



WASHINGTON SUBURBAN SANITARY COMMISSION

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14501 Sweitzer Lane • Laurel, Maryland 20707-5902

DISCHARGE AUTHORIZATION PERMIT

Industry Name: National Institutes of Standards and Technology
Site Address: 00 Muddy Branch Road
Gaithersburg, MD 20899
Correspondence Address: 100 Bureau Drive, Stop 3540
Gaithersburg, MD 20899-3540
Permit Number: 05813

In accordance with the provisions of the Washington Suburban Sanitary Commission's (WSSC's) Plumbing and Gasfitting Regulations, Chapter 9, "Industrial and Special Waste Regulations," and applicable provisions of Federal and State law, the National Institutes of Standards and Technology, a government establishment engaged in performing non-commercial research, and classified generally by NAIC Codes 921190 and 541710, hereinafter referred to as "Industrial User," is hereby granted permission to discharge industrial wastewater into the WSSC's sewer system in accordance with the General and Special Conditions contained herein. This wastewater will be treated at the District of Columbia Water and Sewer Authority's Blue Plains Wastewater Treatment Plant.

In the event that this Discharge Authorization Permit is revoked or otherwise made invalid, all industrial discharges into the WSSC's sewer system shall immediately cease.

This Discharge Authorization Permit is issued to the Industrial User, at the specified site address, by the Washington Suburban Sanitary Commission for the time period set forth as follows:

Effective Date: 06/01/04

Expiration Date: 05/31/08

Deadline To Apply For Renewal: 02/28/08

Issued by:


Michael S. Armorer, Group Leader
Regulatory Services Group

Date:

5/28/04

I. GENERAL CONDITIONS

A. General Discharge Requirement

The Industrial User shall meet all requirements of Chapter 9 of the Washington Suburban Sanitary Commission's (WSSC's) Plumbing and Gasfitting Regulations.

B. Permit Requirements

1. Duty to Mitigate

The Industrial User shall take all reasonable steps to minimize or correct any adverse impact resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliant discharge.

2. Duty to Comply

The Industrial User shall comply with all conditions of this permit. Failure to comply with pretreatment standards and requirements, and any applicable compliance schedule, may result in civil or criminal liability under applicable State or Federal law and may be grounds to impose the following penalties, as outlined in the WSSC's Enforcement Response Plan:

- a) Publication of Industrial User's name and nature of violation in the largest daily local newspaper;
- b) Suspension or revocation of Industrial User's Discharge Authorization Permit;
- c) Termination of water and sewer service;
- d) Civil Citation with a maximum fine of \$1,000/day;
- e) Incurrence of all WSSC costs associated with investigations, monitoring, analyses, or enforcement actions resulting from violation(s) of Federal, State, or local pretreatment standards or requirements;
- f) Increase in self-monitoring frequency; or
- g) Administrative Order with associated monetary penalty.

3. Duty to Reapply

If the Industrial User wishes to continue an activity regulated by this permit beyond the expiration date, the Industrial User must apply for and obtain a new permit. The permit application must be submitted at least 90 days before the expiration date of this permit. In the event that a timely and sufficient application has been submitted and the WSSC is

unable, through no fault of the Industrial User, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

4. Duty to Provide Information

The Industrial User shall furnish to the WSSC, in a timeframe set by the Commission, any information which the WSSC may request to determine whether cause exists for modifying or terminating this permit, or to determine compliance with this permit. The Industrial User shall also furnish to the WSSC, upon request, copies of records required by this permit to be kept.

5. Requests for Reconsideration

Requests for reconsideration of any condition or other requirement contained in a Discharge Authorization Permit must be filed within 15 days from the issuance of the Discharge Authorization Permit, provided such request does not create a violation of any existing applicable requirements, standards, laws, or rules and regulations. The filing of a request by the Industrial User for a Permit modification or a notification of planned changes or anticipated noncompliance does not stay any Permit condition.

- a) Requests for reconsideration shall be made in writing, shall be addressed to and filed with the Regulatory Services Group Leader, and shall state in detail the reasons supporting a reconsideration of a Discharge Authorization Permit limitation condition or other requirement.
- b) Failure to file a request for reconsideration within the time specified in this Section shall be deemed a waiver of the right to challenge or appeal a Discharge Authorization Permit limitation, condition, or other requirement.
- c) The decision of the Regulatory Services Group Leader on a request for reconsideration shall be final and binding upon the parties.
- d) If the Regulatory Services Group Leader fails to reach a decision on a request for reconsideration within 30 days from the date the request for reconsideration is filed, the failure shall be deemed a final denial of the request.

6. Confidentiality

Records concerning Industrial Users and the nature of their discharges shall be public information unless the User declares at the time a document is submitted, and is able to demonstrate to the satisfaction of the Commission, that the release of the information would divulge information, processes, or methods of operation entitled to protection as trade secrets pursuant to the requirements of the Maryland Public Information Act. Effluent data is public record and shall not be withheld.

7. Upset Provision (For Categorical Industries Only)

An upset shall constitute an incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the Industrial User. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

An upset can be used as an affirmative defense to an action brought for noncompliance with categorical pretreatment standards only if the Industrial User demonstrates, through properly signed contemporaneous logs, or other relevant evidence, that:

- a) An upset occurred and the Industrial User can identify the specific cause(s) of the upset.**
- b) The permitted facility was, at the time, being operated in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures.**
- c) The Industrial User has submitted the following information to the Commission within 24 hours of becoming aware of the upset (if this information is provided orally, a written submission must follow within 5 days): a description of the indirect discharge and cause of noncompliance; the period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue; steps being taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.**
- d) The Industrial User complied with any remedial measures required to minimize adverse impact on the wastewater treatment plant and collection system.**

8. Maintenance and Operation of Pretreatment Facilities

The Industrial User shall at all times properly operate and maintain all treatment systems, facilities, and controls (and related appurtenances) which are installed or used by the Industrial User to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to: effective performance; adequate funding; adequate operator staffing and training; and adequate laboratory and process controls, including appropriate quality assurance procedures.

Any changes or modifications made to the pretreatment system subsequent to issuance of this permit must be reported to the WSSC in writing, and authorized by the WSSC prior to the proposed change. Each report shall be accompanied by a set of plans outlining the system modification(s).

9. Duty to Halt or Reduce Activity

Upon reduction of efficiency of operation, or loss or failure of all or part of the pretreatment system, the permittee shall, to the extent necessary to maintain compliance

with its permit, control its production discharges until operation of the treatment facility is restored or an alternative method of treatment is provided (i.e., the primary source of power to the pretreatment system fails or is reduced).

10. Bypass of Treatment Facilities

A bypass shall be defined as the intentional diversion of wastestreams from any portion of an Industrial User's treatment facility.

Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury, or severe property damage, or no feasible alternative exists, such as the use of auxiliary treatment facilities.

The Industrial User may allow any bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operations. If bypass is needed for maintenance, the Industrial User must notify the WSSC within 24 hours of performing the necessary maintenance. The Industrial User must submit data documenting that standards were being met and submit a written report within 30 days of the event.

If an Industrial User knows in advance of the need for a bypass, it shall submit prior notice to the Commission, if possible at least 10 days before the date of the bypass.

An Industrial User shall submit oral notice of an unanticipated bypass that exceeds applicable pretreatment standards to the Commission within 24 hours from the time the Industrial User becomes aware of the bypass. A written submission shall also be provided within 5 days of the time the Industrial User becomes aware of the cause; the duration of the bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

11. Permit Conditions

This permit may be modified, suspended, or terminated for good cause including, but not limited to, the following:

- a) Material or substantial alterations or additions to the Industrial User's operation, which were not covered in the effective permit;
- b) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- c) Information indicating that the permitted discharge poses a threat to the collection treatment system, WSSC personnel, or the receiving waters;
- d) Violation of any terms or conditions of this permit;

- c) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- f) Upon request of the Industrial User, provided such request does not create a violation of any existing applicable requirements, standards, laws, or rules and regulations. The filing of a request by the Industrial User for a permit modification, suspension, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

12. Reopener Clause

This permit may be reopened and modified with any applicable more stringent requirements as contained in the National Categorical Pretreatment Standard promulgated per 40 CFR 403 or any applicable more stringent requirement resulting from the re-evaluation of Local Limits as necessary to ensure POTW compliance with sludge management requirements promulgated by the Environmental Protection Agency or the State of Maryland.

13. Significant Noncompliance

If at any time during the previous 12 months an Industrial User is in Significant Noncompliance of applicable pretreatment requirements, the Industrial User's name and nature of the violation will be published in the largest daily local newspaper. The User will be required to monitor 5 additional days until consistent compliance is demonstrated, and may also be subject to additional enforcement action as specified in Section I.B.2.

An Industrial User is in Significant Noncompliance if its violation meets one or more of the following criteria:

- a) chronic violations of wastewater discharge limits, defined as those in which 66% or more of all of the measurements taken during a 6-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;
- b) Technical Review Criteria (TRC) violations, defined as those in which 33% or more of all measurements taken during a 6-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oils, and grease, and 1.2 for all other pollutants except pH);
- c) any violation of a pretreatment effluent limit (daily maximum or longer-term average) that the WSSC determines has caused, alone or in combination with other discharges, interference or pass-through with the POTW (including endangering the health of POTW personnel or the general public);

- d) any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or to the environment or has resulted in the WSSC's exercise of its emergency authority;
- e) failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;
- f) failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- g) failure to accurately report noncompliance (see Section II.C. on Self-Monitoring Reports); or
- h) any other violation or group of violations which the WSSC determines will adversely affect the operation or implementation of the local pretreatment program.

In the event the Industrial User is in Significant Noncompliance during a 6-month period, the WSSC will notify the User. Once notified, the User will be required to conduct additional monitoring during the next reporting period for the parameters for which they were in Significant Noncompliance. Industrial Users in Significant Noncompliance for a daily maximum discharge limitation shall monitor 5 additional days during the next reporting period. Industrial Users in Significant Noncompliance for a monthly average discharge limitation shall monitor 1 additional day per month for 5 months. Industrial Users in Significant Noncompliance for a 4-day average discharge limitation must accumulate 5 4-day averages (20 days) during the next reporting period. The Industrial User may use its Periodic Compliance Report data in accumulating the 5 4-day averages. Additional monitoring shall continue until the Industrial User demonstrates consistent compliance with the specified limitation.

Permit monitoring requirements are a minimum. An Industrial User may conduct additional monitoring at any time. All additional monitoring shall be submitted in accordance with the requirements outlined in Section I.B.29, Additional Monitoring by the Industrial User. Enforcement action may be escalated for violations that constitute Significant Noncompliance.

14. Right of Entry

The Industrial User hereby grants the WSSC the right of entry to its premises for the purpose of inspecting any wastewater generating processes, chemical or wastewater storage facilities and pretreatment facilities, and for collecting samples and viewing records. Failure of an Industrial User to allow the WSSC access to its premises may result in immediate termination of service.

15. Accidental Discharges

The Industrial User shall notify the WSSC immediately in the event of any accident, negligence, or other occurrence which may result in a violation of this permit or could cause a problem to the treatment plant, including any slug loading. A slug loading being defined as any pollutant, including, but not limited to, flammables, explosives, acids, and oxygen demanding pollutants released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the treatment plant. Notification shall be made immediately by phoning:

301-206-8525 Washington Suburban Sanitary Commission
Regulatory Services Group
8:15 a.m. to 5:00 p.m., Monday - Friday

301-206-4002 Washington Suburban Sanitary Commission
Maintenance Trouble Desk
All Other Times

and

202-787-4177 District of Columbia Water and Sewer Authority
Pretreatment Section
202-787-4178 8:00 a.m. to 4:30 p.m., Monday - Friday

202-787-2068 District of Columbia Water and Sewer Authority
Water and Sewer Emergency
All Other Times

The following information will be requested:

- a) Industry name, address, and precise location of spill;
- b) Date, time, and duration of spill;
- c) Type of waste, concentration, and volume;
- d) Corrective action taken, or to be taken;
- e) Contact person and telephone number; and
- f) Any additional information, as appropriate.

Within five days, the Industrial User shall file a written report stating the above information as well as:

- a) A description of the accidental discharge and its cause;

- b) The duration of the discharge, including exact date(s) and time(s); and
- c) A description of all steps taken, or to be taken, to reduce, eliminate, and prevent a recurrence of future accidental discharges, other conditions, or noncompliance.

Mail or deliver this report to:

Washington Suburban Sanitary Commission
Regulatory Services Group
Industrial Discharge Compliance/Enforcement Unit
14501 Sweitzer Lane, 11th Floor.
Laurel, MD 20707-5902

and

District of Columbia Water and Sewer Authority
Pretreatment Section
5000 Overlook Avenue, SW
Washington, DC 20032

16. Notification of Changed Discharge

Any changes which result in the addition of new production shifts, chemicals, processes, pollutants, or result in a 30% or more increase or decrease in the Industrial User's wastewater flow must be reported to the WSSC in writing, 30 days prior to the proposed change. This notification shall also apply to the shutdown of any processes or facilities covered by this permit.

17. Notification of the Discharge of Hazardous Waste

The Industrial User shall notify the WSSC, the Environmental Protection Agency, Regional Waste Management Division Director, and State hazardous waste authorities, in writing, of any discharge into the POTW of a hazardous substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261.

Exempt from this notification are pollutants already reported on self-monitoring reports and discharges of less than 15 kilograms of non-acute hazardous waste within a calendar month.

18. Records Retention

- a) The Industrial User shall retain and preserve any records, books, documents, memoranda, reports, correspondence, and summaries of these materials relating to testing, internal or external monitoring, investigations, and chemical analyses made by or on behalf of the Industrial User in connection with its discharge for not less than five years from the date of drafting or preparation.

- b) All records that pertain to matters that are the subjects of special orders or any other enforcement or litigation activities brought by the Commission shall be retained and preserved until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired. Such materials as mentioned above shall be made available to Commission personnel upon request.

19. Sampling Locations

The WSSC reserves the right to monitor process discharges, or to require the Industrial User to install a manhole or other suitable structure for the purpose of monitoring process and/or facility discharges, if no suitable monitoring points exist.

20. Disposal of Pretreatment Sludges and Spent Chemicals

The disposal of sludge and spent chemicals generated shall be accomplished in accordance with Section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act. Pretreatment sludges may not be disposed of to the sanitary sewer.

21. Dilution

Increasing the usage of potable or process water by the Industrial User in any manner to achieve compliance with limitations is prohibited.

22. Falsifying Information

Any person who knowingly makes any false statements, representation, or certification in any application, records, plan, or other document filed or required to be maintained pursuant to these regulations, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under these regulations, shall be prosecuted by the WSSC according to the provisions of Sections 221 and 911 of the WSSC's Plumbing and Gasfitting Regulations.

In addition to prosecution by the WSSC, the person may also be liable for criminal and/or civil penalties under applicable State and Federal law.

23. Permit Transferability

Discharge Authorization Permits are issued to the Industrial User for specified operations at the time of issuance and shall not be reassigned, transferred, or sold to a new owner, new user, different premises, or a new or changed operation without the prior written approval of the Commission.

Discharge Authorization Permits may be transferred to a new owner or operator only if the permittee gives at least 30 days advance notice to the Commission and the Commission approves the Discharge Authorization Permit transfer. The notice to the Commission must include a written certification by the new owner or operator which:

- a) States that the new owner and/or operator has no immediate intent to change the facility's operations and processes;
- b) Identifies the specific date on which the transfer is to occur; and
- c) Acknowledges full responsibility for complying with the existing Discharge Authorization Permit.

Failure to provide advance notice of a transfer renders the Discharge Authorization Permit void as of the date of facility transfer.

24. Severability

The provisions of this Discharge Authorization Permit are severable. If any provision of this Discharge Authorization Permit or the application thereof is held invalid, the application of such provision to other circumstances, as well as the remainder of the Discharge Authorization Permit, shall not be affected thereby.

25. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State, or local laws.

26. Extension of Compliance Dates

Any requests for an extension of a compliance date must be submitted in writing, at least seven days prior to the compliance date, and shall include the reason for the extension and actions taken, or to be taken, to return to the original schedule.

The WSSC will review the request and make a determination of approval. Federal pretreatment standard compliance dates cannot be extended.

27. Industrial User Reports

Each Industrial User is responsible for performing the sampling associated with this permit. Industrial Users shall submit self-monitoring reports in the format specified by the WSSC.

The WSSC reserves the right to require the submission of plans, reports, questionnaires, notices, or analytical data to evaluate waste discharge characteristics and ensure compliance with this permit.

28. Analytical Protocol

All analyses performed on samples collected from the regulated monitoring point(s) defined in Section II shall be conducted in accordance with approved EPA methods specified in 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act."

29. Additional Monitoring by the Industrial User

In the event an Industrial User voluntarily samples at the regulated monitoring point(s) more frequently than required by this permit, the results of such monitoring shall be submitted to the WSSC by the due date of the next Periodic Compliance Report submission. The results of additional monitoring conducted in response to a violation shall be submitted within 30 days. A certification statement attesting to the accuracy and completeness of the data submitted shall accompany all Industrial User self-monitoring.

30. Grab Samples

The following five pollutant parameters shall be collected as grab samples: cyanide; total phenol; fats, oils, and grease; sulfide; and volatile organics. Samples for these pollutants shall consist of one grab for the day's production. If self-monitoring is required for any of these pollutants, collect the required sample volume in its appropriate container as specified in 40 CFR Part 136.

31. Total Toxic Organic (TTO) Exemption

In order to obtain exemption from TTO monitoring, a TTO Self-Monitoring Exemption Application must be completed. Effluent results conducted by the Industrial User and/or the WSSC must be less than 1.07 mg/l and a Toxic Organic Management Plan (TOMP) must be submitted. Once the TOMP is reviewed and approved, the Industrial User may maintain exemption by submitting a certification statement with each compliance report.

32. Signatory Requirements

All reports shall be signed as follows:

- a) By a responsible corporate officer if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:
- (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (2) the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign

documents has been assigned or delegated to the manager in accordance with corporate procedures.

- b) By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship, respectively.
- c) The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agent.
- d) By a duly authorized representative of the individual designated in paragraph a., b., or c. of this Section if:
 - (1) the authorization is made in writing by the individual described in paragraph a., b., or c.;
 - (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager, operator of a well or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
 - (3) the written authorization is submitted to the WSSC.
- e) If an authorization under paragraph d. of this Section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph d. of this Section must be submitted to the WSSC prior to, or together with, any reports to be signed by an authorized representative.

33. **Prohibited Discharges** [Chapter 9, Section 906, WSSC's Plumbing and Gasfitting Regulations]

No Industrial User shall discharge, or cause to be discharged, directly or indirectly, into the Commission's sanitary sewer:

- a) Any liquids or vapors having a temperature greater than 150° Fahrenheit (65° C). In no case shall discharged waste raise the temperature at the treatment works influent above 104° Fahrenheit (40° C);
- b) Any liquids, solids, or gases that by reason of their nature or quantity are, or may be, either alone or by interaction with other substances, sufficient to cause fire or explosion hazard in the POTW or its processes including, but not limited to, wastestreams with a closed cup flashpoint of less than 140° Fahrenheit or 60° Centigrade using the test methods specified in 40 CFR 261.21. At no time shall an Industrial User discharge any substance which results in a reading of greater than 5%

of the Lower Explosive Limit (LEL) for that substance, whether at the point of discharge or at any point in the system;

- c) Any malodorous or toxic gases, vapors, fumes, or other substances that, either singly or by interaction with other wastes, are capable of creating a public nuisance, a hazard to human health or the environment, or the prevention of entry by Commission personnel into sewers for maintenance and repair;
- d) Any liquids, solids, or gases not amenable to treatment or reduction by the sewage treatment processes employed, or amenable to treatment only to such a degree that the wastewater treatment plant violates its NPDES permit;
- e) Any liquids, solids, or gases that, singly or by interaction with other material, cause excessive coloration which may pass-through the POTW to the receiving water;
- f) Any garbage, other than that which has been properly shredded;
- g) Any ashes, cinders, sand, mud, straw, shavings, metals, glass, bones, wood, plastics, stone dusts, rags, paunch manure, butcher's offal, or any solids, liquids, or other substances capable of causing obstruction to the flow in sewers or other interference with the proper operation of the wastewater system;
- h) Any slug load, release rate of pollutants, concentration of pollutants, including oxygen demanding pollutants either singly or by interaction with other pollutants or wastestreams, which may cause interference with any wastewater treatment process, constitute a hazard to humans or animals, contaminate sludge, may pass-through the POTW to receiving waters, or could result in a violation of the POTW's NPDES permit;
- i) An average daily flow greater than two percent of the average daily sewage flow at the wastewater treatment plant receiving the industrial waste unless otherwise permitted in writing;
- j) Any water or wastewater containing substances in excess of the limitations. These limits shall be subject to revision and may be modified to represent concentration or mass-based standards;
- k) Any radioactive wastes or isotopes of such half-life or concentration as to exceed limits established by applicable local, State, or Federal regulations. Reports of discharges to the Commission's system shall reflect actual discharge concentrations rather than any time or dilution adjustments;
- l) Any liquids, solids, or gases containing viable pathogenic or parasitic organisms including, but not limited to, viruses, bacteria, algae, protozoa, and amoebas that may pose a health hazard or interfere with the proper operation of the wastewater collection or treatment systems;

- m) Any storm water, surface water, ground water, roof runoff, subsurface drainage, or other non-metered waters;
- n) Any substances that may solidify or become highly viscous at temperatures between 40° Fahrenheit (4° C) and 150° Fahrenheit (65° C), or that may cause obstruction and/or interference with the conveyance system or the POTW processes;
- o) Any water added for the purpose of diluting wastes that would otherwise exceed applicable concentration limitations for any wastewater constituent;
- p) Any trucked or hauled pollutants, except at discharge points designated by the Commission;
- q) Any wastes containing petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass-through;
- r) Any substance which may interfere with or pass-through the POTW into the receiving waters untreated or without adequate treatment; or
- s) Any glycol compound or derivative added to or contained in internal combustion engine cooling systems or liquid conveyance systems for the purposes of altering liquid freezing and/or boiling points.

II. SPECIAL CONDITIONS

A. Effluent Limitations/Minimum Monitoring Requirements

During the period of June 1, 2004, to May 31, 2008, the permittee is authorized to discharge wastewater from their site-wide neutralization system into the Washington Suburban Sanitary Commission's sewer system. These discharges are authorized from Outfall FAC. The permittee shall perform monitoring at Monitoring Point FAC (A), established as the fiberglass metering manhole labeled "WSSC IWMP," located inside NIST Gate E downstream of the pH treatment system. Such discharges shall be monitored by the Industrial User and limited as specified below. The WSSC will conduct monitoring for arsenic, mercury, and molybdenum.

During the period of June 1, 2004, to May 31, 2008, Monitoring Point FAC (B) has been established as the metering vault labeled "WSSC IWMP," located outside NIST Gate E on Muddy Branch Road downstream of the pH treatment system and from Monitoring Point FAC (A). Analytical data collected at Monitoring Point FAC (B) will be evaluated with the self-monitoring data from Monitoring Point FAC (A). The below-listed limitations shall apply.

<u>Parameter</u>	<u>Daily Maximum (mg/l)</u>	<u>Limit Origin</u>	<u>Sampling Frequency⁽¹⁾</u>	<u>Sample Type</u>
Flow (gpd)	N/A	N/A	2 days per quarter	Estimated ⁽²⁾
pH (units) ⁽³⁾	6.0 - 10.0	WSSC	2 days per quarter	Continuous Meter
Cadmium (T)	0.20	Blue Plains	2 days per quarter	12 hour Composite ⁽⁴⁾
Chromium (T)	7.0	WSSC	2 days per quarter	12 hour Composite ⁽⁴⁾
Copper (T)	2.3	Blue Plains	2 days per quarter	12 hour Composite ⁽⁴⁾
Lead (T)	0.7	WSSC	2 days per quarter	12 hour Composite ⁽⁴⁾
Nickel (T)	2.2	Blue Plains	2 days per quarter	12 hour Composite ⁽⁴⁾
Silver (T)	1.2	WSSC	2 days per quarter	12 hour Composite ⁽⁴⁾
Zinc (T)	4.2	WSSC	2 days per quarter	12 hour Composite ⁽⁴⁾
Cyanide (T)	0.56	Blue Plains	2 days per quarter	Grab
TTO - VOA / BNAP	2.13	WSSC	2 days per quarter	Grab / 12 hour Composite ⁽⁴⁾
Arsenic (T)	0.23	Blue Plains	1 day per year	Composite
Mercury (T)	Monitoring Only	Blue Plains	1 day per year	Composite

<u>Parameter</u>	<u>Daily Maximum (mg/l)</u>	<u>Limit Origin</u>	<u>Sampling Frequency⁽¹⁾</u>	<u>Sample Type</u>
Molybdenum (T)	3.1	Blue Plains	1 day per year	Composite

⁽¹⁾ Samples collected and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge over the course of production for each calendar day. All parameters shall be monitored on each monitoring day.

⁽²⁾ Wastewater discharge flows shall be estimated for each sampling day. Where estimated, the Industrial User shall specify the manner in which the flow is estimated.

⁽³⁾ pH must be analyzed by a continuous recorder over the course of the sampling day. A pH violation shall be construed as any excursion less than 6.0 or greater than 10.0 for more than 15 minutes at any one time, or more than 30 minutes in aggregate for any calendar day. The measured pH shall not be less than 5.0 for any period of time.

Each monitoring day, the pH of the specified effluent wastestream must be analyzed on-site. All pH meters must be calibrated at the beginning of each monitoring day and a field check conducted at the end of each monitoring day. All calibration and field check records must be submitted with Periodic Compliance Reports.

⁽⁴⁾ Composite samples shall be representative of the process wastestream, collected flow proportionately for a 12-hour period, or for the length of time the facility is in operation, and shall not exceed a 24-hour calendar day. If flow proportional sampling is not feasible, samples may be collected time proportionately at 15-minute intervals. The total composite shall consist of 4 liters minimum. If batch discharges are to occur during the reporting period, sampling shall be scheduled to coincide with these discharges.

B. Reporting Requirements

A Periodic Compliance Report shall be submitted on a quarterly basis by the following dates:

Report due April 7 for: FIRST REPORTING PERIOD
January through March

Report due July 7 for: SECOND REPORTING PERIOD
April through June

Report due October 7 for: THIRD REPORTING PERIOD
July through September

Report due January 7 for: FOURTH REPORTING PERIOD
October through December

It is the responsibility of the Industrial User to schedule sampling in advance of the reporting dates to allow for sample analysis and submittal of the Periodic Compliance Report by the January 7, April 7, July 7, and October 7 dates. Sampling and reporting requirements shall be in effect for the duration of the existence of the regulated process(es).

In the event sampling performed by the Industrial User indicates a violation of a daily maximum or average limit, the Industrial User shall notify the WSSC of the violation within 24-hours of becoming aware of the violation. Within 5 days of the notification to the WSSC, the Industrial User shall submit a copy of the analytical data associated with the violation, a copy of the chain of custody, and an original certification statement. The Industrial User shall repeat the sampling and analysis of the parameter in violation, and submit the results of the analysis, a copy of the chain of custody, and an original certification statement to the WSSC within 30 days of becoming aware of the violation. The Industrial User may not substitute scheduled self-monitoring in place of resampling for a violation.

If the violation is questionable, report the violation within the required 24-hour period. Reporting of violations may not be delayed during an investigation into the sampling data validity. In the event that the WSSC invalidates an Industrial User's sampling data, the Industrial User shall resample each invalidated parameter for the number of days invalidated.

All reports required by this permit shall be submitted to the Commission at the following address:

Washington Suburban Sanitary Commission
Regulatory Services Group
Industrial Discharge Compliance/Enforcement Unit
14501 Sweitzer Lane, 11th Floor
Laurel, MD 20707-5902

C. Minimum Laboratory Reporting Requirements for Industrial User Self-Monitoring Reports

Indicate if an outside laboratory conducted monitoring. Include copies of all analytical data. Laboratory data sheets shall include, at a minimum, the following:

- **Laboratory sample ID;**
- **Date(s) and time(s) sample(s) collected;**
- **Preservation techniques;**
- **Date sample received at laboratory;**
- **Date sample extracted (if applicable);**
- **Date(s) and time(s) sample(s) analyzed;**
- **Parameter analyzed;**
- **Methodology;**
- **Instrumentation;**
- **Dilution factor (if applicable);**
- **Detection limits - Numeric values must be submitted for all analyses. If values are below detection limit, indicate the numeric detection limit, (e.g., <0.01 mg/l);**
- **Concentration/units;**
- **Signature by qualified professional;**
- **Completed Chain of Custody form documenting receipt of samples by analytical laboratory; and**
- **Related comments.**

Please provide a copy of these requirements to your analytical laboratory. It is the Industrial User's responsibility to verify that the laboratory provides the requested information.

III. DEFINITION OF TERMS

Calibration - The adjustment of pH equipment at the onset of monitoring by using buffer solutions to determine deviations.

Composite sample - A combination of individual samples collected at regular intervals over a time period not to exceed 24 hours in any given calendar day. The volume of each individual sample may be either proportional to the flow rate during the sample period (flow composite), or constant and collected at equal time intervals during the composite period (time composite). Composite sampling shall be representative of the process wastestream for that day.

Consistent compliance - Compliance with all applicable pretreatment standards and reporting requirements during a reporting period.

Continuous pH monitoring - A pH reading taken automatically at a frequency of at least once/minute. In the event that an Industrial User monitors its pH continuously, a pH violation shall be construed as any excursion less than 6.0 or greater than 10.0 for more than 15 minutes at any one time, or more than 30 minutes in aggregate, for any calendar day. The pH shall not be less than 5.0 for any period of time.

Daily maximum - The maximum allowable discharge concentration of a pollutant in a wastestream during a calendar day.

Estimated flow - A calculated volume or discharge rate which is based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters, and batch discharge volumes.

Field Check - A check on pH equipment at the end of a monitoring day using buffer solutions. No adjustment is made to equipment.

Four-day average - The arithmetic average of daily values for four consecutive monitoring days.

Grab sample - An individual sample collected over a time period not exceeding 15 minutes, without regard for flow or time. In the event that an Industrial User monitors its pH by collecting grab samples, a violation shall exist if greater than 6.25% of the grabs taken that day are less than 6.0 or greater than 10.0, or if any of the grabs taken are less than 5.0.

Measured flow - Flow obtained from appropriate flow measurement devices and methods consistent with scientific practices to ensure accuracy and reliability. Such devices shall be maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% for true discharge rates throughout the range of expected discharge volumes.

Monthly average - The arithmetic average of the values for effluent samples collected over a calendar month.

POTW - A Publicly Owned Treatment Works, which includes any device and system used in storage, treatment, recycling, and reclamation of municipal sewage or industrial waste of a liquid nature. Also included are sewers, pipes, and other conveyances only if they convey wastewater to a POTW treatment plant. The term also means the municipality as defined in Section 502.(4). of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

Quarter - For reporting purposes, a quarter shall consist of the months of January - March, April - June, July - September, and October - December.

Severe Property Damage - Substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Total Toxic Organics - The summation of all toxic organic compounds with a concentration of greater than 10 micrograms/liter. This list consists of those compounds appearing in the categorical standard to which the industry is subject. Noncategorical Industrial Users shall be subject to the total toxic organics list appearing in 40 CFR 433.11.

Variations in duplicate sample results (excluding pH*) - The following equation will be used to determine the acceptability of any variations between WSSC and Industrial User monitoring data collected on the same day:

$$\frac{2|A-B|}{A+B} \times 100$$

A = WSSC Results
B = Industry Results

If the results of this calculation exceed 20%, the variance between the results is unacceptable and the Industrial User's monitoring data will not be used.

***In the event that the Industrial User and the WSSC monitor for pH on the same day, the WSSC's data will be used to determine compliance.**

REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES

(40 CFR Part 136.3, Table II)

<u>Parameter</u>	<u>Container⁽¹⁾</u>	<u>Preservation⁽²⁾</u>	<u>Maximum Holding Time</u>
Ammonia	P, G	Cool, 4°C, H ₂ SO ₄ to pH <2	28 Days
Biochemical Oxygen Demand	P, G	Cool, 4°C	48 Hours
Chemical Oxygen Demand	P, G	Cool, 4°C, H ₂ SO ₄ to pH <2	28 Days
Cyanide, Total and Amenable to Chlorination	P, G	Cool, 4°C, NaOH to pH >12	14 Days
Chromium VI	P, G	Cool, 4°C	24 Hours
Mercury	P, G	HNO ₃ to pH <2	28 Days
Metals (Except Chromium VI ⁽³⁾ and Mercury)	P, G	HNO ₃ to pH <2	6 Months
Oil and Grease	G	Cool to 4°C, HCl or H ₂ SO ₄ to pH <2	28 Days
pH	P, G	None Required	Analyze Immediately
Phosphorus, Total	P, G	Cool, 4°C, H ₂ SO ₄ to pH <2	28 Days
Sulfide	P, G	Cool, 4°C Add Zinc Acetate and Sodium Hydroxide to pH >9	7 Days
Temperature	P, G	None	Analyze Immediately
Volatile Organics	G, Teflon-lined Septum	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ , HCl to pH 2	14 Days ⁽⁴⁾
Semi-volatile Organics	G, Teflon-lined Cap	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃	7 Days Until Extraction, 40 Days After Extraction
Radiological Tests	P, G	HNO ₃ to pH <2	6 Months

⁽¹⁾ Polyethylene or Glass

⁽²⁾ Preservation should be performed immediately upon sample collection.

⁽³⁾ Unless otherwise requested, analyze for total chromium.

⁽⁴⁾ Samples receiving no pH adjustment must be analyzed within 7 days of sampling.