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POLICY ISSUE
(Information)

September 25, 1996

SECY-96-207

FOR: The Commissioners

FROM: James M. Taylor
Executive Director for Operations

SUBJECT: UPDATE OF POLICY AND PROGRAM ISSUES AT SITE DECOMMISSIONING
MANAGEMENT PLAN SITES

PURPOSE:

To provide the Commission with a summary of significant program management and decommissioning activities since August 1995, the last Site Decommissioning Management Plan (SDMP) Update (SECY-95-209).

BACKGROUND:

In a November 4, 1993, Staff Requirements Memorandum on SECY-93-179, the Commission agreed to change the frequency of detailed updates to the SDMP from annual to biennial, but requested a short summary of significant activities during the non-reporting years. A detailed update was provided to the Commission, and published as NUREG-1444, Supplement 1, in 1995. This paper summarizes significant activities during the last year.

DISCUSSION:

The discussion covers three areas: 1) the SDMP program management plan; 2) significant site-specific decommissioning activities; and 3) activities related to U.S. Nuclear Regulatory Commission decommissioning policy and guidance.

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PAPER

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1. Program Management Plan

The staff is implementing the management plan described in the last SDMP report (SECY-95-209). In accordance with this plan, additional guidance for inspectors and license reviewers has been developed, and changes have been made to the process for reviewing characterization plans and reports and performing confirmatory surveys.

The staff has developed a final draft Manual Chapter (MC) on decommissioning, which is currently in the final stage of review. The MC defines a streamlined decommissioning process in which the rigor of review is consistent with potential contamination levels. The full spectrum of sites is covered, from small, routine sites, to large, complex sites, including those listed on the SDMP. The MC presents a process for decommissioning and license termination that differs in a number of ways from the current procedures used by the licensing staff for routine decommissioning. The consolidation of the procedures, policies, and guidance into one document upgrades the NRC decommissioning program and ensures consistent and effective site decommissioning and license termination for all NRC licensees. The issuance of the MC will also satisfy concerns related to the lack of written procedures that were raised by the U.S. General Accounting Office and the NRC Inspector General (IG) during decommissioning program reviews.

The staff has established a decommissioning inspection program (MC 2602) and decommissioning inspection procedures (IPs) for materials and fuel cycle facilities (IPs 87104 and 88104). These IPs describe inspection frequency and define the decommissioning activities to inspect at various stages in the decommissioning process. Particular emphasis is placed on ensuring adequate control of licensed material after licensed operations have ceased. Consistent with the streamlined program for confirmatory surveys, the IPs also provide guidance on areas to inspect during a final survey program review in place of NRC performing extensive confirmatory measurements. The staff has also developed a qualification program (MC 1246, Appendices IX and X) for technical, project management, and inspection staff working in the area of decommissioning. The qualification program ensures that staff has at least minimum technical qualifications to effectively review decommissioning plans and other related submittals.

The MC and IPs reflect recent changes in the staff's approach to reviewing characterization plans and reports, and performing confirmatory surveys. In accordance with the management plan, characterization reports are not being reviewed before the submittal of the decommissioning plans for most sites. This approach was applied to the review of characterization data submitted by the Cimarron Corporation, the Cleveite Corporation, Westinghouse Waltz Mill, and AAR Manufacturing, Inc., and has resulted in more efficient and effective reviews. To date, no significant delays in site decommissioning have been encountered as a result of reviewing characterization reports with the decommissioning plans. In addition, the staff is no longer reviewing characterization plans for most sites. However, staff's decision not to formally approve the site characterization plan at one site, Sequoyah Fuels Corporation, prompted an investigation by the IG. To ensure that

characterization reports do not contain glaring data omissions that would significantly delay the approval of the decommissioning plan, the staff is encouraging licensees to meet with NRC early in the characterization process to outline the characterization plan and summarize characterization results. This should allow NRC the opportunity to provide comments and identify potential data gaps. This approach is being applied, for example, to the General Electric Wilmington site and the Nuclear Fuel Services Erwin site, which are undergoing partial decommissioning and are not listed on the SDMP.

The staff is also modifying its approach for NRC confirmatory surveys at remediated sites consistent with the management plan in SECY-95-209. For large decommissioning sites, NRC confirmatory survey measurements have represented a considerable effort. For example, the confirmatory survey at the Shoreham Nuclear Plant cost about \$800,000 in technical contract support, in addition to NRC staff time. Although Shoreham is an extreme example, the cost to NRC, and fee-recoverable licensees, has been considerable at a significant number of sites. The management plan called for a reduction in the number and scope of confirmatory surveys, relying instead on inspections of the licensee's final survey program, supporting quality assurance (QA) documentation, and past performance, to provide NRC with the confidence that the final survey data reported by the licensee is valid and accurate. A limited number of NRC confirmatory measurements may also be collected as a part of the performance-oriented inspection. This program is being implemented on a trial basis at two sites -- the Fort St. Vrain (FSV) power reactor site, and the Cimarron site, a former fuel fabrication facility. Based on the results of inspections of the FSV final survey program conducted to date, and the extent of confirmatory surveys performed during these inspections, the staff expects the cost of NRC confirmatory surveys at the FSV reactor to be reduced by at least a factor of 4 (including reductions in contractor cost from improved efficiency) compared with the Shoreham reactor. In addition, the staff believes that the up-front inspection effort will provide NRC with greater confidence in the accuracy and reliability of the licensee's final survey results, as opposed to relying extensively on confirmatory surveys performed after the licensee has completed the final survey measurements.

The formal trial implementation of the streamlined confirmatory survey approach is being conducted out of the Division of Waste Management (DWM), with the assistance of Region IV. However, the approach is being applied, to varying degrees, on a case-by-case basis in all the regions, in coordination with DWM. Although the streamlined approach is generally reflected in the decommissioning IPs and the draft MC, detailed procedures for implementing this approach will be issued in 1997 based on experience gained during trial implementation.

To augment the regions' technical resources to conduct these "in-process" inspections of licensees' final survey programs, two Environmental Measurements Specialist (EMS) positions were created as a part of the Laboratory Transition Plan. The Laboratory Transition Plan was developed to ensure an orderly and effective reduction in NRC's mobile and fixed radioanalytical laboratories. The EMS positions are located in Region I and

III, but are intended to also provide technical assistance to Regions II and IV, as needed. Although the creation of the EMS positions is an important component of the Laboratory Transition Plan, the main purpose of the plan is to improve efficiency by consolidating the NRC radiological measurements laboratories from four regional laboratories (one in each region) to two laboratories (one in Regions I and III), while ensuring that NRC maintains the independent measurement capabilities necessary for a viable regulatory program. In addition to increased efficiency, the consolidation plan seeks to enhance overall confidence in the quality of measurements at the remaining two laboratories and NRC's contractor laboratory through a more rigorous quality assurance program. The overall effect of the consolidation effort, which is currently underway, will be a reduction in resources devoted to NRC radioanalytical efforts, improved quality of laboratory analyses, improved consistency between NRC laboratories, and improved support of decommissioning efforts through the creation of the EMS position and increased emphasis on environmental measurements.

Finally, a database was developed to track progress and manage SDMP site decommissioning activities. The database is also used to respond to requests for site-specific information and to provide the site summaries for the annual report to the Commission. The attachment contains site summaries that were generated directly from the database, at considerable resource savings over manual site summary generation used for previous SDMP reports to the Commission.

2. Major Site Decommissioning Activities

Staff efforts over the past year have primarily focused on site-specific casework. Since May 1995, six sites have completed decommissioning and have been removed from the SDMP, exceeding the goal set by the Office of Nuclear Material Safety and Safeguards for this year. The Commission was informed of each of these actions in separate papers. In addition, NUREG-1444, Supplement 1, projected that a total of nine sites would be removed from the SDMP by May 1997. This goal is also expected to be met or exceeded. No sites have been added to the SDMP list.

Six additional sites have essentially completed remediation (or are otherwise no longer appropriate for inclusion in the SDMP) and several are expected to be removed from the SDMP list before May 1997. These sites are: (1) Anne Arundel County/Curtis Bay, Baltimore, MD; (2) Babcock and Wilcox, Apollo, PA; (3) RTI, Inc., Rockaway, NJ; (4) Texas Instruments, Inc., Attleboro, MA; (5) Aberdeen Proving Ground, MD; and (6) Watertown Arsenal, Watertown, MA.

Decommissioning plans have been approved for five sites in the last year, allowing remediation to begin. Two of the sites, BP Chemicals America, Lima, OH, and Chemetron Corporation (Harvard Avenue), Cleveland, OH, have been approved to place the contaminated material into on-site disposal cells. After the disposal cells are capped, the sites will be released for unrestricted use. Work continues towards decommissioning, and removing from the list, the remaining 45 sites listed in the SDMP. The attachment provides a brief update on the current status of decommissioning activities at the remaining sites.

3. Policy and Guidance

The staff is developing environmental impact statements (EISs) for four SDMP sites: (1) Shieldalloy Metallurgical Corporation, Cambridge, OH; (2) Babcock & Wilcox Shallow Land Disposal Area, Parks Township, PA; (3) Sequoyah Fuels Corporation, Gore, OK; and (4) the U.S. Army Jefferson Proving Ground, Madison, IN. Development of an EIS for a fifth site, Shieldalloy Metallurgical Corporation, Newfield, NJ, has been placed on hold in response to the licensee's request and actions. The staff plans to brief the Commission on the status of the four sites in October 1996. The contamination levels at each of these sites could result in a dose to a member of the public in excess of 1 mSv/yr (100 mrem/yr) assuming an intruder and/or resident farmer pathway scenario. The waste volumes and physical distribution of the radioactive material on these sites make decommissioning to levels suitable for unrestricted use prohibitively expensive (i.e., up to approximately \$1 billion). On-site disposal of the material requires an exemption from existing regulations, supported by an EIS.

Each of these four sites present different site conditions and decommissioning challenges. The Shieldalloy site contains over 200,000 cubic meters (7 million cubic feet) of slag material contaminated with uranium and thorium resulting from the extraction of niobium from ores containing licensable quantities of uranium and thorium. The Parks Township Shallow Land Disposal Area, authorized under 10 CFR 20.304, contains uranium (including enriched uranium), thorium, polychlorinated biphenyls (PCBs), and volatile organics. The Sequoyah Fuels site is a former uranium conversion facility containing on the order of 200,000 cubic meters (7 million cubic feet) or more of soil and buildings contaminated with natural uranium, 34 million liters (9 million gallons) of contaminated sludge from solvent extraction processes, and significant uranium groundwater contamination. The Jefferson Proving Ground contains 75,000 Kg (165,000 lb) of depleted uranium (DU) spread over an 8.6 square km (3-square-mile) area. The contamination resulted from testing DU munitions, and is mixed with millions of rounds of unexploded ordinance.

For the Shieldalloy site, the staff published a draft EIS (DEIS) for comment in July 1996. A preliminary DEIS for the Parks Township site was provided to the Commonwealth of Pennsylvania for review in June 1996, with a DEIS scheduled for November 1996. The DEISs are scheduled to be issued for the Sequoyah Fuels and Jefferson Proving Ground sites in Fall 1997 and Spring 1998, respectively. The decommissioning alternative proposed by the licensees at all four sites involves leaving contaminated material on-site, with reliance on land-use restrictions and institutional controls. The staff is currently holding discussions with the U.S. Department of Energy (DOE) to determine if DOE would be willing to accept custody of these sites after the waste is stabilized on-site, and provide long-term control and surveillance at the sites, under the authority of section 151(b) of the Nuclear Waste Policy Act.

The staff was planning to initiate EISs for other SDMP sites with similar contamination and volumes of waste as the Shieldalloy site. However, based on experience from the four EISs under development, staff is assessing the feasibility of a generic EIS (GEIS) addressing on-site disposals of similar

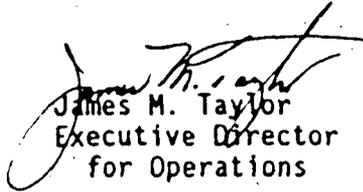
wastes, and whether such a generic approach may be feasible to cover a number of sites (estimated to be 10 to 20) that might otherwise require site-specific EISs under 10 CFR Part 51.

Regarding guidance to licensees, an Information Notice (IN) on decommissioning former on-site burials was issued on August 19, 1996 (IN 96-47). This IN iterated the Commission's expectations, as noted in the "Statement of Considerations for the 1988 Decommissioning Rule" (53 FR 24018), that former on-site disposals are to be evaluated, and if necessary excavated, before the disposal area is released for unrestricted use. In addition, an Administrative Letter has been developed, and will be issued in October 1996, that outlines licensee responsibilities under the Timeliness Rule. Feedback from regional and headquarters staff indicated that licensees were not fully aware of their obligations under the Timeliness Rule. Therefore, the Administrative Letter will serve as a reminder, as well as provide additional explanation of the rule.

In addition to providing guidance on the implementation of the Timeliness Rule, the staff is preparing an enforcement strategy for licensees found in non-compliance with the final rule on "Clarification of Decommissioning Funding Requirements" (60 FR 38235, November 29, 1995) and is continuing with the development of the technical bases to support the ongoing Rulemaking on Radiological Criteria for Decommissioning. One of these technical basis documents is the Multi-Agency Radiological Survey and Site Investigation Manual (MARSSIM), which is intended to provide guidance on methods for demonstrating compliance with decommissioning criteria. The MARSSIM is being developed by a working group consisting of representatives from NRC, DOE, the U.S. Environmental Protection Agency, and the Department of Defense. A draft for public comment should be completed in late 1996.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection.


James M. Taylor
Executive Director
for Operations

Attachment:
SDMP Site Status Summaries

DISTRIBUTION:

Commissioners	REGIONS
OGC	EDO
OCAA	SECY
OIG	
OPA	
OCA	

SDMP SITE STATUS SUMMARIES

ATTACHMENT

AAR MANUFACTURING

Site Identification

Location: LIVONIA, MI
License No.:
Docket Number: 04000235
License Status: Terminated
Project Manager J. BUCKLEY

Status of Decommissioning Activities

Thorium contaminated soil is present at several locations, both surface and subsurface, in the open land areas outside of the building. Soil contamination has also been identified below the building foundation in three locations..

AAR Manufacturing submitted a site remediation plan (including a site characterization report) for NRC review in May 1996. NRC staff has reviewed the plan and is preparing comments (see Issues below).

NRC/Licensee Actions and Schedule

- Sep 1996 NRC provides comments to AAR on remediation plan
- Oct 1996 AAR revises remediation plan and conducts additional site characterization

Problems/Issues

AAR is proposing to remove only the soil which results in an exposure rate of greater than 10 uR/hr measured at one meter above the surface. This approach results in leaving significant volumes of soil which exceed the NRC's release criteria for the unrestricted use of thorium (10 pCi/g).

ABERDEEN PROVING GROUND

Site Identification

Location: ABERDEEN PROV GROUND, MD
License No.: SUB-834
Docket Number: 04007354
License Status: Active
Project Manager: A. DIMITRIADIS

Status of Decommissioning Activities

In December 1995, the licensee submitted a study of the long term fate of depleted uranium (DU) at the Aberdeen site. The study evaluated the current distribution of DU in the environment and concluded that the DU has a minimal effect on the environment.

The NRC completed the review of the licensee's report in May 1996 and is considering whether the Aberdeen Site should be removed from the SDMP.

Staff is in process of writing Commission paper to remove this site from the SDMP list.

NRC/Licensee Actions and Schedule

· Oct 1996 Commission paper to be completed.

Problems/Issues

None

ADVANCED MEDICAL SYSTEMS

Site Identification

Location: CLEVELAND, OH
License No.: 34-19089-01
Docket Number: 3016055
License Status: Active
Project Manager M. WEBER

Status of Decommissioning Activities

AMS is an active licensee, and is not decommissioning its facility. However, several rooms, and a former hot-cell, are contaminated with Co-60.

AMS' NRC license is currently in the renewal process.

In 1995, over 100,000 gallons of water contaminated with Co-60 were removed from AMS' basement and subsequently treated (cleaned). The treated water remains on site, inside the facility, because of regulatory issues involving the Ohio EPA and the Northeast Ohio Regional Sewer District. Also in 1995, the facility's contaminated under drain system and sewer manhole were replaced or grouted with cement. This action blocks licensee access to the sanitary sewer system.

In October 1995, AMS submitted a conceptual decommissioning plan proposing the SAFSTOR decommissioning option for the AMS facility. NRC has provided AMS comments on the plan and is currently reviewing the AMS responses. NRC will either provide additional comments or make a determination as to the acceptability of SAFSTOR at the AMS facility in October 1996.

The licensee placed a contract with Chem Nuclear to remove the majority of sealed and bulk sources of Co-60 (approximately 50,000 Ci).

NRC/Licensee Actions and Schedule

- Sep 1996 AMS submits plan to remove sealed and bulk Co-60 sources
- Oct 1996 NRC completes review of source removal plan
- Nov 1996 AMS removes Co-60 sources from AMS facility

Problems/Issues

ADVANCED MEDICAL SYSTEMS

The ability of AMS to fund decommissioning may be affected by a lawsuit brought by the NEORS. NEORS contends that AMS is responsible for the Co-60 contamination at its Easterly and Southerly Waste Water Treatment Plants.

ALUMINUM CO. OF AMERICA

Site Identification

Location: CLEVELAND, OH
License No.: NA
Docket Number: 04000501
License Status: Terminated
Project Manager: J. BUCKLEY

Status of Decommissioning Activities

The site was released for unrestricted use and removed from the SDMP in April 1996. The Commission was informed of the staff action in SECY-96-053.

NRC/Licensee Actions and Schedule

Problems/Issues

NA

ANNE ARUNDEL CURTIS BAY DEPOT

Site Identification

Location: BALTIMORE, MD
License No.: STC-133
Docket Number: 04000341
License Status: Terminated
Project Manager: D. ORLANDO

Status of Decommissioning Activities

The Defense Logistics Agency (DLA) has completed residual radioactive material removal and has submitted final status surveys for soil and buildings, and a groundwater assessment.

NRC and Maryland Department of Environment (MDDE) staff have reviewed the final status surveys and groundwater assessment and have forwarded comments to DLA (several iterations).

NRC and MDDE staff are awaiting DLA's responses to the latest set of comments.

NRC/Licensee Actions and Schedule

- Sep 1996 DLA submits response to NRC comments on final survey report
- Oct 1996 NRC conducts confirmatory survey
- Nov 1996 NRC releases site for unrestricted use and removes site from SDMP

Problems/Issues

One on-site monitoring well exhibited gross alpha concentrations in excess of the EPA's drinking water limit.

Site Identification

Location: APOLLO, PA
License No.: SNM-145
Docket Number: 07000135
License Status: Active
Project Manager: H. ASTWOOD

Status of Decommissioning Activities

B&W has completed decommissioning actions.

The staff has completed its review of B&W's groundwater monitoring data, the final termination survey, and Oak Ridge Institute for Science and Education's (ORISE) confirmatory survey. All reviews indicate the site meets NRC's criteria for unrestricted use.

The staff is preparing a paper to notify the Commission of the staff's intention to terminate the license and remove the Apollo site from the SDMP list. The paper will be completed in October 1996.

NRC/Licensee Actions and Schedule

- Oct 1996 NRC staff informs Commission of intent to remove site from SDMP
- Nov 1996 NRC removes site from SDMP

Problems/Issues

None

BABCOCK & WILCOX - PARKS TOWNSHIP

Site Identification

Location: VANDERGRIFT, PA
License No.: SNM-414
Docket Number: 07000364
License Status: Active
Project Manager: N. ORLANDO

Status of Decommissioning Activities

Site characterization is almost complete.

B&W submitted a decommissioning plan for the site, which consists of 3 buildings (A, B, and C) and the surrounding grounds, in January 1996. The plan is being reviewed by NRC.

B&W is currently remediating the buildings on-site. This activity is authorized under their existing license.

They plan to decommission the buildings to levels suitable for unrestricted use, and to demolish the buildings after NRC provides approval.

After NRC approval of the decommissioning plan, B&W will remediate soils and underground tanks and pipes.

NRC/Licensee Actions and Schedule

- Nov 1996 NRC approves decommissioning plan and amends license
- Jun 1997 B&W completes decommissioning activities

Problems/Issues

There is significant public interest in this site. When NRC amends the license to approve the decommissioning plan, there may be a hearing request. This could delay the above schedule.

BABCOCK & WILCOX - SHALLOW LAND DISPOSAL AREA

Site Identification

Location: VANDERGRIFT, PA
License No.: 07003085
Docket Number: 07003085
License Status: Active
Project Manager H. ASTWOOD

Status of Decommissioning Activities

The staff is in the process of developing an environmental impact statement (EIS) for this site because the licensee's proposed option is to stabilize the waste in place.

The licensee is proposing to cover the buried waste with a soil and synthetic cover and isolate the waste from the groundwater with slurry walls, grout curtains, and other engineered barriers.

A draft EIS is scheduled for publication in January 1997 for public comment.

NRC/Licensee Actions and Schedule

- Jan 1997 DEIS published for public comment
- Oct 1997 FEIS published

Problems/Issues

The decommissioning schedule can not be completed until a decommissioning alternative is selected based on information to be developed in the EIS.

This site contains enriched and depleted uranium and there is an issue concerning the reconcentration of this material. This issue needs to be resolved in the EIS, but could cause a delay in its completion because of the complex nature of the analyses.

In addition, there is significant public interest in this site. When the NRC amends the license to approve the decommissioning plan, there may be a hearing request. This could delay the decommissioning of the site.

BP CHEMICALS OF AMERICA, INC.

Site Identification

Location: LIMA, OH
License No.: SUB-908
Docket Number: 04007604
License Status: Active
Project Manager S. NALLUSWAMI

Status of Decommissioning Activities

NRC issued License Amendment No. 9 on May 8, 1996, for the mixed waste pond closure project. This amendment authorizes on-site disposal of the mixed wastes containing depleted uranium in accordance with 10 CFR Part 20.2002 in closure cells designed under US EPA's Resource Conservation and Recovery Act (RCRA) rules.

A decommissioning plan for the rest of the site areas was submitted in August 1996, and is under review by NRC staff.

NRC/Licensee Actions and Schedule

- Dec 1996 NRC staff completes review of decommissioning plan for rest of the site areas
- Jan 1997 BPC completes V-1 closure cell
- Jul 1997 BPC completes Burn Pond closure cell
- Jun 1998 BPC completes Celite Pond closure cell
- Nov 1998 BPC constructs caps on all mixed waste closure cells
- Dec 1998 BPC installs post-closure controls for mixed waste cells

Problems/Issues

None

CABOT CORP, BOYERTOWN

Site Identification

Location: BOYERTOWN, PA
License No.: SMB-920
Docket Number: 04006940
License Status: Active
Project Manager M. LAMASTRA

Status of Decommissioning Activities

The license is currently in timely renewal. The content of Cabot's proposed decommissioning funding plan (DFP) and financial assurance mechanism continues to cause delays in completing license renewal. Cabot proposes to base the decommissioning funding plan on the assumption that the existing sludge on-site will be reprocessed to extract remaining Ta and Nb quantities and is therefore not waste. Cabot asserts that after processing, the sludge will be sold to a uranium mill as uranium feedstock.

NRC/Licensee Actions and Schedule

- Oct 1996 NRC completes review of latest DFP
- Dec 1996 NRC issues Finding of No Significant Impact (FONSI) for license renewal

Problems/Issues

Because of Cabot's initial claim that the sludge was not a waste, NRC has not approved the DFP. NRC staff is reviewing the acceptability of Cabot's proposal to reprocess the sludge to extract remaining Ta and Nb quantities and sell the residue to a uranium mill as uranium feedstock.

CABOT CORP., READING

Site Identification

Location: READING, PA
License No.: SMC-1562
Docket Number: 04006940A
License Status: Active
Project Manager J. GREENWALD

Status of Decommissioning Activities

The licensee has completed site characterization except for determining slag leach rates. NRC is reviewing the licensee's revised leach rate calculation for the slag waste. Because the leach rate calculation is more complicated than either the licensee or NRC anticipated, the site decommissioning plan has been delayed until March 1997.

The licensee has determined that the volume of the radioactive slag pile is 60,000 cubic feet. Individual pieces of slag have been determined to contain combined uranium and thorium concentrations ranging from 686 to 1222 pCi/g. However, the radioactive material is mixed with uncontaminated material, so the radiological concentration of the pile as a whole is much less than these individual pieces. The slag pile consists of (1) residue from processing tin slags to recover tantalum; (2) sand mixed with tin slags; and (3) some slags of unknown origin.

Financial assurance in the amount of \$234K was submitted in November 1995. The financial assurance instrument was revised per NRC comments and is now acceptable.

NRC/Licensee Actions and Schedule

· Mar 1997 Cabot submits decommissioning plan

Problems/Issues

The leach rate determination is the major outstanding technical issue. If the licensee proposes onsite disposal, NRC and the licensee will need to resolve groundwater monitoring and local slope stability issues.

CABOT CORP., REVERE

Site Identification

Location: REVERE, PA
License No.: SMC-1562
Docket Number: 04006940B
License Status: Active
Project Manager J. GREENWALD

Status of Decommissioning Activities

The licensee submitted a revised decommissioning plan in April 1996. NRC reviewed the plan and sent comments to the licensee in June 1996. The licensee is awaiting the resolution of the leach rate determination issue at the Reading site before responding to NRC on the Revere site. In April 1996, the licensee submitted a revised financial instrument, per NRC comments, that is now acceptable. The licensee expects to be able to complete decommissioning within four months of NRC approval of its decommissioning plan.

NRC/Licensee Actions and Schedule

Nov 1996 NRC approves decommissioning plan

Problems/Issues

The major issues include: (1) whether radon needs to be included in the dose assessment; (2) the calculation of the leach rate; (3) whether credit for the cover can be given; and (4) concentration averaging.

CHEMETROM CORPORATION/BERT AVE.

Site Identification

Location: NEWBURGH HEIGHTS, OH
License No.: SUB-1357
Docket Number: 04008724B
License Status: Active
Project Manager: T. JOHNSON

Status of Decommissioning Activities

Staff performing groundwater analyses. Information will be included in Draft EA to be sent to State and local agencies for comment.

NRC/Licensee Actions and Schedule

- Sep 1996 NRC sends draft EA to State and local agencies for comment.
- Oct 1996 NRC receives comments on draft EA
- Dec 1996 NRC makes determination on Bert Ave. remediation plan.

Problems/Issues

Draft Environmental Assessment (EA) needs to be completed with updated groundwater analysis information.

CHEMETRON/HARVARD AVE

Site Identification

Location: NEWBURGH HEIGHTS, OH
License No.: SUB-1357
Docket Number: 04008724
License Status: Active
Project Manager: T. JOHNSON

Status of Decommissioning Activities

The decommissioning plan for the Harvard Ave. site was approved on June 7, 1996. Chemetron began excavation of contamination on June 10, 1996. Chemetron is scheduled to complete its final surveys during the week of September 20, 1996, and submit a final survey report during the week of September 23, 1996. NRC is scheduled to inspect Chemetron's final survey practices during the week of September 16, 1996, and perform a confirmatory survey during the week of September 23, 1996. Chemetron expects to finish cap placement and final site contouring by the end of October 1996.

NRC/Licensee Actions and Schedule

- Sep 1996 Chemetron to submit final survey report
- Oct 1996 NRC performs confirmatory surveys
- Feb 1997 NRC releases Harvard Ave. site for unrestricted use.

Problems/Issues

None

CLEVITE CORP.

Site Identification

Location: CLEVELAND, OH
License No.: C-3790, C-3692 SNM-183
Docket Number: 04000133
License Status: Terminated
Project Manager J. BUCKLEY

Status of Decommissioning Activities

Based on the licensing file, it was initially thought that contamination at the site would be uranium. However, during site characterization thorium contamination was also discovered. The thorium contamination is limited mainly to a ventilation duct and the floor directly beneath the duct.

NRC received Severson Environmental Services, Inc. "Site Characterization Survey/Termination Survey, Remediation, and Health and Safety Plan" on May 11, 1995. NRC reviewed and approved the site characterization portion of the plan on June 1, 1995. On June 4, 1996, Severson submitted a revision to the Clevite remediation plan. The Clevite Characterization Survey Summary was submitted to NRC on June 14, 1996. NRC reviewed the revised remediation plan and characterization summary and transmitted comments to Severson on August 8, 1996. Severson is currently revising the remediation plan based on NRC comments.

Severson has completed remediation in the southeast wing of the building. Severson is waiting for NRC approval of the remediation plan revision before beginning remediation of the more heavily contaminated west wing of the building.

NRC/Licensee Actions and Schedule

- Sep 1996 Severson submits site characterization report and revised remediation plan
- Oct 1996 NRC approves decommissioning plan. Severson remediates west wing of building and conducts final survey.
- Nov 1996 NRC conducts inspection and limited confirmatory survey

Problems/Issues

Cleveland Enterprise Group would like to rent out the southeast wing of the building as soon as possible. In order to do so, Cleveland Enterprise Group will request NRC

CLEVITE CORP.

to release the southeast wing and floors 2, 3, and 4 for unrestricted use as soon as decontamination is completed. Cleveland Enterprise Group will submit a plan to show how the southeast wing and floors 2, 3, and 4 will be partitioned off after decommissioning while cleanup proceeds in the west wing.

DOW CHEMICAL CO., MIDLAND AND BAY CITY, MI SITES

Site Identification

Location: MIDLAND, MI
License No.: STB-527
Docket Number: 04000017
License Status: Terminated
Project Manager: J. PARROTT

Status of Decommissioning Activities

The decommissioning plan was partially approved in July 1996. The remediation approach and methods were approved, but approval of the unrestricted use criteria for the site and the final survey plan was withheld pending further review. Decommissioning activities are underway. The contaminated material is being shipped by rail and disposed at Envirocare.

The licensee's proposed release criteria and final status survey plan are under review.

NRC/Licensee Actions and Schedule

- Oct 1996 Approve proposed release criteria and final status survey plan to complete approval of the decommissioning plan
- Jan 1997 Licensee completes excavation and disposal of contaminated material

Problems/Issues

None

ELKEM METALS COMPANY

Site Identification

Location: MARIETTA, OH
License No.: NA
Docket Number: 04007708
License Status: Terminated
Project Manager: C. PITTIGLIO

Status of Decommissioning Activities

The remediation of the site was completed in 1995. A final survey report was submitted to NRC in March 1995. NRC has provided two requests for additional information on the report. During a June 1996 meeting between NRC and Elkem, a schedule was developed to resolve outstanding concerns and release the site for unrestricted use.

NRC/Licensee Actions and Schedule

- Oct 1996 Elkem submits plan for additional surveys in response to NRC comments on final survey report
- Feb 1997 Elkem performs additional final survey measurements and submits revised final survey report
- May 1997 Elkem site released for unrestricted use and removed from SDMP

Problems/Issues

Elkem is evaluating options for disposal of low-level waste generated during remediation.

Site Identification

Location: PLAINVILLE, MA
License No.: SNM-185
Docket Number: 07000139
License Status: Terminated
Project Manager R. TURTIL

Status of Decommissioning Activities

The decommissioning plan for the buildings was approved in April 1996. Remediation of the buildings is ongoing.

The submittal of the decommissioning plan for the contaminated soil will be deferred until the authority for the regulation of the Engelhard site is transferred to the Commonwealth of Massachusetts after Massachusetts becomes an Agreement State. Remediation of the soil is dependent on the schedule for the remediation of the hazardous waste on the site. NRC and Massachusetts staff agreed that NRC would maintain jurisdiction over the building until the decommissioning is complete and the building is released for unrestricted use.

NRC/Licensee Actions and Schedule

- Oct 1996 Engelhard submits final survey report and NRC performs limited confirmatory survey.
- Nov 1996 NRC releases buildings for unrestricted use

Problems/Issues

None

FANSTEEL, INC

Site Identification

Location: MUSKOGEE, OK
License No.: SMB-911
Docket Number: 04007580
License Status: Active
Project Manager R. HOGG

Status of Decommissioning Activities

The Northwest Property was released for unrestricted use on August 27, 1996. A Finding of No Significant Impact for Fansteel's amendment request to process on-site residues was published in July 1996. The review of Fansteel's decommissioning funding plan and financial assurance mechanism continues.

NRC/Licensee Actions and Schedule

Nov 1996 NRC completes review of decommissioning funding plan and financial assurance mechanism

Problems/Issues

Fansteel does not currently have an acceptable decommissioning funding plan and financial assurance mechanism.

FROMME INVESTMENT CO.

Site Identification

Location: DETROIT, MI
License No.: NA
Docket Number: 0400235
License Status: Terminated
Project Manager J. BUCKLEY

Status of Decommissioning Activities

Contaminated waste was shipped to the Barnwell, SC, licensed low-level waste disposal facility. The site was removed from the SDMP list on July 19, 1996. The Commission was informed of the staff's action in SECY-96-130.

NRC/Licensee Actions and Schedule

Problems/Issues

None

HERITAGE MINERALS, INC.

Site Identification

Location: LAKEHURST, NJ
License No.: SMB-1541
Docket Number: 040-08980
License Status: Expired
Project Manager M. MILLER

Status of Decommissioning Activities

On August 15, 1996, Heritage requested an indefinite delay with respect to site decommissioning, because the State may acquire the land through the State's Green Acres Program. NRC staff is reviewing this request.

NRC/Licensee Actions and Schedule

Oct 1996 NRC completes review of Heritage request to indefinitely delay initiation of decommissioning

Problems/Issues

State of NJ objects to NRC's position that the combined tailings pile, which exceeds current unrestricted use criteria, is not subject to licensing since the pile is not currently licensed and contains <0.05 w/% uranium and thorium.

JEFFERSON PROVING GROUND

Site Identification

Location: MADISON, IN
License No.: SUB-1435
Docket Number: 04008838
License Status: Active
Project Manager: C. PITTIGLIO

Status of Decommissioning Activities

The license was amended on May 8, 1996, resulting in the area south of the firing line being released for unrestricted use. In addition, Condition 13 was added to the license requiring the Army to submit, by July 15, 1996, for NRC approval, a Security Plan and an Environmental Monitoring Plan. These plans were submitted on schedule and NRC approved the plans in July 1996. NRC staff participated in two "Jefferson Proving Ground Advisory Board" meetings, in May and August, 1996. The advisory board, which is comprised of community members and technical experts, assesses progress on the remediation of the Jefferson Proving Ground.

A work plan, and schedule, for developing an environmental impact statement to evaluate and determine acceptable decommissioning alternatives for the NRC licensed parts of the site has been drafted and is currently under review.

NRC/Licensee Actions and Schedule

Oct 1996 Schedule for developing EIS will be finalized

Problems/Issues

The presence of unexploded ordnance, the associated risk and cost for cleanup of this material, as well as potential contamination of groundwater are complicating remediation. NRC staff needs to closely coordinate site actions with the State and EPA.

KAISER ALUMINUM SPECIALITY PRODUCTS

Site Identification

Location: TULSA, OK
License No.: NA
Docket Number: 04002377
License Status: Terminated
Project Manager R. TURTIL

Status of Decommissioning Activities

Kaiser is currently pursuing further hydrological characterization of the site. They have performed initial site characterization (report presented April 1995), and are expected to issue bids for hydrological characterization in September 1996.

NRC/Licensee Actions and Schedule

- Nov 1996 Kaiser begins hydrological characterization
- Jul 1997 Kaiser submits decommissioning plan and hydrological characterization report

Problems/Issues

The site contains a large volume of thorium contaminated soil and slag. The Kaiser site contains a small creek and two ponds. Accordingly, the site contains a great deal of water (mostly standing water), and Kaiser is pursuing further study to better characterize the site's hydrology.

KERR-MCGEE CIMARRON

Site Identification

Location: CRESENT, OK
License No.: SNM-928
Docket Number: 07000925
License Status: Expired
Project Manager K. KALMAN

Status of Decommissioning Activities

The Cimarron license was amended in November 1994 to allow the onsite disposal of up to 500,000 cubic feet of contaminated soil. To date, approximately 400,000 cubic feet have been emplaced in two disposal pits. In April 1996, the license was amended to release for unrestricted use 695 acres of the 840 acre site. These 695 acres had no history of licensed activities, and systematic measurements confirmed that the concentration of licensed material in the soil was below NRC's guidelines for unrestricted use. As remediation activities progress, Cimarron will be requesting NRC approval for the release of small parcels of land. In May 1996, Cimarron submitted a Final Status Survey Report on Phase III, Subarea L, and is seeking the release of this 5-acre parcel.

A radiological characterization report was submitted in October 1994 and a decommissioning plan was submitted in April 1995. The NRC staff has reviewed and commented on these documents and expects a response from Cimarron in September 1996.

A decommissioning funding plan was submitted in January 1996, and supplemental information provided in March 1996. NRC comments were transmitted in July 1996 and a response from Cimarron is expected in October 1996.

NRC/Licensee Actions and Schedule

- Sep 1996 Cimarron submits response to NRC comments on decommissioning plan and characterization report. NRC completes Amendment 14 (License update) and provides comments on Phase II Survey Plan. NRC and Cimarron to discuss issue regarding regulatory treatment of Waste Ponds 1 and 2.
- Oct 1996 Cimarron submits response to comments on Decommissioning Funding Plan
- Dec 1996 NRC performs confirmatory survey of first lift in pit #3

KERR-MCGEE CIMARRON

Problems/Issues

1. NRC staff is evaluating the source and extent of groundwater and subsurface contamination.
2. Cimarron is contesting the regulatory treatment of Waste Ponds 1 and 2. Cimarron contends that NRC released these areas for unrestricted use in 1978. However, NRC staff cites an October 30, 1992, SRM stating that these ponds are to be treated in the same manner, and have the same criteria applied, as was applied to the approved onsite disposal cell. This may lead to the need for additional remediation of the ponds.

KERR-MCGEE CUSHING

Site Identification

Location: CUSHING, OK
License No.: SNM-1999
Docket Number: 07003073
License Status: Expired
Project Manager S. BROWN

Status of Decommissioning Activities

The licensee submitted a decommissioning plan (DP) for the site in April 1994, that included a request for onsite disposal. NRC reviewed the plan and provided comments. The licensee has not responded to the comments, but has indicated that a modified DP will be submitted that excludes the request for onsite disposal. In place of onsite disposal, the licensee proposes to ship the waste to Envirocare for disposal. The modified plan is expected to be submitted and approved by NRC by November 1996.

Areas of the site designated as "unaffected" have been surveyed and released for unrestricted use (without removal from the license).

Final surveys of the Haul Road areas, designated "affected" and "undesigned," were completed in May 1996. NRC conducted a confirmatory survey for these areas in August 1996.

The license will be amended in October 1996, to remove outdated license conditions.

NRC/Licensee Actions and Schedule

- Sep 1996 Licensee requests modification of DP to exclude onsite burial.
- Oct 1996 NRC completes license amendment. ORISE submits confirmatory survey report on Haul Road area.
- Nov 1996 NRC approves modified DP

Problems/Issues

None

LAKE CITY ARMY AMMUNITION PLANT

Site Identification

Location: INDEPENDENCE, MO
License No.: SUC-1380
Docket Number: 04008767
License Status: Active
Project Manager S. BROWN

Status of Decommissioning Activities

The licensee met with NRC in March 1996 to discuss the schedule for decommissioning the site. The NRC agreed that a separate decommissioning plan could be submitted for each of 3 separate site areas. The 3 areas are 1) Area 10; 2) Bullet Catcher Area; and 3) Impact Area. The licensee is reviewing historical information to assess the potential for radioactive contamination in other site areas.

NRC has reviewed the decommissioning plan for Area 10 and provided comments to the licensee. The decommissioning plans for the other two areas have not been submitted.

NRC/Licensee Actions and Schedule

- Sep 1996 Licensee submits decommissioning plan for Bullet Catcher Area
- Oct 1996 NRC approves decommissioning plan for Area 10
- Aug 1997 Licensee submits decommissioning plan for Impact Area

Problems/Issues

The decommissioning budgeting process will result in only a portion of the total site being decommissioned in any one fiscal year due to fiscal constraints.

Additional contamination was identified in buildings formerly released by NRC in 1986. Licensee is evaluating significance of this contamination.

LAMOTITE (HORIZONS)

Site Identification

Location: CLEVELAND, OH

License No.: NA
Docket Number: 04000861
License Status: Terminated
Project Manager J. BUCKLEY

Status of Decommissioning Activities

Contamination at the site consists of thorium.

Horizons submitted a claim to DOE for reimbursement of the costs for decommissioning. NRC deferred action pending a final decision on the Horizons claim by DOE. DOE has agreed to reimburse Horizons for the cost of decommissioning. DOE and Horizons are currently involved in contract negotiations.

NRC/Licensee Actions and Schedule

Problems/Issues

Progress is dependent on the timely conclusion of DOE-Horizons contract negotiations.

MAGNESIUM ELEKTRON

Site Identification

Location: FLEMINGTON, NJ

License No.: PENDING
Docket Number: 04008984
License Status: Expired
Project Manager C. GASKIN

Status of Decommissioning Activities

The thorium and uranium concentrations in the Magnesium Elektron process feed and waste was determined to be less than 0.05 percent by weight, and, therefore, below the 10 CFR Part 40 exemption limit for source material. Therefore, the site was removed from the SDMP in November 1995. The Commission was informed of the staff's action in SECY-95-260.

NRC/Licensee Actions and Schedule

Problems/Issues

None

MICHIGAN DEPT OF NATURAL RESOURCES

Site Identification

Location: BAY CITY, MI
License No.: UNDER REVIEW
Docket Number: 04009015
License Status: Expired
Project Manager J. PARROTT

Status of Decommissioning Activities

In the 1970s, the Michigan Department of Natural Resources (MDNR) gained title to property (Hartley & Hartley Landfill) contaminated with thorium. The thorium came from a defunct former licensee. Because the site contains a licensable quantity of thorium, MDNR has submitted a license application and a decommissioning funding plan which are currently under review.

NRC/Licensee Actions and Schedule

- Sep 1996 NRC provides comments to the licensee on the license application
- Nov 1996 Licensee responds to comments in license application
- Jan 1997 NRC issues license

Problems/Issues

The site contains hazardous wastes. The MDNR has used the Michigan Environmental Resource Act (State Superfund Law) to identify potentially responsible parties for the remediation of the site.

MINNESOTA MINING & MANUFACTURING CO. (3M)

Site Identification

Location: PINE COUNTY, MN
License No.: SNM-764, SMB-239
Docket Number: 04001020
License Status: Expired
Project Manager J. BUCKLEY

Status of Decommissioning Activities

Contamination at the site consists of uranium and thorium contaminated scrap materials (lockers, piping duct work, and other scrap) sealed in steel drums and buried under a minimum of 4 feet of soil in accordance with former 10 CFR 20.304. A total of four burials occurred consisting of a total of 674 drums and unpackaged waste. The total amount of waste estimated to be buried at the site is; 1.51 millicuries of Th 232, 3.11 millicuries of U 238 natural, and 11.99 millicuries of U235 (93% enriched).

In May 1995, NRC notified 3M that a decision on overall site management of the 3M-Kerrick site would be deferred pending promulgation of the rulemaking on Radiological Criteria for Decommissioning and completion of the Shieldalloy DEIS. The staff has decided to continue deferring a decision on the site until ongoing feasibility assessment of a generic EIS for large volumes of uranium and thorium waste is completed.

NRC/Licensee Actions and Schedule

Problems/Issues

Action on the site is deferred pending results of the feasibility assessment of a generic EIS for sites with large volumes of thorium and uranium contamination.

MOLYCORP, INC - YORK

Site Identification

Location: YORK, PA
License No.: SMB-1408
Docket Number: 04008794
License Status: Active
Project Manager L. PERSON

Status of Decommissioning Activities

Molycorp has requested an amendment to decontaminate the site and move 4000 cubic yards of soil type waste to its Washington facility for temporary (5-10 years) storage. The waste will ultimately either be disposed of in a permanent disposal unit on the Washington site, or shipped to a commercial low-level waste disposal facility. This request is being reviewed.

NRC/Licensee Actions and Schedule

- Dec 1996 NRC completes review of applicant proposal to store decommissioning waste from this facility at its Washington, PA, site

Problems/Issues

Approval of the site decommissioning plan will be contingent on approval of license amendment request to store waste at Washington site.

Site Identification

Location: WASHINGTON, PA
License No.: SMB-1393
Docket Number: 04008778
License Status: Expired
Project Manager L. PERSON

Status of Decommissioning Activities

The licensee has requested an amendment to the Washington, Pennsylvania, License (SMB-1393) to allow the temporary (5-10 yrs) storage of decommissioning waste from their York (SMB-1408) Pennsylvania, plant. In April 1996, the licensee submitted additional information regarding the geohydrology at the interim storage site. This information is being reviewed. The licensee submitted a site decommissioning plan in July 1995, and approval of this plan (including the above mentioned interim storage of York waste at this site) cannot be assessed prior to making a decision regarding the storage amendment request. A decision on onsite storage should be made by December 1996.

NRC/Licensee Actions and Schedule

- Dec 1996 NRC completes review of amendment request for interim storage of York waste

Problems/Issues

Molycorp has indicated a preference for on-site disposal of radioactive waste at the Washington Site. On-site disposal would require an exemption to current requirements. Assessment of permanent disposal options awaits completion of a feasibility assessment of a generic EIS for sites with large volumes of thorium and uranium waste.

NE OHIO REGIONAL SEWER DISTRICT

Site Identification

Location: CLEVELAND, OH
License No.: 03018276
Docket Number: 03018276
License Status: Expired
Project Manager S. NALLUSWAMI

Status of Decommissioning Activities

NRC approved the site characterization report for the non-lagoon areas in September 1995.

In July 1996, NRC received a letter confirming that the decommissioning plan will be submitted for the non-lagoon areas by September 30, 1996. The decommissioning plan will describe the NEORS D approach to the remediation of the non-lagoon areas, as well as a proposal for the final disposition of the stockpiled Co-60 contaminated soil and sludge that resulted from previous lagoon remediation.

NRC/Licensee Actions and Schedule

- Oct 1996 NEORS D submits decommissioning plan for non-lagoon areas
- Jan 1997 NRC completes review of decommissioning plan for non-lagoon areas

Problems/Issues

NEORS D is pursuing legal action against Advanced Medical Systems, which NEORS D believes is responsible for the Co-60 contamination.