum organic vapor pressure which is representative of the hazardous waste composition stored or treated in the tank.
(3) Direct measurement to determine the maximum organic vapor pressure of a hazardous waste.
(i) Sampling. A sufficient number of samples shall be collected to be representative of the waste contained in the tank. All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous waste are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the facility operating records. An example of acceptable sample collection and handling procedures may be found in Method 25D in 40 CFR part 60, appendix A.
(ii) Analysis. Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous waste:
(A) Method 25E in 40 CFR part 60 appendix A;
(B) Methods described in American Petroleum Institute Publication 2517, Third Edition, February 1989, ``Evaporative Loss from External Floating-Roof Tanks," (incorporated by reference--refer to Sec. 260.11 of this chapter);
(C) Methods obtained from standard reference texts;
(D) ASTM Method 2879-92 (incorporated by reference--refer to Sec. 260.11 of this chapter); and

(E) Any other method approved by the Regional Administrator.

(4) Use of knowledge to determine the maximum organic vapor pressure of the hazardous waste. Documentation shall be prepared and recorded that presents the information used as the basis for the owner's or operator's knowledge that the maximum organic vapor pressure of the hazardous waste is less than the maximum vapor pressure limit listed in Sec. 265.1085(b)(1)(i) of this subpart for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous waste is generated by a process for which at other locations it previously has been determined by direct measurement that the waste maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.
(d) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart:
(1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: The interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure relief valve.
(2) The test shall be performed when the unit contains a hazardous waste having an organic concentration representative of the range of concentrations for the hazardous waste expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
(3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the hazardous waste placed in the waste management unit, not for each individual organic constituent.
(4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
(5) Calibration gases shall be as follows:
(i) Zero air (less than 10 ppmv hydrocarbon in air), and
(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppmv methane or n-hexane.
(6) The background level shall be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21 of 40 CFR part 60, appendix A. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.
(8) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover

opening, in which case the comparison shall be as specified in paragraph (d)(9) of this section. If the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.
(9) For the seals around a rotating shaft that passes through a cover opening, the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

[61 FR 59974, Nov. 25, 1996, as amended at 62 FR 64664, Dec. 8, 1997; 64 FR 3390, January 21, 1999]

§265.1085 Standards: Tanks.

(a) The provisions of this section apply to the control of air pollutant emissions from tanks for which Sec. 265.1083(b) of this subpart references the use of this section for such air emission control.
(b) The owner or operator shall control air pollutant emissions from each tank subject to this section in accordance with the following requirements, as applicable:
(1) For a tank that manages hazardous waste that meets all of the conditions specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section, the owner or operator shall control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in paragraph (c) of this section or the Tank Level 2 controls specified in paragraph (d) of this section.
(i) The hazardous waste in the tank has a maximum organic vapor pressure which is less than the maximum organic vapor pressure limit for the tank's design capacity category as follows:
(A) For a tank design capacity equal to or greater than 151 m^3, the maximum organic vapor pressure limit for the tank is 5.2 kPa.
(B) For a tank design capacity equal to or greater than 75 m^3 but less than 151 m^3, the maximum organic vapor pressure limit for the tank is 27.6 kPa.
(C) For a tank design capacity less than 75 m^3, the maximum organic vapor pressure limit for the tank is 76.6 kPa.
(ii) The hazardous waste in the tank is not heated by the owner or operator to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous waste is determined for the purpose of complying with paragraph (b)(1)(i) of this section.
(iii) The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process, as defined in Sec. 265.1081 of this subpart.
(2) For a tank that manages hazardous waste that does not meet all of the conditions specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section, the owner or operator shall control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section. Examples of tanks required to use Tank Level 2 controls include: A tank used for a waste stabilization process; and a tank for which the hazardous waste in the tank has a maximum organic

vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category as specified in paragraph (b)(1)(i) of this section.
(c) Owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls shall meet the requirements specified in paragraphs (c)(1) through (c)(4) of this section:
(1) The owner or operator shall determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level 1 controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure shall be determined using the procedures specified in Sec. 265.1084(c) of this subpart. Thereafter, the owner or operator shall perform a new determination whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in paragraph (b)(1)(i) of this section, as applicable to the tank.
(2) The tank shall be equipped with a fixed roof designed to meet the following specifications:
(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).
(ii) The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.
(iii) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:
(A) Equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or
(B) Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever hazardous waste is managed in the tank, except as provided for in paragraphs (c)(2)(iii)(B)(1) and (2) of this section.
(1) During periods it is necessary to provide access to the tank for performing the activities of paragraph (c)(2)(iii)(B)(2) of this section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.
(2) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for the removal of accumulated sludge or other residues from the bottom of the tank.
(iv) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended

service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: Organic vapor permeability, the effects of any contact with the hazardous waste or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.
(3) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:
(i) Opening of closure devices or removal of the fixed roof is allowed at the following times:
(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
(B) To remove accumulated sludge or other residues from the bottom of tank.
(ii) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the owner or operator based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.
(iii) Opening of a safety device, as defined in Sec. 265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.
(4) The owner or operator shall inspect the air emission control equipment in accordance with the following requirements.
(i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
(ii) The owner or operator shall perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except under the special conditions provided for in paragraph (l) of this section.
(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k) of this section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 265.1090(b) of this subpart.
(d) Owners and operators controlling air pollutant emissions from a tank using Tank Level 2 controls shall use one of the following tanks:
(1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in paragraph (e) of this section;
(2) A tank equipped with an external floating roof in accordance with the requirements specified in paragraph (f) of this section;
(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (g) of this section;
(4) A pressure tank designed and operated in accordance with the requirements specified in paragraph (h) of this section; or
(5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in paragraph (i) of this section.
(e) The owner or operator who controls air pollutant emissions from a tank using a fixed-roof with an internal floating roof shall meet the requirements specified in paragraphs (e)(1) through (e)(3) of this section.
(1) The tank shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:
(i) The internal floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.
(ii) The internal floating roof shall be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:
(A) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in Sec. 265.1081 of this subpart; or
(B) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.
(iii) The internal floating roof shall meet the following specifications:
(A) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
(B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.
(C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 percent of the opening.
(D) Each automatic bleeder vent and rim space vent shall be gasketed.
(E) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
(F) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.
(ii) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.
(iii) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed (i.e., no visible gaps). Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.
(3) The owner or operator shall inspect the internal floating roof in accordance with the procedures specified as follows:
(i) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: The internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the hazardous waste surface from the atmosphere; or the slotted membrane has more than 10 percent open area.
(ii) The owner or operator shall inspect the internal floating roof components as follows except as provided in paragraph (e)(3)(iii) of this section:
(A) Visually inspect the internal floating roof components through openings on the fixed-roof (e.g., manholes and roof hatches) at least once every 12 months after initial fill, and
(B) Visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 10 years.
(iii) As an alternative to performing the inspections specified in paragraph (e)(3)(ii) of this section for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or operator may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 5 years.
(iv) Prior to each inspection required by paragraph (e)(3)(ii) or (e)(3)(iii) of this section, the owner or operator shall notify the Regional Administrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Regional Administrator of the date and location of the inspection as follows:
(A) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (e)(3)(iv)(B) of this section.
(B) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Regional Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned

inspection, may be sent so that it is received by the Regional Administrator at least 7 calendar days before refilling the tank.
(v) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k) of this section.
(vi) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 265.1090(b) of this subpart.
(4) Safety devices, as defined in Sec. 265.1081 of this subpart, may be installed and operated as necessary on any tank complying with the requirements of paragraph (e) of this section.
(f) The owner or operator who controls air pollutant emissions from a tank using an external floating roof shall meet the requirements specified in paragraphs (f)(1) through (f)(3) of this section.
(1) The owner or operator shall design the external floating roof in accordance with the following requirements:
(i) The external floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.
(ii) The floating roof shall be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.
(A) The primary seal shall be a liquid-mounted seal or a metallic shoe seal, as defined in Sec. 265.1081 of this subpart. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters (cm^2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 3.8 centimeters (cm). If a metallic shoe seal is used for the primary seal, the metallic shoe seal shall be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 centimeters above the liquid surface.
(B) The secondary seal shall be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters (cm^2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 1.3 centimeters (cm).
(iii) The external floating roof shall meet the following specifications:
(A) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.
(B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid.
(C) Each access hatch and each gauge float well shall be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.
(D) Each automatic bleeder vent and each rim space vent shall be equipped with a gasket.
(E) Each roof drain that empties into the liquid managed in the tank shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.
(F) Each unslotted and slotted guide pole well shall be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

(G) Each unslotted guide pole shall be equipped with a gasketed cap on the end of the pole.
(H) Each slotted guide pole shall be equipped with a gasketed float or other device which closes off the liquid surface from the atmosphere.
(I) Each gauge hatch and each sample well shall be equipped with a gasketed cover.
(2) The owner or operator shall operate the tank in accordance with the following requirements:
(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.
(ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be secured and maintained in a closed position at all times except when the closure device must be open for access.
(iii) Covers on each access hatch and each gauge float well shall be bolted or fastened when secured in the closed position.
(iv) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.
(v) Rim space vents shall be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.
(vi) The cap on the end of each unslotted guide pole shall be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.
(vii) The cover on each gauge hatch or sample well shall be secured in the closed position at all times except when the hatch or well must be opened for access.
(viii) Both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.
(3) The owner or operator shall inspect the external floating roof in accordance with the procedures specified as follows:
(i) The owner or operator shall measure the external floating roof seal gaps in accordance with the following requirements:
(A) The owner or operator shall perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years.
(B) The owner or operator shall perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.
(C) If a tank ceases to hold hazardous waste for a period of 1 year or more, subsequent introduction of hazardous waste into the tank shall be considered an initial operation for the purposes of paragraphs (f)(3)(i)(A) and (f)(3)(i)(B) of this section.
(D) The owner or operator shall determine the total surface area of gaps in the primary seal and in the secondary seal individually using the following procedure:
(1) The seal gap measurements shall be performed at one or more floating roof levels when the roof is floating off the roof supports.
(2) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where a 0.32-centimeter (cm) diameter uniform probe passes freely (without

forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.
(3) For a seal gap measured under paragraph (f)(3) of this section, the gap surface area shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.
(4) The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in paragraph (f)(1)(ii) of this section.
(E) In the event that the seal gap measurements do not conform to the specifications in paragraph (f)(1)(ii) of this section, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k) of this section.
(F) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 265.1090(b) of this subpart.
(ii) The owner or operator shall visually inspect the external floating roof in accordance with the following requirements:
(A) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: Holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
(B) The owner or operator shall perform an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (l) of this section.
(C) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k) of this section.
(D) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 265.1090(b) of this subpart.
(iii) Prior to each inspection required by paragraph (f)(3)(i) or (f)(3)(ii) of this section, the owner or operator shall notify the Regional Administrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Regional Administrator of the date and location of the inspection as follows:
(A) Prior to each inspection to measure external floating roof seal gaps as required under paragraph (f)(3)(i) of this section, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before the date the measurements are scheduled to be performed.
(B) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days

before refilling the tank except when an inspection is not planned as provided for in paragraph (f)(3)(iii)(C) of this section.
(C) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Regional Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least 7 calendar days before refilling the tank.
(4) Safety devices, as defined in 40 CFR 265.1081, may be installed and operated as necessary on any tank complying with the requirements of paragraph (f) of this section.
(g) The owner or operator who controls air pollutant emissions from a tank by venting the tank to a control device shall meet the requirements specified in paragraphs (g)(1) through (g)(3) of this section.
(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:
(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.
(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.
(iii) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: Organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.
(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Sec. 265.1088 of this subpart.
(2) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:
(i) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:
(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker

needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
(B) To remove accumulated sludge or other residues from the bottom of a tank.
(ii) Opening of a safety device, as defined in Sec. 265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.
(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:
(i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in Sec. 265.1088 of this subpart.
(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (l) of this section.
(iv) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k) of this section.
(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 265.1090(b) of this subpart.
(h) The owner or operator who controls air pollutant emissions by using a pressure tank shall meet the following requirements.
(1) The tank shall be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.
(2) All tank openings shall be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in Sec.265.1084(d) of this subpart.
(3) Whenever a hazardous waste is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except under either of the following conditions as specified in paragraph (h)(3)(i) or (h)(3)(ii) of this section.
(i) At those times when opening of a safety device, as defined in Sec. 265.1081 of this subpart, is required to avoid an unsafe condition.
(ii) At those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of Sec. 265.1088 of this subpart.
(i) The owner or operator who controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device shall meet the requirements specified in paragraphs (i)(1) through (i)(4) of this section.
(1) The tank shall be located inside an enclosure. The enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in ``Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or

temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to ``Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure'' initially when the enclosure is first installed and, thereafter, annually.
(2) The enclosure shall be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in Sec. 265.1088 of this subpart.
(3) Safety devices, as defined in Sec. 265.1081 of this subpart, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of paragraphs (i)(1) and (i)(2) of this section.
(4) The owner or operator shall inspect and monitor the closed-vent system and control device as specified in Sec. 265.1088 of this subpart.
(j) The owner or operator shall transfer hazardous waste to a tank subject to this section in accordance with the following requirements:
(1) Transfer of hazardous waste, except as provided in paragraph (j)(2) of this section, to the tank from another tank subject to this section or from a surface impoundment subject to Sec. 265.1086 of this subpart shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR--National Emission Standards for Individual Drain Systems.
(2) The requirements of paragraph (j)(1) of this section do not apply when transferring a hazardous waste to the tank under any of the following conditions:
(i) The hazardous waste meets the average VO concentration conditions specified in Sec. 265.1083(c)(1) of this subpart at the point of waste origination.
(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Sec. 265.1083(c)(2) of this subpart.
(iii) The hazardous waste meets the requirements of Sec. 265.1083(c)(4) of this subpart.
(k) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraphs (c)(4), (e)(3), (f)(3), or (g)(3) of this section as follows:
(1) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (k)(2) of this section.
(2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(l) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this subpart, subsequent inspection and monitoring may be performed at intervals longer than 1 year under the following special conditions:
(1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the owner or operator may designate a cover as an ``unsafe to inspect and monitor cover'' and comply with all of the following requirements:
(i) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.
(ii) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable section of this subpart, as frequently as practicable during those times when a worker can safely access the cover.
(2) In the case when a tank is buried partially or entirely underground, an owner or operator is required to inspect and monitor, as required by the applicable provisions of this section, only those portions of the tank cover and those connections to the tank (e.g., fill ports, access hatches, gauge wells, etc.) that are located on or above the ground surface.

[61 FR 59979, Nov. 25, 1996, as amended at 62 FR 64666, Dec. 8, 1997; 64 FR 3391, Jan. 21, 1999]

§265.1086 Standards: Surface impoundments.

(a) The provisions of this section apply to the control of air pollutant emissions from surface impoundments for which Sec. 265.1083(b) of this subpart references the use of this section for such air emission control.
(b) The owner or operator shall control air pollutant emissions from the surface impoundment by installing and operating either of the following:
(1) A floating membrane cover in accordance with the provisions specified in paragraph (c) of this section; or
(2) A cover that is vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (d) of this section.
(c) The owner or operator who controls air pollutant emissions from a surface impoundment using a floating membrane cover shall meet the requirements specified in paragraphs (c)(1) through (c)(3) of this section.
(1) The surface impoundment shall be equipped with a floating membrane cover designed to meet the following specifications:
(i) The floating membrane cover shall be designed to float on the liquid surface during normal operations and form a continuous barrier over the entire surface area of the liquid.
(ii) The cover shall be fabricated from a synthetic membrane material that is either:
(A) High density polyethylene (HDPE) with a thickness no less than 2.5 millimeters (mm); or
(B) A material or a composite of different materials determined to have both organic permeability properties that are equivalent to those of the material listed in paragraph (c)(1)(ii)(A) of this section and chemical and physical properties that maintain the material integrity for the intended service life of the material.

(iii) The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.
(iv) Except as provided for in paragraph (c)(1)(v) of this section, each opening in the floating membrane cover shall be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device.
(v) The floating membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening or a flexible fabric sleeve seal.
(vi) The closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the floating membrane cover is installed.
(2) Whenever a hazardous waste is in the surface impoundment, the floating membrane cover shall float on the liquid and each closure device shall be secured in the closed position except as follows:
(i) Opening of closure devices or removal of the cover is allowed at the following times:
(A) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly replace the cover and secure the closure device in the closed position, as applicable.
(B) To remove accumulated sludge or other residues from the bottom of surface impoundment.
(ii) Opening of a safety device, as defined in Sec. 265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.
(3) The owner or operator shall inspect the floating membrane cover in accordance with the following procedures:
(i) The floating membrane cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
(ii) The owner or operator shall perform an initial inspection of the floating membrane cover and its closure devices on or before the date that the surface impoundment becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at

least once every year except for the special conditions provided for in paragraph (g) of this section.
(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (f) of this section.
(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 265.1090(c) of this subpart.
(d) The owner or operator who controls air pollutant emissions from a surface impoundment using a cover vented to a control device shall meet the requirements specified in paragraphs (d)(1) through (d)(3) of this section.
(1) The surface impoundment shall be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:
(i) The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the surface impoundment.
(ii) Each opening in the cover not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the cover is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the cover is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions using the procedure specified in Sec. 265.1084(d) of this subpart.
(iii) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed.
(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Sec. 265.1088 of this subpart.
(2) Whenever a hazardous waste is in the surface impoundment, the cover shall be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device except as follows:
(i) Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed at the following times:
(A) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the surface impoundment.

(B) To remove accumulated sludge or other residues from the bottom of the surface impoundment.
(ii) Opening of a safety device, as defined in Sec. 265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.
(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:
(i) The surface impoundment cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in Sec. 265.1088 of this subpart.
(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the surface impoundment becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (g) of this section.
(iv) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (f) of this section.
(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Sec. 265.1090(c) of this subpart.
(e) The owner or operator shall transfer hazardous waste to a surface impoundment subject to this section in accordance with the following requirements:
(1) Transfer of hazardous waste, except as provided in paragraph (e)(2) of this section, to the surface impoundment from another surface impoundment subject to this section or from a tank subject to Sec. 265.1085 of this subpart shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR--National Emission Standards for Individual Drain Systems.
(2) The requirements of paragraph (e)(1) of this section do not apply when transferring a hazardous waste to the surface impoundment under either of the following conditions:
(i) The hazardous waste meets the average VO concentration conditions specified in Sec. 265.1083(c)(1) of this subpart at the point of waste origination.
(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Sec. 265.1083(c)(2) of this subpart.
(iii) The hazardous waste meets the requirements of Sec. 265.1083(c)(4) of this subpart.
(f) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraph (c)(3) or (d)(3) of this section as follows:
(1) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (f)(2) of this section.

(2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the surface impoundment and no alternative capacity is available at the site to accept the hazardous waste normally managed in the surface impoundment. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.
(g) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this subpart, subsequent inspection and monitoring may be performed at intervals longer than 1 year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an ``unsafe to inspect and monitor cover'' and comply with all of the following requirements:
(1) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.
(2) Develop and implement a written plan and schedule to inspect and monitor the cover using the procedures specified in the applicable section of this subpart as frequently as practicable during those times when a worker can safely access the cover.

[61 FR 59984, Nov. 25, 1996, as amended at 62 FR 64666, Dec. 8, 1997]

§265.1087: Standards: Containers.

(a) The provisions of this section apply to the control of air pollutant emissions from containers for which Sec. 265.1083(b) of this subpart references the use of this section for such air emission control.
(b)(1) General requirements. The owner or operator shall control air pollutant emissions from each container subject to this section in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in paragraph (b)(2) of this section apply to the container.
(i) For a container having a design capacity greater than 0.1 m^3 and less than or equal to 0.46 m^3, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in paragraph (c) of this section.
(ii) For a container having a design capacity greater than 0.46 m^3 that is not in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in paragraph (c) of this section.
(iii) For a container having a design capacity greater than 0.46 m^3 that is in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in paragraph (d) of this section.
(2) When a container having a design capacity greater than 0.1 m^3 is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in paragraph (e) of this section at those times during the waste

stabilization process when the hazardous waste in the container is exposed to the atmosphere.
(c) Container Level 1 standards. (1) A container using Container Level 1 controls is one of the following:
(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in paragraph (f) of this section.
(ii) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum or a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a ``portable tank'' or bulk cargo container equipped with a screw-type cap).
(iii) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.
(2) A container used to meet the requirements of paragraph (c)(1)(ii) or (c)(1)(iii) of this section shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability, the effects of contact with the hazardous waste or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.
(3) Whenever a hazardous waste is in a container using Container Level 1 controls, the owner or operator shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:
(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:
(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.
(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:
(A) For the purpose of meeting the requirements of this section, an empty container as defined in 40 CFR 261.7(b) may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).
(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 40 CFR 261.7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.
(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the design specifications of the container. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.
(v) Opening of a safety device, as defined in Sec. 265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.
(4) The owner or operator of containers using Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:
(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual

inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to 40 CFR part 262 (EPA Forms 8700-22 and 8700-22A), as required under subpart E of this part, at 40 CFR 265.71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (c)(4)(iii) of this section.
(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (c)(4)(iii) of this section.
(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.
(5) The owner or operator shall maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m^3 or greater, which do not meet applicable DOT regulations as specified in paragraph (f) of this section, are not managing hazardous waste in light material service.
(d) Container Level 2 standards. (1) A container using Container Level 2 controls is one of the following:
(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in paragraph (f) of this section.
(ii) A container that operates with no detectable organic emissions as defined in Sec. 265.1081 of this subpart and determined in accordance with the procedure specified in paragraph (g) of this section.
(iii) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, appendix A, Method 27 in accordance with the procedure specified in paragraph (h) of this section.
(2) Transfer of hazardous waste in or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive or other hazardous materials. Examples of container loading procedures that the EPA considers to meet the requirements of this paragraph include using any one of the following: A submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a

fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.
(3) Whenever a hazardous waste is in a container using Container Level 2 controls, the owner or operator shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:
(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:
(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.
(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:
(A) For the purpose of meeting the requirements of this section, an empty container as defined in 40 CFR 261.7(b) may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).
(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 40 CFR 261.7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.
(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within

the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.
(v) Opening of a safety device, as defined in Sec. 265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.
(4) The owner or operator of containers using Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:
(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to 40 CFR part 262 (EPA Forms 8700-22 and 8700-22A), as required under subpart E of this part, at Sec. 265.71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (d)(4)(iii) of this section.
(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (d)(4)(iii) of this section.
(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.
(e) Container Level 3 standards. (1) A container using Container Level 3 controls is one of the following:
(i) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of paragraph (e)(2)(ii) of this section.

(ii) A container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (e)(2)(i) and (e)(2)(ii) of this section.
(2) The owner or operator shall meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:
(i) The container enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in ``Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to ``Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.
(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Sec. 265.1088 of this subpart.
(3) Safety devices, as defined in Sec. 265.1081 of this subpart, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of paragraph (e)(1) of this section.
(4) Owners and operators using Container Level 3 controls in accordance with the provisions of this subpart shall inspect and monitor the closed-vent systems and control devices as specified in Sec. 265.1088 of this subpart.
(5) Owners and operators that use Container Level 3 controls in accordance with the provisions of this subpart shall prepare and maintain the records specified in Sec. 265.1090(d) of this subpart.
(6) Transfer of hazardous waste in or out of a container using Container Level 3 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the EPA considers to meet the requirements of this paragraph include using any one of the following: A submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.
(f) For the purpose of compliance with paragraph (c)(1)(i) or (d)(1)(i) of this section, containers shall be used that meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as follows:
(1) The container meets the applicable requirements specified in 49 CFR part 178--Specifications for Packaging or 49 CFR part 179--Specifications for Tank Cars.
(2) Hazardous waste is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B--Exemptions; 49 CFR part 172--Hazardous Materials Table, Special Provisions, Hazardous Materials Communications,

Emergency Response Information, and Training Requirements; 49 CFR part 173-- Shippers-- General Requirements for Shipments and Packages; and 49 CFR part 180-- Continuing Qualification and Maintenance of Packagings.
(3) For the purpose of complying with this subpart, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in paragraph (f)(4) of this section.
(4) For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this subpart, an owner or operator may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b).
(g) To determine compliance with the no detectable organic emissions requirements of paragraph (d)(1)(ii) of this section, the procedure specified in Sec. 265.1084(d) of this subpart shall be used.
(1) Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the container, its cover, and associated closure devices, as applicable to the container, shall be checked. Potential leak interfaces that are associated with containers include, but are not limited to: The interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
(2) The test shall be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in this type of container. During the test, the container cover and closure devices shall be secured in the closed position.
(h) Procedure for determining a container to be vapor-tight using Method 27 of 40 CFR part 60, appendix A for the purpose of complying with paragraph (d)(1)(iii) of this section.
(1) The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A of this chapter.
(2) A pressure measurement device shall be used that has a precision of <plus-minus2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.
(3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

[61 FR 59986, Nov. 25, 1996, as amended at 62 FR 64666, Dec. 8, 1997; 64 FR 3391, Jan. 21, 1999]

§265.1088: Standards: Closed-vent systems and control devices.

(a) This section applies to each closed-vent system and control device installed and operated by the owner or operator to control air emissions in accordance with standards of this subpart.
(b) The closed-vent system shall meet the following requirements:

(1) The closed-vent system shall route the gases, vapors, and fumes emitted from the hazardous waste in the waste management unit to a control device that meets the requirements specified in paragraph (c) of this section.
(2) The closed-vent system shall be designed and operated in accordance with the requirements specified in Sec. 265.1033(j) of this part.
(3) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device shall be equipped with either a flow indicator as specified in paragraph (b)(3)(i) of this section or a seal or locking device as specified in paragraph (b)(3)(ii) of this section. For the purpose of complying with this paragraph, low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring-loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices.
(i) If a flow indicator is used to comply with paragraph (b)(3) of this section, the indicator shall be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For this paragraph, a flow indicator means a device which indicates the presence of either gas or vapor flow in the bypass line.
(ii) If a seal or locking device is used to comply with paragraph (b)(3) of this section, the device shall be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle, damper lever) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The owner or operator shall visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.
(4) The closed-vent system shall be inspected and monitored by the owner or operator in accordance with the procedure specified in 40 CFR 265.1033(k).
(c) The control device shall meet the following requirements:
(1) The control device shall be one of the following devices:
(i) A control device designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 percent by weight;
(ii) An enclosed combustion device designed and operated in accordance with the requirements of Sec. 265.1033(c); or
(iii) A flare designed and operated in accordance with the requirements of Sec. 265.1033(d).
(2) The owner or operator who elects to use a closed-vent system and control device to comply with the requirements of this section shall comply with the requirements specified in paragraphs (c)(2)(i) through (c)(2)(vi) of this section.
(i) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this section, as applicable, shall not exceed 240 hours per year.
(ii) The specifications and requirements in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iii) of this section for control devices do not apply during periods of planned routine maintenance.

(iii) The specifications and requirements in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iii) of this section for control devices do not apply during a control device system malfunction.
(iv) The owner or operator shall demonstrate compliance with the requirements of paragraph (c)(2)(i) of this section (i.e., planned routine maintenance of a control device, during which the control device does not meet the specifications of paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this section, as applicable, shall not exceed 240 hours per year) by recording the information specified in Sec. 265.1090(e)(1)(v) of this subpart.
(v) The owner or operator shall correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.
(vi) The owner or operator shall operate the closed-vent system such that gases, vapors, and/or fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction (i.e., periods when the control device is not operating or not operating normally) except in cases when it is necessary to vent the gases, vapors, or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.
(3) The owner or operator using a carbon adsorption system to comply with paragraph (c)(1) of this section shall operate and maintain the control device in accordance with the following requirements:
(i) Following the initial startup of the control device, all activated carbon in the control device shall be replaced with fresh carbon on a regular basis in accordance with the requirements of Sec. 265.1033(g) or Sec. 265.1033(h).
(ii) All carbon that is a hazardous waste and that is removed from the control device shall be managed in accordance with the requirements of 40 CFR 265.1033(m), regardless of the average volatile organic concentration of the carbon.
(4) An owner or operator using a control device other than a thermal vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with paragraph (c)(1) of this section shall operate and maintain the control device in accordance with the requirements of Sec. 265.1033(i).
(5) The owner or operator shall demonstrate that a control device achieves the performance requirements of paragraph (c)(1) of this section as follows:
(i) An owner or operator shall demonstrate using either a performance test as specified in paragraph (c)(5)(iii) of this section or a design analysis as specified in paragraph (c)(5)(iv) of this section the performance of each control device except for the following:
(A) A flare;
(B) A boiler or process heater with a design heat input capacity of 44 megawatts or greater;
(C) A boiler or process heater into which the vent stream is introduced with the primary fuel;
(D) A boiler or industrial furnace burning hazardous waste for which the owner or operator has been issued a final permit under 40 CFR part 270 and has designed and operates the unit in accordance with the requirements of 40 CFR part 266, subpart H; or
(E) A boiler or industrial furnace burning hazardous waste for which the owner or operator has designed and operates in accordance with the interim status requirements of 40 CFR part 266, subpart H.

(ii) An owner or operator shall demonstrate the performance of each flare in accordance with the requirements specified in Sec. 265.1033(e).
(iii) For a performance test conducted to meet the requirements of paragraph (c)(5)(i) of this section, the owner or operator shall use the test methods and procedures specified in Sec. 265.1034(c)(1) through (c)(4).
(iv) For a design analysis conducted to meet the requirements of paragraph (c)(5)(i) of this section, the design analysis shall meet the requirements specified in Sec. 265.1035(b)(4)(iii).
(v) The owner or operator shall demonstrate that a carbon adsorption system achieves the performance requirements of paragraph (c)(1) of this section based on the total quantity of organics vented to the atmosphere from all carbon adsorption system equipment that is used for organic adsorption, organic desorption or carbon regeneration, organic recovery, and carbon disposal.
(6) If the owner or operator and the Regional Administrator do not agree on a demonstration of control device performance using a design analysis then the disagreement shall be resolved using the results of a performance test performed by the owner or operator in accordance with the requirements of paragraph (c)(5)(iii) of this section. The Regional Administrator may choose to have an authorized representative observe the performance test.
(7) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in 40 CFR 265.1033(f)(2) and 40 CFR 265.1033(k). The readings from each monitoring device required by 40 CFR 265.1033(f)(2) shall be inspected at least once each operating day to check control device operation. Any necessary corrective measures shall be immediately implemented to ensure the control device is operated in compliance with the requirements of this section.

[59 FR 62935, Dec. 6, 1994, as amended at 61 FR 4915, Feb. 9, 1996; 61 FR 59989, Nov. 25, 1996; 62 FR 64667, Dec. 8, 1997]

§265.1089: Inspection and monitoring requirements.

(a) The owner or operator shall inspect and monitor air emission control equipment used to comply with this subpart in accordance with the applicable requirements specified in Sec. 265.1085 through Sec. 265.1088 of this subpart.
(b) The owner or operator shall develop and implement a written plan and schedule to perform the inspections and monitoring required by paragraph (a) of this section. The owner or operator shall incorporate this plan and schedule into the facility inspection plan required under 40 CFR 265.15.

[61 FR 59990, Nov. 25, 1996]

§265.1090: Recordkeeping requirements.

(a) Each owner or operator of a facility subject to requirements in this subpart shall record and maintain the information specified in paragraphs (b) through (j) of this section, as applicable to the facility. Except for air emission control equipment design documentation and information required by paragraphs (i) and (j) of this section, records

required by this section shall be maintained in the operating record for a minimum of 3 years. Air emission control equipment design documentation shall be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service. Information required by paragraphs (i) and (j) of this section shall be maintained in the operating record for as long as the waste management unit is not using air emission controls specified in Sec. Sec. 265.1085 through 265.1088 of this subpart in accordance with the conditions specified in Sec. 265.1080(d) or Sec. 265.1080(b)(7) of this subpart, respectively.

(b) The owner or operator of a tank using air emission controls in accordance with the requirements of Sec. 265.1085 of this subpart shall prepare and maintain records for the tank that include the following information:

(1) For each tank using air emission controls in accordance with the requirements of Sec. 265.1085 of this subpart, the owner or operator shall record:

(i) A tank identification number (or other unique identification description as selected by the owner or operator).

(ii) A record for each inspection required by Sec. 265.1085 of this subpart that includes the following information:

(A) Date inspection was conducted.

(B) For each defect detected during the inspection: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Sec. 265.1085 of this subpart, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(2) In addition to the information required by paragraph (b)(1) of this section, the owner or operator shall record the following information, as applicable to the tank:

(i) The owner or operator using a fixed roof to comply with the Tank Level 1 control requirements specified in Sec. 265.1085(c) of this subpart shall prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous waste in the tank performed in accordance with the requirements of Sec. 265.1085(c) of this subpart. The records shall include the date and time the samples were collected, the analysis method used, and the analysis results.

(ii) The owner or operator using an internal floating roof to comply with the Tank Level 2 control requirements specified in Sec. 265.1085(e) of this subpart shall prepare and maintain documentation describing the floating roof design.

(iii) Owners and operators using an external floating roof to comply with the Tank Level 2 control requirements specified in Sec. 265.1085(f) of this subpart shall prepare and maintain the following records:

(A) Documentation describing the floating roof design and the dimensions of the tank.

(B) Records for each seal gap inspection required by Sec. 265.1085(f)(3) of this subpart describing the results of the seal gap measurements. The records shall include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Sec. 265.1085(f)(1) of this subpart, the records shall include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

(iv) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in Sec. 265.1085(i) of this subpart shall prepare and maintain the following records:
(A) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in ``Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure'' under 40 CFR 52.741, appendix B.
(B) Records required for the closed-vent system and control device in accordance with the requirements of paragraph (e) of this section.
(c) The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of Sec. 265.1086 of this subpart shall prepare and maintain records for the surface impoundment that include the following information:
(1) A surface impoundment identification number (or other unique identification description as selected by the owner or operator).
(2) Documentation describing the floating membrane cover or cover design, as applicable to the surface impoundment, that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in Sec. 265.1086(c) of this subpart.
(3) A record for each inspection required by Sec. 265.1086 of this subpart that includes the following information:
(i) Date inspection was conducted.
(ii) For each defect detected during the inspection the following information: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Sec. 265.1086(f) of this subpart, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.
(4) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator shall prepare and maintain the records specified in paragraph (e) of this section.
(d) The owner or operator of containers using Container Level 3 air emission controls in accordance with the requirements of Sec. 265.1087 of this subpart shall prepare and maintain records that include the following information:
(1) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in ``Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure'' under 40 CFR 52.741, appendix B.
(2) Records required for the closed-vent system and control device in accordance with the requirements of paragraph (e) of this section.
(e) The owner or operator using a closed-vent system and control device in accordance with the requirements of Sec. 265.1088 of this subpart shall prepare and maintain records that include the following information:
(1) Documentation for the closed-vent system and control device that includes:
(i) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as

specified in paragraph (e)(1)(ii) of this section or by performance tests as specified in paragraph (e)(1)(iii) of this section when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.
(ii) If a design analysis is used, then design documentation as specified in 40 CFR 265.1035(b)(4). The documentation shall include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with 40 CFR 265.1035(b)(4)(iii) and certification by the owner or operator that the control equipment meets the applicable specifications.
(iii) If performance tests are used, then a performance test plan as specified in 40 CFR 265.1035(b)(3) and all test results.
(iv) Information as required by 40 CFR 265.1035(c)(1) and 40 CFR 265.1035(c)(2), as applicable.
(v) An owner or operator shall record, on a semiannual basis, the information specified in paragraphs (e)(1)(v)(A) and (e)(1)(v)(B) of this section for those planned routine maintenance operations that would require the control device not to meet the equirements of Sec. 265.1088 (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable.
(A) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6-month period. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.
(B) A description of the planned routine maintenance that was performed for the control device during the previous 6-month period. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of Sec. 265.1088 (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable, due to planned routine maintenance.
(vi) An owner or operator shall record the information specified in paragraphs (e)(1)(vi)(A) through (e)(1)(vi)(C) of this section for those unexpected control device system malfunctions that would require the control device not to meet the requirements of Sec. 265.1088 (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable.
(A) The occurrence and duration of each malfunction of the control device system.
(B) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.
(C) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.
(vii) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Sec. 265.1088(c)(3)(ii) of this subpart.
(f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of Sec. 265.1083(c) of this subpart shall prepare and maintain the following records, as applicable:
(1) For tanks, surface impoundments, or containers exempted under the hazardous waste organic concentration conditions specified in Sec. 265.1083(c)(1) or Sec. 265.1083(c)(2)(i) through (c)(2)(vi) of this subpart, the owner or operator shall record the information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator shall

record the date, time, and location that each waste sample is collected in accordance with applicable requirements of Sec. 265.1084 of this subpart.
(2) For tanks, surface impoundments, or containers exempted under the provisions of Sec. 265.1083(c)(2)(vii) or Sec. 265.1083(c)(2)(viii) of this subpart, the owner or operator shall record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.
(g) An owner or operator designating a cover as ``unsafe to inspect and monitor'' pursuant to Sec. 265.1085(l) or Sec. 265.1086(g) of this subpart shall record in a log that is kept in the facility operating record the following information: The identification numbers for waste management units with covers that are designated as ``unsafe to inspect and monitor,'' the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.
(h) The owner or operator of a facility that is subject to this subpart and to the control device standards in 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, may elect to demonstrate compliance with the applicable sections of this subpart by documentation either pursuant to this subpart, or pursuant to the provisions of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, to the extent that the documentation required by 40 CFR parts 60 or 61 duplicates the documentation required by this section.
(i) For each tank or container not using air emission controls specified in Sec. Sec. 265.1085 through 265.1088 of this subpart in accordance with the conditions specified in Sec. 265.1080(d) of this subpart, the owner or operator shall record and maintain the following information:
(1) A list of the individual organic peroxide compounds manufactured at the facility that meet the conditions specified in Sec. 265.1080(d)(1).
(2) A description of how the hazardous waste containing the organic peroxide compounds identified in paragraph (i)(1) of this section are managed at the facility in tanks and containers. This description shall include the following information:
(i) For the tanks used at the facility to manage this hazardous waste, sufficient information shall be provided to describe for each tank: A facility identification number for the tank; the purpose and placement of this tank in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste managed in the tanks.
(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to describe: A facility identification number for the container or group of containers; the purpose and placement of this container, or group of containers, in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste handled in the containers.
(3) An explanation of why managing the hazardous waste containing the organic peroxide compounds identified in paragraph (i)(1) of this section in the tanks and containers as described in paragraph (i)(2) of this section would create an undue safety hazard if the air emission controls, as required under Sec. Sec. 265.1085 through 265.1088 of this subpart, are installed and operated on these waste management units. This explanation shall include the following information:
(i) For tanks used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: How use of the required air emission controls on the tanks would affect the tank design features and facility operating procedures currently used to

prevent an undue safety hazard during the management of this hazardous waste in the tanks; and why installation of safety devices on the required air emission controls, as allowed under this subpart, will not address those situations in which evacuation of tanks equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.
(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: How use of the required air emission controls on the containers would affect the container design features and handling procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the containers; and why installation of safety devices on the required air emission controls, as allowed under this subpart, will not address those situations in which evacuation of containers equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.
(j) For each hazardous waste management unit not using air emission controls specified in Sec. Sec. 265.1085 through 265.1088 of this subpart in accordance with the provisions of Sec. 265.1080(b)(7) of this subpart, the owner and operator shall record and maintain the following information:
(1) Certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63.
(2) Identification of the specific requirements codified under 40 CFR part 60, part 61, or part 63 with which the waste management unit is in compliance.

[61 FR 59990, Nov. 25, 1996, as amended at 62 FR 64667, Dec. 8, 1997]

Related Resources:

- Frequently Asked Questions on the 40 CFR PART 264/265, Subpart CC Air Emission Standards
- RCRA Organic Air Emission Standards for TSDFs and Generators
- Applicability of Subpart CC Air Emission Regulations
- RCRA Organic Air Emissions Training and Assistance: RCRA Subpart AA, BB and CC Regulations Body of Knowledge
- Technical Guidance Document for RCRA Air Emission Standards for Process Vents and Equipment Leaks
- Background Information Document for Promulgated Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers
- Subpart CC Waste Determination Options
- Applicability of Parts 264/265, Subparts AA, BB and CC
- Waste Analysis Information for Purposes of Subpart CC Compliance
- Clarification of Subpart CC Standards
- Applicability of Subpart CC Air Emission Regulations

Closure and Post-closure

§ 265 Subpart G (From 40 CFR 262.34 (a)(4))

§ 265.111: Closure performance standard.

The owner or operator must close the facility in a manner that:
(a) Minimizes the need for further maintenance, and
(b) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere, and
(c) **Complies with the closure requirements of this subpart, including, but not limited to, the requirements of §§ 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381, 265.404, and 265.1102. (See citations below.)**

[51 FR 16451, May 2, 1986, as amended at 57 FR 37267, Aug. 18, 1992]

§ 265.114: Disposal or decontamination of equipment, structures and soils.

During the partial and final closure periods, all contaminated equipment, structures and soil must be properly disposed of, or decontaminated **unless specified otherwise in §§ 265.197, 265.228, 265.258, 265.280, or 265.310**. By removing all hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that hazardous waste in accordance with all applicable requirements of part 262 of this chapter.

[51 FR 16451, May 2, 1986, as amended at 53 FR 34086, Sept. 2, 1988]

§ 265.197: Closure and post-closure care.

(a) At closure of a tank system, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless § 261.3(d) of this Chapter applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems must meet all of the requirements specified in subparts G and H of this part.
(b) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in paragraph (a) of this section, then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (§ 265.310) In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in subparts G and H of this part.
(c) If an owner or operator has a tank system which does not have secondary containment that meets the requirements of § 265.193(b) through (f) and which is not exempt from the secondary containment requirements in accordance with § 265.193(g), then,

(1) The closure plan for the tank system must include both a plan for complying with paragraph (a) of this section and a contingent plan for complying with paragraph (b) of this section.
(2) A contingent post-closure plan for complying with paragraph (b) of this section must be prepared and submitted as part of the permit application.
(3) The cost estimates calculated for closure and post-closure care must reflect the costs of complying with the contingent closure plan and the contingent post-closure plan, if these costs are greater than the costs of complying with the closure plan prepared for the expected closure under paragraph (a) of this section.
(4) Financial assurance must be based on the cost estimates in paragraph (c)(3) of this section. (5) For the purposes of the contingent closure and post-closure plans, such a tank system is considered to be a landfill, and the contingent plans must meet all of the closure, post-closure, and financial responsibility requirements for landfills under subparts G and H of this part.

§ 265.228: Closure and post-closure care.

(a) At closure, the owner or operator must:
(1) Remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless § 261.3(d) of this chapter applies; or
(2) Close the impoundment and provide post-closure care for a landfill under subpart G and § 265.310, including the following:
(i) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;
(ii) Stabilize remaining wastes to a bearing capacity sufficient to support the final cover; and
(iii) Cover the surface impoundment with a final cover designed and constructed to:
(A) Provide long-term minimization of the migration of liquids through the closed impoundment;
(B) Function with minimum maintenance;
(C) Promote drainage and minimize erosion or abrasion of the cover;
(D) Accommodate settling and subsidence so that the cover's integrity is maintained; and
(E) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.
(b) In addition to the requirements of subpart G, and § 265.310, during the post-closure care period, the owner or operator of a surface impoundment in which wastes, waste residues, or contaminated materials remain after closure in accordance with the provisions of paragraph (a)(2) of this section must:
(1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;
(2) Maintain and monitor the leak detection system in accordance with §§ 264.221(c)(2)(iv) and (3) of this chapter and 265.226(b) and comply with all other applicable leak detection system requirements of this part;

(3) Maintain and monitor the ground- water monitoring system and comply with all other applicable requirements of subpart F of this part; and
(4) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

[52 FR 8708, Mar. 19, 1987, as amended at 57 FR 3493, Jan. 29, 1992; 71 FR 40275, July 14, 2006]

§ 265.258: Closure and post-closure care.

(a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless § 261.3(d) of this chapter applies; or
(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in paragraph (a) of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (§ 265.310).

[47 FR 32368, July 26, 1982]

§ 265.280: Closure and post-closure.

(a) In the closure plan under § 265.112 and the post-closure plan under § 265.118, the owner or operator must address the following objectives and indicate how they will be achieved:
(1) Control of the migration of hazardous waste and hazardous waste constituents from the treated area into the ground water;
(2) Control of the release of contaminated run-off from the facility into surface water;
(3) Control of the release of airborne particulate contaminants caused by wind erosion; and
(4) Compliance with § 265.276 concerning the growth of food-chain crops.
(b) The owner or operator must consider at least the following factors in addressing the closure and post-closure care objectives of paragraph (a) of this section:
(1) Type and amount of hazardous waste and hazardous waste constituents applied to the land treatment facility;
(2) The mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;
(3) Site location, topography, and surrounding land use, with respect to the potential effects of pollutant migration (e.g., proximity to ground water, surface water and drinking water sources); (4) Climate, including amount, frequency, and pH of precipitation;
(5) Geological and soil profiles and surface and subsurface hydrology of the site, and soil characteristics, including cation exchange capacity, total organic carbon, and pH;
(6) Unsaturated zone monitoring information obtained under § 265.278; and

(7) Type, concentration, and depth of migration of hazardous waste constituents in the soil as compared to their background concentrations.
(c) The owner or operator must consider at least the following methods in addressing the closure and post-closure care objectives of paragraph (a) of this section:
(1) Removal of contaminated soils;
(2) Placement of a final cover, considering:
(i) Functions of the cover (e.g., infiltration control, erosion and run-off control, and wind erosion control); and
(ii) Characteristics of the cover, including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope, and type of vegetation on the cover; and
(3) Monitoring of ground water.
(d) In addition to the requirements of subpart G of this part, during the closure period the owner or operator of a land treatment facility must:
(1) Continue unsaturated zone monitoring in a manner and frequency specified in the closure plan, except that soil pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone;
(2) Maintain the run-on control system required under § 265.272(b);
(3) Maintain the run-off management system required under § 265.272(c); and
(4) Control wind dispersal of particulate matter which may be subject to wind dispersal.
(e) For the purpose of complying with §265.115, when closure is completed the owner or operator may submit to the Regional Administrator certification both by the owner or operator and by an independent, qualified soil scientist, in lieu of a qualified Professional Engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.
(f) In addition to the requirements of § 265.117, during the post-closure care period the owner or operator of a land treatment unit must:
(1) Continue soil-core monitoring by collecting and analyzing samples in a manner and frequency specified in the post-closure plan;
(2) Restrict access to the unit as appropriate for its post-closure use;
(3) Assure that growth of food chain crops complies with § 265.276; and
(4) Control wind dispersal of hazardous waste.

[45 FR 33232, May 19, 1980, as amended at 47 FR 32368, July 26, 1982; 71 FR 16911, Apr. 4, 2006; 71 FR 40275, July 14, 2006]

§ 265.310: Closure and post-closure care.

(a) At final closure of the landfill or upon closure of any cell, the owner or operator must cover the landfill or cell with a final cover designed and constructed to:
(1) Provide long-term minimization of migration of liquids through the closed landfill;
(2) Function with minimum maintenance;
(3) Promote drainage and minimize erosion or abrasion of the cover;
(4) Accommodate settling and subsidence so that the cover's integrity is maintained; and
(5) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) After final closure, the owner or operator must comply with all post-closure requirements contained in §§ 265.117 through 265.120 including maintenance and monitoring throughout the post-closure care period. The owner or operator must:
(1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;
(2) Maintain and monitor the leak detection system in accordance with §§ 264.301(c)(3)(iv) and (4) of this chapter and 265.304(b), and comply with all other applicable leak detection system requirements of this part;
(3) Maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of subpart F of this part;
(4) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and
(5) Protect and maintain surveyed benchmarks used in complying with §265.309.

[50 FR 16048, Apr. 23, 1985, as amended at 57FR 3495, Jan. 29, 1992]

§ 265.351: Closure.

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including but not limited to ash, scrubber waters, and scrubber sludges) from the incinerator.

[Comment: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3(d) of this chapter, that the residue removed from his incinerator is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262 through 266 of this chapter.]

§ 265.381: Closure.

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash) from the thermal treatment process or equipment.

[Comment: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that any solid waste removed from his thermal treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, and 265 of this chapter.]

§ 265.404: Closure.
At closure, all hazardous waste and hazardous waste residues must be removed from treatment processes or equipment, discharge control equipment, and discharge confinement structures.

[Comment: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that any solid waste removed from his treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, and 265 of this chapter.]

§ 265.1102: Closure and post-closure care.

(a) At closure of a containment building, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless § 261.3(d) of this chapter applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for containment buildings must meet all of the requirements specified in subparts G and H of this part.
(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in paragraph (a) of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (§ 265.310). In addition, for the purposes of closure, post-closure, and financial responsibility, such a containment building is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in subparts G and H of this part.

Related Resources:

- Generator Closure Requirements
- Contents of Closure Plan
- Drip Pad Closure Notification and Certification Requirements

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Special Requirements for Generators of F006

§ 262.34: Accumulation time.

(d) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that:
(1) The quantity of waste accumulated on-site never exceeds 6000 kilograms;
(2) The generator complies with the requirements of subpart I of part 265 of this chapter, except for §§ 265.176 and 265.178;
(3) The generator complies with the requirements of § 265.201 in subpart J of part 265;
(4) The generator complies with the requirements of paragraphs (a)(2) and (a)(3) of this section, the requirements of subpart C of part 265, the requirements of 40 CFR 268.7(a)(5); and
(5) The generator complies with the following requirements:

(i) At all times there must be at least one employee either on the premises or on call (*i.e.*, available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in paragraph (d)(5)(iv) of this section. This employee is the emergency coordinator.
(ii) The generator must post the following information next to the telephone:
(A) The name and telephone number of the emergency coordinator;
(B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and
(C) The telephone number of the fire department, unless the facility has a direct alarm.
(iii) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;
(iv) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:
(A) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;
(B) In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;
(C) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424–8802). The report must include the following information:
(*1*) The name, address, and U.S. EPA Identification Number of the generator;
(*2*) Date, time, and type of incident (*e.g.*, spill or fire);
(*3*) Quantity and type of hazardous waste involved in the incident;
(*4*) Extent of injuries, if any; and
(*5*) Estimated quantity and disposition of recovered materials, if any.

(e) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more for off-site treatment, storage or disposal may accumulate hazardous waste on-site for 270 days or less without a permit or without having interim status provided that he complies with the requirements of paragraph (d) of this section.
(f) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who accumulates hazardous waste in quantities exceeding 6000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if he must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 40 CFR parts 264 and 265 and the permit requirements of 40 CFR part 270 unless he has been granted an extension to the 180-day (or 270-day if applicable) period. Such extension may be granted by EPA if hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and

uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

(g) A generator who generates 1,000 kilograms or greater of hazardous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the RCRA hazardous waste code F006, may accumulate F006 waste on- site for more than 90 days, but not more than 180 days without a permit or without having interim status provided that:
(1) The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants or contaminants entering F006 or otherwise released to the environment prior to its recycling;
(2) The F006 waste is legitimately recycled through metals recovery;
(3) No more than 20,000 kilograms of F006 waste is accumulated on-site at any one time; and
(4) The F006 waste is managed in accordance with the following:
(i) The F006 waste is placed:
(A) In containers and the generator complies with the applicable requirements of subparts I, AA, BB, and CC of 40 CFR part 265; and/or
(B) In tanks and the generator complies with the applicable requirements of subparts J, AA, BB, and CC of 40 CFR part 265, except §§ 265.197(c) and 265.200; and/or
(C) In containment buildings and the generator complies with subpart DD of 40 CFR part 265, and has placed its professional engineer certification that the building complies with the design standards specified in 40 CFR 265.1101 in the facility's operating record prior to operation of the unit. The owner or operator must maintain the following records at the facility:
(*1*) A written description of procedures to ensure that the F006 waste remains in the unit for no more than 180 days, a written description of the waste generation and management practices for the facility showing that they are consistent with the 180-day limit, and documentation that the generator is complying with the procedures; or
(*2) Documentation that the unit is emptied at least once every 180 days.*

(ii) In addition, such a generator is exempt from all the requirements in subparts G and H of 40 CFR part 265, except for §§ 265.111 and 265.114.
(iii) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;
(iv) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, ''Hazardous Waste;'' and
(v) The generator complies with the requirements for owners or operators in subparts C and D in 40 CFR part 265, with 40 CFR 265.16, and with 40 CFR 268.7(a)(5).

(h) A generator who generates 1,000 kilograms or greater of hazardous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the RCRA hazardous waste code F006, and who must transport this waste, or offer this waste for transportation, over a distance of 200 miles or more for off-site metals recovery, may accumulate F006 waste on-site for more than 90 days, but not more than 270 days without a permit or without having

interim status if the generator complies with the requirements of paragraphs (g)(1) through (g)(4) of this section.
(i) A generator accumulating F006 in accordance with paragraphs (g) and (h) of this section who accumulates F006 waste on-site for more than 180 days (or for more than 270 days if the generator must transport this waste, or offer this waste for transportation, over a distance of 200 miles or more), or who accumulates more than 20,000 kilograms of F006 waste on-site is an operator of a storage facility and is subject to the requirements of 40 CFR parts 264 and 265 and the permit requirements of 40 CFR part 270 unless the generator has been granted an extension to the 180-day (or 270-day if applicable) period or an exception to the 20,000 kilogram accumulation limit. Such extensions and exceptions may be granted by EPA if F006 waste must remain on-site for longer than 180 days (or 270 days if applicable) or if more than 20,000 kilograms of F006 waste must remain on- site due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days or an exception to the accumulation limit may be granted at the discretion of the Regional Administrator on a case-by-case basis.

Special Requirements for Performance Track Members

§ 262.34: Accumulation time.

(j) A member of the Performance Track Program who generates 1000 kg or greater of hazardous waste per month (or one kilogram or more of acute hazardous waste) may accumulate hazardous waste on-site without a permit or interim status for an extended period of time, provided that:
(1) The generator accumulates the hazardous waste for no more than 180 days, or for no more than 270 days if the generator must transport the waste (or offer the waste for transport) more than 200 miles from the generating facility; and
(2) The generator first notifies the Regional Administrator and the Director of the authorized State in writing of its intent to begin accumulation of hazardous waste for extended time periods under the provisions of this section. Such advance notice must include:
(i) Name and EPA ID number of the facility, and specification of when the facility will begin accumulation of hazardous wastes for extended periods of time in accordance with this section; and
(ii) A description of the types of hazardous wastes that will be accumulated for extended periods of time, and the units that will be used for such extended accumulation; and
(iii) A Statement that the facility has made all changes to its operations, procedures, including emergency preparedness procedures, and equipment, including equipment needed for emergency preparedness, that will be necessary to accommodate extended time periods for accumulating hazardous wastes; and
(iv) If the generator intends to accumulate hazardous wastes on-site for up to 270 days, a certification that a facility that is permitted (or operating under interim status) under part 270 of this chapter to receive these wastes is not available within 200 miles of the generating facility; and (3) The waste is managed in:
(i) Containers, in accordance with the applicable requirements of subparts I, AA, BB, and CC of 40 CFR part 265 and 40 CFR 264.175; or

(ii) Tanks, in accordance with the applicable requirements of subparts J, AA, BB, and CC of 40 CFR part 265, except for §§ 265.197(c) and 265.200; or
(iii) Drip pads, in accordance with subpart W of 40 CFR part 265; or
(iv) Containment buildings, in accordance with subpart DD of 40 CFR part 265; and
(4) The quantity of hazardous waste that is accumulated for extended time periods at the facility does not exceed 30,000 kg; and
(5) The generator maintains the following records at the facility for each unit used for extended accumulation times:
(i) A written description of procedures to ensure that each waste volume remains in the unit for no more than 180 days (or 270 days, as applicable), a description of the waste generation and management practices at the facility showing that they are consistent with the extended accumulation time limit, and documentation that the procedures are complied with; or
(ii) Documentation that the unit is emptied at least once every 180 days (or 270 days, if applicable); and
(6) Each container or tank that is used for extended accumulation time periods is labeled or marked clearly with the words ''Hazardous Waste,'' and for each container the date upon which each period of accumulation begins is clearly marked and visible for inspection; and
(7) The generator complies with the requirements for owners and operators in subparts C and D in 40 CFR part 265, with § 265.16, and with § 268.7(a)(5). In addition, such a generator is exempt from all the requirements in subparts G and H of part 265 of this chapter, except for §§ 265.111 and 265.114; and
(8) The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants, or contaminants released to the environment prior to its recycling, treatment, or disposal; and
(9) The generator includes the following with its Performance Track Annual Performance Report, which must be submitted to the Regional Administrator and the Director of the authorized State:
(i) Information on the total quantity of each hazardous waste generated at the facility that has been managed in the previous year according to extended accumulation time periods; and
(ii) Information for the previous year on the number of off-site shipments of hazardous wastes generated at the facility, the types and locations of destination facilities, how the wastes were managed at the destination facilities (*e.g.*, recycling, treatment, storage, or disposal), and what changes in on-site or off-site waste management practices have occurred as a result of extended accumulation times or other pollution prevention provisions of this section; and
(iii) Information for the previous year on any hazardous waste spills or accidents occurring at extended accumulation units at the facility, or during off-site transport of accumulated wastes; and
(iv) If the generator intends to accumulate hazardous wastes on-site for up to 270 days, a certification that a facility that is permitted (or operating under interim status) under part 270 of this chapter to receive these wastes is not available within 200 miles of the generating facility; and

(k) If hazardous wastes must remain on-site at a Performance Track member facility for longer than 180 days (or 270 days, if applicable) due to unforeseen, temporary, and uncontrollable circumstances, an extension to the extended accumulation time period of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

(l) If a generator who is a member of the Performance Track Program withdraws from the Performance Track Program, or if the Regional Administrator terminates a generator's membership, the generator must return to compliance with all otherwise applicable hazardous waste regulations as soon as possible, but no later than six months after the date of withdrawal or termination.

(m) A generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of § 264.72 or § 265.72 of this chapter may accumulate the returned waste on-site in accordance with paragraphs (a) and (b) or (d), (e) and (f) of this section, depending on the amount of hazardous waste on-site in that calendar month. Upon receipt of the returned shipment, the generator must:
(1) Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or
(2) Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

Miscellaneous Resources

Miscellaneous

- Regulatory Status of Waste Generated by Contractors and Resident from Lead-Based Paint Activities Conducted in Households (7/31/2000)
- Co-Generator Policy And Exceptions When a Generator Is Designated By A Mutual Agreement Among Co-Generators
- Frequently Asked Questions on Wastes
- Generator Status of Contractors Who Remove Lead-Based Paint
- Interpretation of Generator Requirements as Applied to Various On-Site and Off-Site Scenarios

Empty Containers

- Regulatory Status of Residues Removed from Empty Containers
- Burning of Residues Remaining in Empty Containers
- Empty Containers Regulatory Status
- Policy on the Management of Rinsate from Empty Containers
- Triple Rinsing of Empty Containers
- Containers That Held Commercial Chemical Products, Definition of Empty
- Empty Container Residue Handling
- Empty Tank Cars That Contained Commercial Chemical Product
- Empty Container Rule Applied to Tanker or Vacuum Trucks
- Empty Container Regulations
- Steam-Spraying of an Empty Tank
- When Residue in an Empty Container is No Longer Regulated
- Empty Container Definition

Treatment

- Generator Treatment in Accumulation Tanks and Containers
- Treatment in Accumulation Tanks and Containers Allowed for All Generators Subject to 262.34
- Frequently Asked Questions on Generator Treatment
- Generator Treatment in Accumulation Tanks and Containers
- Treatment in Accumulation Tanks and Containers Allowed for All Generators Subject to 262.34
- Treatment in a Generator's 90-Day Containment Building
- Regulatory Clarification of Totally Enclosed Treatment Facility

U.S. ENVIRONMENTAL PROTECTION AGENCY

Bookmark

Wastes - Laws & Regulations

- Wastes Home

- Laws & Regulations
- RCRA History
- Hazardous Waste Regulations
- Non-hazardous Waste Regulations
- Guidance & Policy
- State Authorization

Laws and Regulations

The Resource Conservation and Recovery Act (RCRA) is the public law that creates the framework for the proper management of hazardous and nonhazardous solid waste. This section contains:

- History of RCRA
- RCRA Regulations
  - Hazardous Waste
  - Non-hazardous Waste
- RCRA Guidance, Policy, and Resources
- State Authorization

Related Links

EPA's Laws and Regulations page

Last updated on Tuesday, September 9th, 2008.
http://www.epa.gov/osw/laws-regs/index.htm
Print As-Is

Environmental Management Systems (EMS)

An Environmental Management System (EMS) is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency. This Web site provides information and resources related to EMS for businesses, associations, the public, and state and federal agencies.

Basic Information

Learn why and how to develop an EMS.

Where You Live

This section includes information on EMS initiatives in our 10 regions.

Resources & Publications

A collection of guides, case studies, and other tools to help organizations understand and adopt EMSs for their operations, including a new report: Financial Market Incentives for Environmental Management Systems.

EPA's Position on EMS

Quick Links

- National Environmental Performance Track
  This program recognizes top environmental performers that have high quality EMSs.
- PEER (Public Entity EMS Resource) EXIT Disclaimer
  Provides information and tools to assist public entities in developing an EMS for their operations.
- State EMS Initiatives
  Learn about EMS activities being supported by various state agencies.
- Water/Wastewater Initiatives
  EPA's Office of Water is working with many local governments and utilities in developing EMSs.
- National Directory of EMS Technical Assistance Providers EXIT Disclaimer
  Lists contact information for nonprofit organizations by state or type.

Read about our approach to EMS development, including our position on EMS, signed December 15, 2005

EMS Initiatives Supported by EPA

We are carrying out a number of programs and activities involving EMSs, including voluntary initiatives with the public and private sectors.

EMS at EPA Facilities

Learn how we are developing and implementing EMS at our facilities.

Other Federal EMS Web Sites

A list of links that will take you to various federal agency EMS Web sites.

Last updated on Tuesday, June 17th, 2008.
http://www.epa.gov/ems/index.html
Print As-Is

U.S. ENVIRONMENTAL PROTECTION AGENCY

Bookmark

Facility Registry System (FRS)

Facility Detail Report

Report an Error

FRS

Facility Name:	AMERGEN ENERGY THREE MILE ISLAND NUCLEAR STA
Location Address:	ROUTE 441 SOUTH
Supplemental Address:	
City Name:	MIDDLETOWN
State	PA
County Name:	DAUPHIN
ZIP/Postal Code:	17057
EPA Region:	03
Congressional District Number:	17
Legislative District Number:	3
HUC Code:	02050305
Federal Facility:	NO
US Mexico Border Indicator:	NO
Tribal Land :	NO
Latitude:	40.2274
Longitude:	-76.757
Method:	ADDRESS MATCHING-HOUSE NUMBER
Reference Point Description:	OTHER
Duns Number:	
Registry ID:	110006646415

Map this facility

Environmental Interests

Information System	Information System ID	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental Interests:
AIRS/AFS	4204300687	AIR SYNTHETIC MINOR (ACTIVE)	AIRS/AFS	07/09/2007	

EGRID	8011	ELECTRIC POWER GENERATION	EGRID		
NPDES	PA0009920	ICIS-NPDES MAJOR	ICIS	04/08/2003	**ICIS**-ENFORCEMENT/ COMPLIANCE ACTIVITY
PA-EFACTS	450833	STATE MASTER	PA-EFACTS		**PWSID**-7220917 DRINKING WATER PROGRAM **PWSID**-7222222 DRINKING WATER PROGRAM **PCS**-PA0009920 NPDES PERMIT **AFS**-23-2921417-1 AIR PROGRAM
PCS	PA0009920	NPDES MAJOR	NPDES PERMIT	03/01/2002	
RCRAINFO	PAR000037861	SQG (ACTIVE)	NOTIFICATION (RCRA)	01/04/2008	

Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information System
OWN	PO BOX 480	MIDDLETOWN	PA	17057-0480	PA-EFACTS
OPR	PO BOX 480	MIDDLETOWN	PA	17057-0480	PA-EFACTS
MAILING ADDRESS	PO BOX 480	MIDDLETOWN	PA	17057-0480	PA-EFACTS
MAILING ADDRESS	PO BOX 480	MIDDLETOWN	PA	170570480	NPDES
OWN	965 CHESTERBROOK BLVD # 63C-3	CHESTERBROOK	PA	19087-5614	PA-EFACTS
PRIMARY MAILING ADDRESS	PO BOX 480	MIDDLETOWN	PA	170570480	PCS
OWNOP	965 CHESTERBROOK BLVD # 63C-3	CHESTERBROOK	PA	19087-5614	PA-EFACTS
OWNOP	PO BOX 480	MIDDLETOWN	PA	17057-0480	PA-EFACTS
OPR	965 CHESTERBROOK BLVD # 63C-3	CHESTERBROOK	PA	19087-5614	PA-EFACTS
OWNER	PO BOX 480	MIDDLETOWN	PA	17057	RCRAINFO

NAICS Codes

No NAICS Codes returned.

SIC Codes

Data Source	SIC Code	Description	Primary
PA-EFACTS	4911	ELECTRIC SERVICES	

PCS	4911	ELECTRIC SERVICES	
NPDES	4911	ELECTRIC SERVICES	
AIRS/AFS	4911	ELECTRIC SERVICES	

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
OPR	UNKNOWN	7179488881	PA-EFACTS	View
OWN	UNKNOWN	7179488881	PA-EFACTS	View
OWNOP	JOHN B COTTON	6106406507	PA-EFACTS	View
COMPLIANCE CONTACT	SCOTT R COGLEY	7179488881	AIRS/AFS	
OWN	JOHN B COTTON	6106406507	PA-EFACTS	View
OWNOP	UNKNOWN	7179488881	PA-EFACTS	View
COGNIZANT OFFICIAL	BRUCE WILLIAMS/ VICE PRES	7179488881	PCS	
OPR	JOHN B COTTON	6106406507	PA-EFACTS	View

Organizations

Affiliation Type	Name	DUNS Number	Information System	Mailing Address
OWNER	AMERGEN ENERGY CO LLC		RCRAINFO	View
OWNER1	AMERGEN ENERGY CO LLC		EGRID	
OWN	AMERGEN ENERGY COMPANY LLC		PA-EFACTS	View
OPR	AMERGEN ENERGY COMPANY LLC		PA-EFACTS	View
OWN	G P U NUCLEAR CORP.		PA-EFACTS	View
OPR	G P U NUCLEAR CORP.		PA-EFACTS	View
OWNOP	AMERGEN ENERGY COMPANY LLC		PA-EFACTS	View
OWNOP	G P U NUCLEAR CORP.		PA-EFACTS	View
MAILING ADDRESS	AMERGEN ENERGY CO LLC		NPDES	View

Alternative Names

Alternative Name	Source of Data
THREE MILE ISLAND	EGRID
AMERGEN ENERGY CO LL/THREE MILE ISLAND N	AIRS/AFS
AMERGEN ENERGY CO LL/THREE MILE ISLAND N	AIRS/AFS
AMERGEN ENERGY COMPANY LLC	NPDES PERMIT

THREE MILE ISLAND NUCLEAR STA UNIT 1	RCRAINFO
AMERGEN	PA eFACTS

Query executed on: OCT-14-2008

EPA Home Privacy and Security Notice Contact Us

Last updated on Tuesday, October 14th, 2008.
http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=PAR000037861&pgm_sys_acrnm_in=RCRAINFO
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U.S. ENVIRONMENTAL PROTECTION AGENCY

Pollution Prevention Information Clearinghouse (PPIC)

The Pollution Prevention Information Clearinghouse (PPIC) is a free information service of the U.S. EPA dedicated to reducing and eliminating industrial pollutants through technology transfer, source reduction, education and public awareness.

Frequently Requested

- Order BEES 4.0
  More information...
- Report a Violation
- Find Green Products
- Compliance Assistance

Ask a question via email, web form or call (202) 566-0799.

Help us improve our service. Fill out the PPIC Customer Survey!

Reference and Referral Service

PPIC provides reference and referral between 9:00 a.m. and 5:00 p.m. Monday through Thursday. Reference questions can be submitted via telephone/ voicemail at (202) 566-0799, fax at (202) 564-8899, postal mail, or e-mail. A convenient web form is also available.

Document Distribution Services

PPIC provides pollution prevention resources such as EPA documents and fact sheets dealing with source reduction and pollution prevention. Orders are taken from the public by phone, fax, e-mail and mail.

PPIC Information Products

The **PPIC Archive** contains electronic versions of older pollution prevention documents no longer available in hard copy.

The **Conference List** gives details and contact information for many current and upcoming pollution prevention conferences, workshops and training opportunities.

EPA's **Pollution Prevention (P2) Web Site** provides general information about P2 policies and programs, P2 technical assistance information and P2 resources. The annual Pollution Prevention Grant Programs information is also featured on this Web site.

Pathfinders. These pathfinders and bibliographies are designed to help you find the books and web sites on certain subjects relevant to Pollution Prevention, Pesticides, and Toxic substances.

EPA Libraries. You can search the EPA library collection through EPA's Online Library System (OLS) by selecting "Advanced Search", searching "pollution prevention" as a keyword.

Last updated on Tuesday, July 29th, 2008.
http://www.epa.gov/oppt/ppic/
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