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Task Order ST06-120
Control Number: 1000-T06-0971

March 2006

March 28, 2006

Mr. Arthur W. Kleinrath
Site Manager
U.S. Department of Energy
Office of Legacy Management
955 Mound Road
Miamisburg, OH 45342

SUBJECT: Contract No. DE-AC01-02GJ79491
Deliverable – Draft Long-Term Surveillance and Maintenance Plan for the Ashtabula Closure Project

Dear Mr. Kleinrath:

In response to the CPAF Deliverable, submittal of the Draft Long-Term Surveillance and Maintenance Plan for the Ashtabula Closure Project is enclosed.

If you have any questions, please call Rebecca Cato of my staff at (636) 926-7038.

Sincerely,

Donna Gallaher
Task Order Manager

DG/jp

Enclosure

cc: S. Marutzky, Stoller
R. Cato, Stoller

cc w/o enclosures
Correspondence Control File (Thru B. Bonnett)

The S.M. Stoller Corporation 955 Mound Road Miamisburg, OH 45343 (937) 847–8350 Fax: (937) 847–8352

DOE-LM/GJXXX-2006

# Long-Term Surveillance and Maintenance Plan for the U.S. Department of Energy Ashtabula Closure Project, Ashtabula, Ohio

Draft

March 2006

**Information in this document is subject to revision until the EM mission is completed at the Ashtabula Closure Project**

# Contents

# Tables



# Figures

# Acronyms

| | |
|---|---|
| ACP | Ashtabula Closure Project |
| CBC | (DOE-EM) Consolidated Business Center |
| CFR | *Code of Federal Regulations* |
| CIP | Community Involvement Plan |
| D&D | Decontamination and Decommissioning |
| DOE | U.S. Department of Energy |
| DP | Decommissioning Plan |
| EM | [DOE] Office of Environmental Management |
| EPA | U.S. Environmental Protection Agency |
| FRC | Federal Records Center |
| ft | feet (foot) |
| LM | [DOE] Office of Legacy Management |
| LTS&M | Long-Term Surveillance and Maintenance |
| MCL | maximum contaminant level |
| MSL | mean sea level |
| NRC | U.S. Nuclear Regulatory Commission |
| ODH | Ohio Department of Health |
| ODNR | Ohio Department of Natural Resources |
| OEPA | Ohio Environmental Protection Agency |
| O&M | Operation and Maintenance |
| RCRA | Resource Conservation and Recovery Act |
| Tc | technetium |
| TCE | trichloroethylene |
| WMU | Waste Management Unit |

End of current text

# 1.0 Purpose and Objective

## 1.1 Purpose

This Long-Term Surveillance and Maintenance (LTS&M) Plan explains how the U.S. Department of Energy (DOE) will fulfill its surveillance and maintenance obligation at the DOE Ashtabula Closure Project (ACP) located in Ashtabula, Ohio.

Because the ACP is being remediated to unrestricted release standards, limited LTS&M activities will be necessary. The primary activity to be performed by DOE Office of Legacy Management (DOE-LM) will be custodianship of certain site records. DOE will also be responsible to perform necessary ground water monitoring at the site to ensure that the remedy is effective. It is anticipated that this activity will be performed for up to 1 year. A more detailed discussion of these activities is presented in Section 3.

## 1.2 Objectives

The primary objective of this LTS&M Plan is to document the activities and operations that DOE-LM is required to perform long term. This plan summarizes all surveillance and maintenance operations for the Ashtabula site. Another major objective of this plan is to identify the actions that the public and regulatory community can expect. Specific surveillance and maintenance objectives for performing LTS&M at the Ashtabula Site are summarized in Table 1–1 and are further explained in Section 3.

*Table 1–1. Summary of Surveillance and Maintenance Objectives for the Ashtabula Site*

| Surveillance and Maintenance Objective | Strategies to Achieve Objective (see Section 3 for specifics) |
|---|---|
| Control human exposure to contaminated ground water | • Remediate contaminated ground water to MCLs.<br>• Verify the effectiveness of the ground water remedy. |
| Prevent loss of knowledge | • Comply with National Archives and Records Administration records management requirements.<br>• Record site information in real property records.<br>• Regularly interact with regulators and stakeholders. |

## 1.3 Summary of DOE Environmental Management Functions

In September 1988, uranium extrusion work ceased at the RMI Ashtabula facility and all extrusion operations of non-radioactive metals ceased on October 31, 1990. RMI had extruded depleted uranium under a U.S. Nuclear Regulatory Commission (NRC) license (SMB-602).

The current end state is defined by the Decommissioning Plan (DP) (NRC 1995) and the Resource Conservation and Recovery Act (RCRA) permit. Specifically, the DP requires clean-up to meet unrestricted resident farmer end use. This requires compliance with maximum contaminant levels (MCLs) where ground water contamination exists. Contaminated facilities and associated infrastructure will be removed generating approximately 42,000 tons of soil

debris contaminated with trichloroethylene (TCE) and/or radionuclides that will be disposed off-site at commercial facilities.

The site DP has served as the driver for the ACP since 1997, when it was approved by NRC and subsequently adopted by the Ohio Department of Health (ODH). The Ohio Environmental Protection Agency (OEPA) has jurisdiction over the RCRA Waste Management Unit (WMU).

## 1.4 Summary of LTS&M Regulatory Management

This section provides a summary of the regulatory and institutional framework for LM at the Ashtabula site. Included are all LM activities that are specifically required by federal, state, or local regulations, and defined in the DP and Ohio Hazardous Waste Permit, as well as other non-enforceable activities DOE will perform.

The objective of the decommissioning project is to safely remove the facility from service and to reduce residual radioactive contamination to a level that permits the site and adjacent areas to be released from unrestricted use. The achievement of this objective will allow RMI to terminate its NRC license per the requirements of 10 CFR Part 40.

In addition to reducing residual radioactive contamination, non-radioactive contamination will be remedial in accordance with the U.S. Environmental Protection Agency (EPA) and the State of Ohio. The Corrective Action Plan for this activity is pending.

# 2.0 Background Information on the Ashtabula Site

## 2.1 Site Description

The ACP is a decontamination and decommissioning (D&D) and RCRA project in Ashtabula, Ohio. The RMI Titanium Company (RMI) is a commercial extrusion plant with a NRC license. The site is owned by RMI and holds the licenses and permits governing cleanup of the site. DOE will complete its obligation at Ashtabula, by remediating the extrusion plant site to meet the unrestricted use criteria defined in the DP and Ohio Hazardous Waste Permit. Completion of the remediation work and verification that cleanup criteria have been attained satisfy DOE's liability that radiological and hazardous materials resulting form previous operations have been removed.

### 2.1.1 Location

The ACP site is located in Ashtabula Township. The City of Ashtabula is adjacent to the western boundary of the site. Ashtabula Township is located approximately 55 miles east of Cleveland. The site is located at 1601 East 21st Street, near the intersection of State Road and East 21st Street (Figure 2–1). The site consists of 42.5 acres of privately owned property.

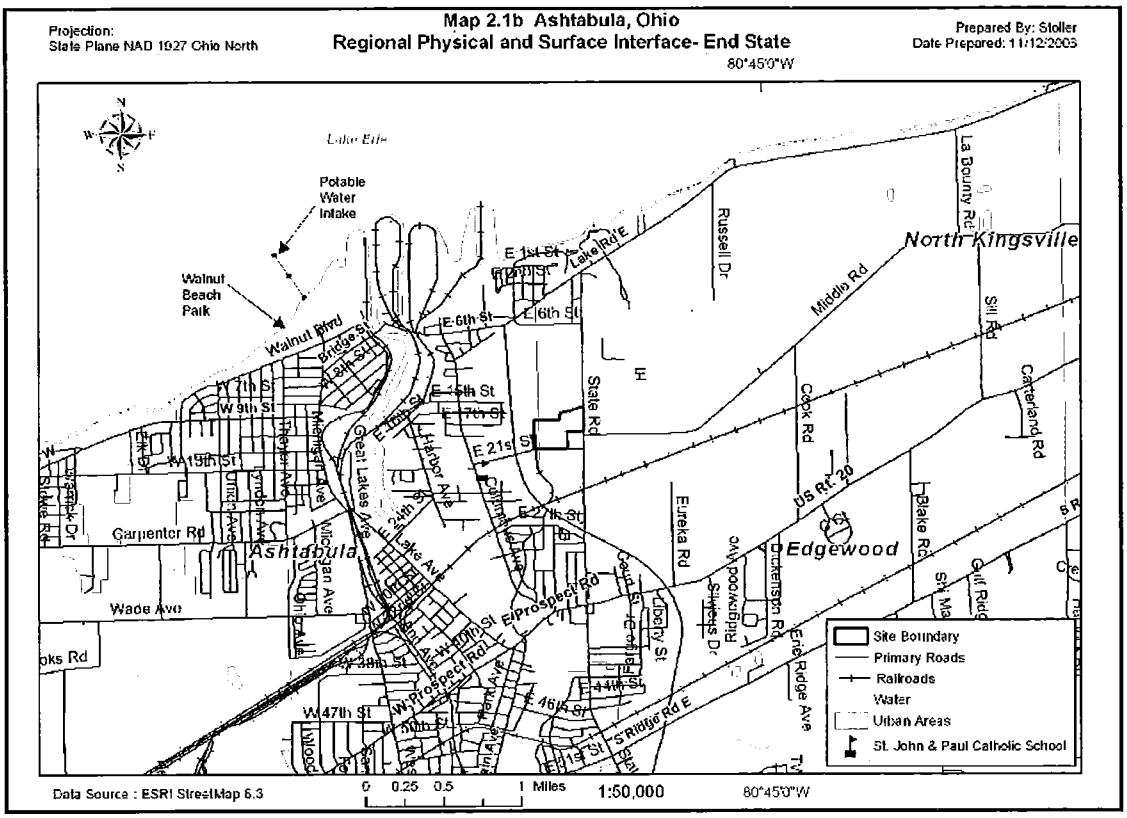


*Figure 2–1. Location of the Ashtabula Closure Project*

### 2.1.2 Land Use

The ACP is located in a highly industrialized portion of Ashtabula County and is zoned for heavy industrial use. Adjacent properties include a chemical production plant, a commercial scrap recycling facility, the former RMI metals reduction plant, a trucking firm, the Fields Brook floodplain (a remediated National Priorities List site) and several tracts of undeveloped land, which are zoned for industrial (M-2) or central business (C-3) usage.

Population information extracted from the 2004 Census shows that Ashtabula Township has a population of 22,608. The population of Ashtabula County is 103,152. The closest residential area is on Columbus Avenue, approximately 1,800 feet (ft) west of site (DOE 2004). The St. John and Paul Elementary School is the closest school to the site and is located on East 21st Street, approximately 1,400 ft west of the site.

### 2.1.3 Geology and Hydrogeology

The site is located in the Lake Plain physiographic province of Ashtabula County. The elevation of the Lake Plain ranges from 620 ft mean sea level (MSL) to 660 ft MSL. In general, the subsurface geology of the area consists of glacial till (Ashtabula and Hiram Tills) and the Chagrin Shale bedrock unit. Several feet of miscellaneous soil fill materials are encountered on the site, dependent on site development (Sharp and Associates, Inc. 2003).

The ground water flow at the site is generally to the north and northwest, but is significantly retarded due to low hydraulic conductivity. The ground water table is generally shallow and is present approximately 15 ft below the ground surface. There are no residences located in the direction of ground water flow between the plant site and Fields Brook (RMI Company 1989). The potential does exist for contaminated ground water to migrate through seeps at the escarpment located north of the site due to the presence of silt zones or stringers in the glacial tills and seasonally high water tables.

According to information from the Ohio Department of Natural Resources (ODNR), the ground water production potential of the area of the site is considered very limited and not capable of yielding water at rates greater than 3 gallons per minute. No drinking water wells are located onsite or within a 1,000 ft radius of the site. The water supply for the area is from Lake Erie.

### 2.1.4 Surface Features

The site is located on a flat upland surface. The predominant surface water feature is Fields Brook, located along the northern boundary of the site (Figure 2–2). Fields Brook is a 6 square mile watershed that flows into the Ashtabula River, which flows into Lake Erie approximately 1.5 miles downstream of the site. The site is located approximately 1 mile south of Lake Erie.

An escarpment, approximately 30 ft in height, is located approximately 120 ft from the former plant buildings and slopes toward Fields Brook. The site is not located within the 100-year floodplain of either Lake Erie or the Ashtabula River, as determined by a review of Flood Insurance Rate Maps (RMI Company 1989).

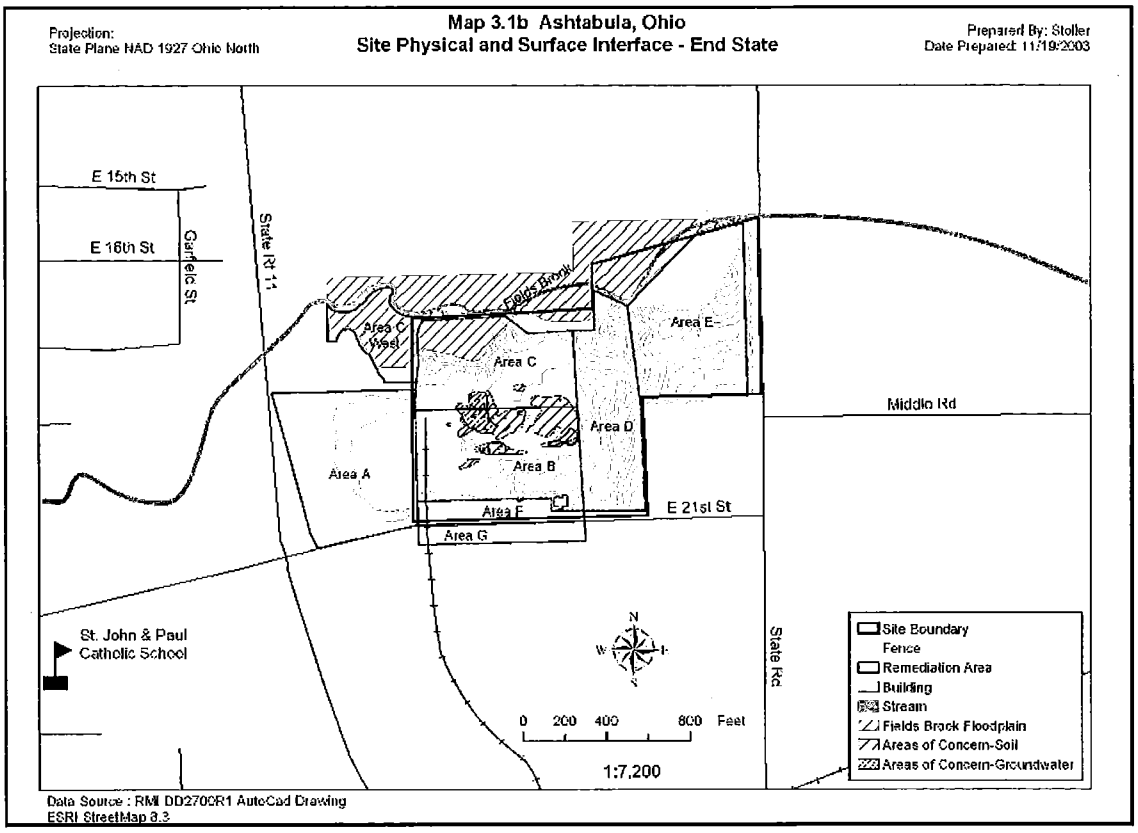


*Figure 2–2. Surface Features at the Ashtabula Closure Project*

A natural drainage swale is located in the northern portion of the site, downgradient of a former evaporation pond site. Prior to pond closure in 1984, overflow from the former pond flowed through the swale. A seepage pond, located at the base of the escarpment, receives runoff from the plant area as well as ground water discharge (RMI Company 1989).

### 2.1.5 Cultural, Natural, and Historic Preservation

Threatened and endangered species, floodplains, wetlands, regulated streams, cultural resources, and historic sites were evaluated at and proximate to the site in the RCRA Facility Investigation (Ref. TBP). The following is a summary of cultural, natural, and historic preservation evaluations or activities on the site:

- There are no federal endangered or threatened species, or federal lands managed for ecological value within a 1-mile radium of the site (TBP).

- The facility is located within the possible range of the Indiana Bat, although no examples of the species have been noted at the site, as noted by the U.S, Department of Interior, Fish and Wildlife Service (TBP).

- The property does not contain areas that are classified as prime or unique farmland, or farmland of statewide or local importance, based on information from the Soil Conservation Service, U.S. Department of Agriculture (TBP).

- Three jurisdiction wetland areas (Wetlands I, II, and III) have been identified on the site. Soil contamination has been identified in Wetlands I and III (RMI Environmental Services 1995).

## 2.2 Ashtabula Site History

This section provides a summary of pertinent historical information regarding the operation and remediation the Ashtabula site.

### 2.2.1 Operational History

Beginning in 1962, the Atomic Energy Commission contracted with RMI to manufacture metallic uranium tubes and rods, forged uranium parts, and experimental quantities of thorium metal for use in the Hanford and Savannah River weapons program reactors. The uranium was extruded into rods, tubes, or other shapes as an intermediate step in the production of nuclear fuel elements at other DOE sites. RMI also extruded depleted uranium under an NRC license and extruded non-radioactive metals, primarily copper based, for the commercial sector. The facility was also licensed by NRC for handling radioactive source materials. The plant discontinued operations in 1988. A complete description of operational activities can be read in the *Site Characterization Report for the RMI Titanium Company Extrusion Plant* (RMI Environmental Services 1995).

RMI once operated a small wastewater evaporation pond near the northern boundary of the plant area for disposal of a sodium nitrate solution, which also contained trace quantities of uranium. TCE was used at the plant from 1962 to 1966 for degreasing tube sections in a 250-gallon vapor degreaser tank, which was retained to approximately 1972. It is speculated that a single, unauthorized disposal of TCE into the pond occurred prior to 1972 (RMI Company 1989).

### 2.2.2 Remedial Actions

The plant discontinued operations in 1988. Subsequently, cleanup of the site was performed by RMI under contract to DOE. This included demolition of the main process buildings and some soil remediation. The information is presented in more detail in the *RFI Equivalency Document for the RMI Extrusion Plant* (RMI Company 1989) and the DP (NRC 1995).

Uranium, technetium-99 (Tc-99), and volatile organics (primarily TCE) are the primary contaminants associated with past extrusion activities. The DP and RCRA permit define the cleanup criteria for the site. To date (2005), remediation has been completed on approximately 29.5 acres of the 42.5 acre site. These 29.5 acres had minimal contamination and have conditionally been free-released by ODH.

Figure 2–3 depicts the location of former process facilities, Hazard Areas I and II, and areas of known soil and ground water contamination. Hazard Area I is comprised of contaminated buildings that housed the extrusion press and related process activities. Currently only 11 buildings remain at the site. Soil is contaminated with radioactive material, primarily uranium

and Tc-99 (RMI Company 1989). Surface water samples from drain lines and shallow ditches indicate that runoff from this area exceeds cleanup standards.

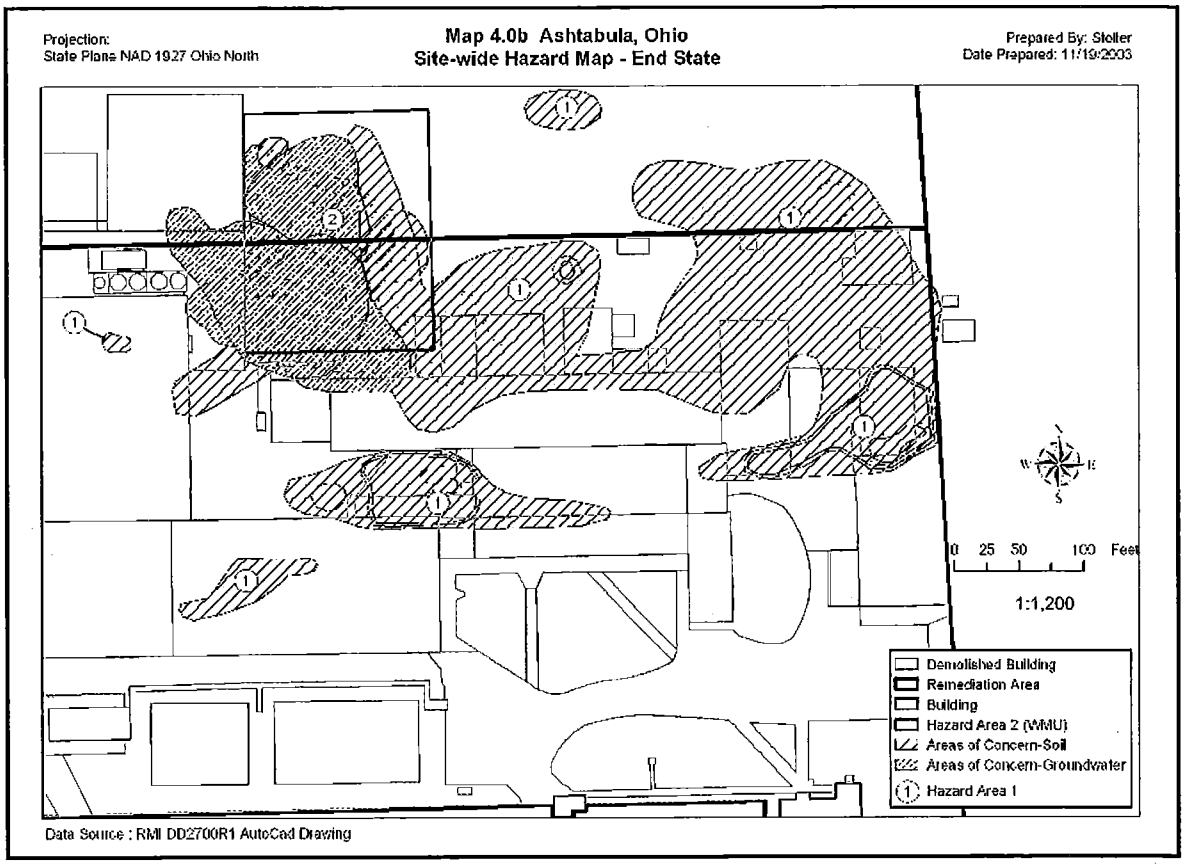


*Figure 2–3. Remediation Areas at the Ashtabula Closure Project*

Hazard Area II is the WMU (Figure 2–3) where TCE impact in soil and ground water is being addressed under RCRA by OEPA. This area was the location of an evaporation pond used for the disposal of sodium nitrate solution from the uranium extrusion process. Contaminants include TCE and its degradation products, uranium, Tc-99, and nitrate. The Ohio Hazardous Waste Permits encompass three WMUs requiring corrective action: the former evaporation pond area, the ground water plume associated with the pond, and the seepage pond at the base of the escarpment located north of the Extrusion Plant.

## 2.3 Contaminant Nature and Extent

Uranium, Tc-99, and TCE are the primary contaminants associated with past extrusion activities. Tc-99 is present because recycled uranium was extruded at the site. TCE was used at the site as a degreasing agent in the uranium extrusion process and for degreasing tools. Contamination at the site is discussed as RCRA or non-RCRA in the following sections. More detailed discussions regarding the nature and extent of contamination can be found in the DP (Ref. XXX).

### 2.3.1 Non-RCRA Contamination

Radiological surveys were performed on all major RMI buildings. Based on the survey data, radiological contamination was determined to be non-uniformly distributed within building surfaces. The majority of the impact resulted from the extrusion and forging processes that generated uranium oxide dust or fumes. The particulate contamination and superficial oxides settled on or were transferred to equipment, buildings, and adjacent surface soil.

Soil is contaminated with radioactive material, primarily uranium. The contaminated areas include surface soil, subsurface soil associated with building foundations and buried utilities, and staged soil piles.

Ground water currently meets site cleanup criteria for unrestricted use. Surface water from drain lines and shallow ditches indicate that runoff from radioactively contaminated areas exceed current site cleanup standards.

### 2.3.2 RCRA Contamination

An unlined evaporation pond (part of the RCRA WMU) was used for disposal and evaporation of sodium nitrate wastewater that was generated from the spent pickling operation containing neutralized nitric acid. The pickling solution contained small quantities of uranium and Tc-99, which subsequently contaminated the soil and ground water beneath the pond. It is suspected that an unauthorized disposal of TCE into the evaporation pond occurred during or before 1972, also resulting in impact of soil and ground water beneath the pond.

A seepage pond at the base of the escarpment located north of the site is also impacted by wastewater that was placed in the evaporation pond. During periods of pond overflow when wastewater would discharge into a swale and flow to Fields Brook or during seasonal periods when the water table was high, contaminated ground water would migrate via silt zones in the glacial till and discharge in the seepage pond.

## 2.4 Final Physical Site Conditions

The expected site conditions at transfer are:

- The site will be remediated for unrestricted use, including soil and structures.
- All contaminated foundations and concrete will be removed from the site.
- The final status surveys will be complete.
- All required ground water monitoring wells will be installed.

All necessary ground water monitoring wells will be installed and available for sampling. DOE-LM will monitor ground water at these locations for up to 1 year to ensure the remedy is effective.

# 3.0 Long-Term Surveillance and Maintenance Implementation and Programs

This LTS&M Plan identifies long-term commitments to operation and maintenance of the ACP. The purpose of LTS&M is to meet the objectives listed in Section 1.1 of this plan. The following outlines the specific activities that will take place to ensure these objectives are met.

## 3.1 Roles and Responsibilities

This portion of the document summarizes the roles and the scope to responsibilities of DOE and other involved parties, and how these roles relate to those of the regulators. The primary stakeholders with an interest in the ACP include DOE, RMI, ODH, and OEPA. These parties have historically shared a vision that allowed for unrestricted use of the site after closure (NRC 1995). In general, DOE-Office of Restoration and Waste Management contracted RMI to conduct the site decommissioning project to satisfy DOE's liability by removing all radiological and hazardous contaminant to levels which allow for the facility and adjacent areas to be released for unrestricted use.

### 3.1.1 Role of DOE

DOE-LM has LTS&M responsibility of all DOE remedial action sites, disposal sites, and other sites, as assigned, that (1) have no ongoing DOE mission and (2) are not part of a larger DOE facility. LM was established primarily to provide a separate focus for DOE's long-term commitments and responsibilities at sites without an on-going long-term mission.

Since ownership of the Ashtabula site will remain with RMI, all operational responsibility will remain with RMI. Responsibility for custodianship of the ACP records will be assigned to LM. DOE will conduct ground water sampling at the Ashtabula site for up to 1 year to ensure that the ground water remedy established through RCRA is effective. DOE-EM will install and maintain the necessary equipment and structures for remediation of the ground water at the site. After completion of the ground water remediation project, DOE will remove all equipment and monitoring wells.

### 3.1.2 Role of the Property Owner

Ownership of the Ashtabula site will remain with RMI; therefore, all land maintenance activities will remain with RMI. The present and any future property owner are responsible for complying with any land-use restrictions for the site.

### 3.1.3 Role of Regulators

NRC will provide regulatory oversight in consultation with ODH for NRC activities at the ACP. ODH adopted the DP in 1999 when Ohio became an agreement state.

OEPA, headquartered in Columbus, Ohio, has jurisdiction over the RCRA WMU at the ACP that contains TCE-contaminated soil and ground water. OEPA approves site remedies and concurs with their ongoing implementation.

## 3.2 Revisions to the LTS&M Plan

DOE is responsible for the preparation, revision, and implementation of this LTS&M Plan, which includes procedures for managing records pertaining to the site. Surveillance and maintenance will be limited since the site is being remediated to unrestricted land-use.

DOE will need to revise this plan in response to changes in the remedies or how the remedies are implemented. If the change only entails administrative changes such as updating contact information, DOE may revise those portions of the plan and notify regulators and stakeholders of the revision.

## 3.3 Public Participation and Communication

DOE-LM is formalizing those efforts into the *Ashtabula Site Community Involvement Plan* (CIP). All community relation activities will continue to follow DOE guidance on public participation. DOE-LM will integrate the requirements for public involvement of both NRC and RCRA into the CIP. The CIP documents how DOE-LM will ensure the public can be involved post-closure activities.

Promoting involvement of the public in the surveillance and maintenance process at the ACP ensures that citizens' concerns are addressed and that relevant public information is provided. Active citizen involvement also promotes understanding of, and encourages informed participation in, the project by the general public. DOE seeks to encourage public participation by providing site information via public and DOE contacts, documents to the public for comment, and public meetings. The following are general descriptions of public participation activities that will occur at the Ashtabula site.

### 3.3.1 Regulator, Stakeholder, and Responder Contacts

The purpose of the contact effort is to ensure that public and key community leaders, including federal, state, and local government officials, are kept informed of site activities and status changes. Contact information is maintained, including:

- Legislative and executive branch officials (federal, state, and local).
- EPA - Region V.
- OEPA.
- RMI.
- Township of Ashtabula, Ohio.
- Interested citizens.
- Media (print and electronic).

The Official Contact List and the Distribution List will be maintained in the CIP site announcements and notifications.

### 3.3.2 DOE Contacts

Contact information for DOE staff responsible for implementing the LTS&M program will be posted at the site. The DOE contact list will serve an informational purpose by providing a mechanism for the public to submit questions or requests for information when there is no continuous on-site DOE presence. The following contact list will be maintained and revised on an annual basis, as necessary, to reflect the most current contact information. Changes to this list are minor changes to the LTS&M Plan, to be issued as part of an update, but will not cause the issuance of a revision to the LTS&M Plan.

- Art Kleinrath, LM-50, Grand Junction Site
  U.S. Department of Energy
  955 Mound Road
  Miamisburg, Ohio 45342
  (937) 847-8350

- Website
  http://www.lm.doe.gov

## 3.4 Site Maintenance and Operations

### 3.4.1 RCRA WMU Monitoring System

A ground water monitoring program is being developed for the ACP. It is anticipated that DOE will monitor ground water in the WMU for TCE for up to 1 year to verify that the remedial action is effective. The specifics of the monitoring will be defined in a forthcoming document prepared by DOE-EM and approved by the necessary regulators. When it is determined that the remedial action is operating as expected, DOE will discontinue monitoring (estimated to be 1 year).

## 3.5 Emergencies, Contingency Planning, and Corrective Action

Because the ACP site is being remediated to unrestricted release standards, no engineered controls or operations and maintenance of the remedy will be necessary. Also, the site will remain under ownership of RMI; therefore, DOE is not responsible for any emergency measures that will take place in response to unusual damage or disruption of the site.

## 3.6 Records and Data Management

Records management is the primary LTS&M function for the Ashtabula project; however, it is important to note that LM will not be assuming custodianship for all ACP records. Portions of the records will be divided between the following entities:

- RMI, as the property owner,
- ODH under and Agreement with the NRC and to satisfy regulatory requirements under the ODH license (11900040004), and

- DOE-EM/Consolidated Business Center (CBC) to support ongoing management closeout of the master contract with RMI.
- DOE-LM will assume custodianship of the EM/CBC project records after contract closeout in February 2007. The ongoing management of the Energy Employees Occupational Illness Compensation Program Act responsibilities will transfer to LM.

The retention of records and dissemination of information over the long-term is a critical aspect of legacy management. Records that are needed for LTS&M purposes will be managed by LM. Any centralized system to provide stakeholders and the public with access to records or copies of records will be managed by LM.

### 3.6.1 LTS&M Records and Data Collection

Because the ACP site is being remediated to unrestricted release standards, no engineered controls or operations and maintenance activities are required; therefore, no records associated with the aspect of LTS&M activities will be developed.

A ground water monitoring program is being developed for the Ashtabula project. It is anticipated that DOE will monitor ground water in the WMU for TCE for up to 1 year to verify that the remedial action is effective. The specifics of the monitoring will be defined in a forthcoming document prepared by DOE-EM and approved by the necessary regulators.

### 3.6.2 Pre-LTS&M Records and Data Collection

Copies of selected records documenting past remedial activities will be retained for legacy management purposes on or near the site by LM. Records are selected because they contain critical information needed to ensure the continued management and the follow-on actions and controls (including property management) required to protect public health and the environment and to demonstrate compliance with applicable legal requirements. This surveillance and maintenance record collection does not include records that document past operations and remedial activities or information pertaining to employee or public health and safety issues with respect to former site operations.

Inactive or retired site records are stored at a Federal Records Center (FRC). The Regional Records Center designated archive facility for Ashtabula records created during the operation and remediation of the site is the federal records repository in Dayton, Ohio. To facilitate retrieval of records after site operations cease, and because the greatest repository of site knowledge will reside with the site steward, DOE-LM will obtain copies of box and file indices and Records Transmittal and Receipt forms (SF 135) for the site. These indices and SF 135s will be retained to access the surveillance and maintenance collection, and will remain in DOE-LM custody.

In addition, DOE will have custody of site documents residing in the FRC and will be notified prior to the destruction of any temporary records. Original real property records will be dispositioned by EM to FRC and custody will be transferred to DOE-LM. Federal real property specialist may have access to these records.

### 3.6.3 Records Retrieval Process

Access to records will be coordinated through the Ohio Records Coordinator at the DOE-LM office located at 955 Mound Road, Miamisburg, Ohio. Document searches and requests can be made via the DOE-LM website (http://wwww.lm.doe.gov) or by contacting the Records Coordinator at (937) 847-8350. Allow up to 10 working days for a request to be processed.

### 3.6.4 Regulatory Requirements

Project records are maintained in full compliance with DOE requirements:

- 36 CFR Parts 1220–1238 - National Archives and Records Administration,
- Title 44, United States Code, Chapter 29 - Records Management by the Archivist of the United States and by the Administrator of General Services,
- Title 44, United States Code, Chapter 31 - Records Management by Federal Agencies, and
- Title 44, United States Code, Chapter 33 - Disposal of Records.

The DOE Records Disposition Schedules provide the authority for the transfer, or disposal of records created and maintained by DOE. The disposition schedules, and the citations to the disposition authorities, can be found online at the DOE website under the Chief Information Officer page (http://cio.doe.gov/Records).

## 3.7 Safety and Health

Health and safety procedures for OLM activities are consistent with DOE orders, regulations, applicable codes, and standards. The DOE-LM Integrated Safety Management process serves as the basis for the contractor's health and safety programs. All activities performed at the Ashtabula site will comply with the DOE-LM contractor's Health and Safety Project Plan. Proper training (i.e., OSHA HAZWOPER) requirements will be met for the activities being performed. Ashtabula contractors and subcontractors are required to review health and safety plans to ensure that they have an understanding of the potential hazards and the health and safety requirements associated with the work to be performed.

## 3.8 Quality Assurance

All activities related to the surveillance and maintenance of the Ashtabula Site will comply with DOE Order 414.1A, *Quality Assurance* and ANSI/ASQE E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs."

Quality assurance requirements and protocols for Ashtabula Site monitoring operations and environmental monitoring will be documented in the forthcoming plan to be developed by DOE-EM and approved by the regulators. As additional quality assurance/quality control programs are developed, they will be referenced in this section and integrated into the DOE-LM contractor's Quality Assurance Program Plan.

## 3.9 Budgeting and Funding

DOE will request adequate funds to maintain the remedies required for this site. DOE will provide appropriated funds to conduct LTS&M at the ACP as part of an annual Congressional appropriation. Approximate total funding to implement the LTS&M program described in this Plan is estimated to be $300,000 in 2007 dollars.

# 4.0 References

RMI Company, 1989. *RFI Equivalency Document for the RMI Extrusion Plant*, prepared by Eckenfelder, Incorporated, August.

RMI Environmental Services, 1995. *Site Characterization Report for the RMI Titanium Company Extrusion Plant*, Prepared by B. Koh and Associates, April.

Sharp and Associates, Inc., 2003. *Phase II Groundwater Investigation Report*, September.

U.S. Department of Energy (DOE), 2004. *Ashtabula Closure Project Risk-Based End State Vision*, Draft, September.

U.S. Nuclear Regulatory Commission (NRC), 1995. *Decommissioning Plan for the RMI Titanium Company Extrusion Plant, Ashtabula, Ohio*, prepared by RMI Environmental Services, April.

End of current text

# 3.0 Fire Plan

## 1. Purpose

This plan provides procedures to be followed at the site in the event of a fire.

A fire at the DOE office in Grand Junction, Colorado, should be classified as an operational emergency if assistance is required from the Grand Junction Fire Department or other off-site agency or if there is confirmed or suspected personnel injury or substantial degradation of health and safety.

## 2. Control by the Fire Department

The senior Fire Department officer shall be in charge of direct fire fighting activities. Nothing in this plan shall alter this authority unless the DOE Emergency Manager or the Emergency Response Coordinator (ERC) determines that other hazardous conditions would override the fire-fighting considerations.

Appropriate site emergency personnel will remain in charge of the overall emergency; fire-fighting efforts will be under the direction of the senior Fire Department officer at the scene.

## 3. Reporting and Notification

A fire discovered anywhere on the site shall be reported immediately by pulling the nearest fire alarm pull station and by calling extension 222 from a safe location.

A fire may require categorization under DOE Order 231.1A, *Environment, Safety and Health Reporting*. Refer to the *Health and Safety Manual* (STO 2), Chapter 4.

## 4. Response

### 4.1 Security Officer

If the fire alarm originates from a pull station or flow switch during normal working hours (Monday through Friday between 8:00 a.m. and 4:30 p.m.), the Security Officer will perform the following sequence of responses:

- Call 9-911 and report the fire alarm to the Grand Junction Fire Department
- Notify the Emergency Response Organization (ERO) of the alarm and its location using the group pager number (263-1080)
- Open the South Gate and use expedited entry procedures for the Grand Junction Fire Department. If the fire is at the front of the facility, notify the ERO or other available personnel for assistance in opening the barricaded area.
- If personnel responding to the alarm determine the alarm to be false, immediately call 9-911 to notify the Grand Junction Fire Department that it is a false alarm
- Write an Incident Report