ENHANCED WORK PLANNING FOR REDUCTION IN LANDLORD COSTS

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For Presentation at the

Waste Management '96 Conference
Oral Session 49 "Managing & Modeling Costs to Optimize Site Cleanup"
Tucson, Arizona
February 25-29, 1996

Fernald Environmental Restoration Management Corporation with the U.S. Department
of Energy under Contract No. DE-AC24-92OR21972
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INTRODUCTION

The cost of Landlord services constitutes a major portion of the Fernald Environmental Management Project (FEMP) budget. In order to place more resources in the area of actual remediation and cleanup, the Fernald Environmental Restoration Management Corporation (FERMCO) has established a new enhanced work planning initiative through the Integrated Safe Shutdown, Waste Management, and Landlord (ISWL) Project Team. The ISWL Project Team is a planning and coordination group which meets weekly at no additional cost to the DOE; actual field work is funded and implemented through the remedial or operational projects.

The purpose of this team is to address issues that will facilitate safe shutdown and/or reduction of utilities in facilities thereby decreasing the infrastructure costs and increasing integration/advanced planning between Waste Management, Safe Shutdown, and Landlord Programs. The ISWL Project Team is the key planning and integration link for near term (one month to one year) integration activities. The ISWL Team is planning for the coordination of integration activities which must be completed to support and facilitate the FEMP’s 1) Safe Shutdown Program, 2) Utility Reduction Program, 3) Waste Programs Management, 4) remediation of all FEMP structures, and 5) ongoing remediation projects.

Although similar to Surveillance and Maintenance (S&M) Programs utilized at many Department of Energy (DOE) sites, the FEMP Safe Shutdown Program (SSP) is an aggressive and thorough final initiative intended to bring process-related facilities to a controlled shutdown prior to a private subcontractor decontaminating and dismantling the facility. Safe Shutdown activities are limited to facilities known to contain nuclear materials, hold-up or process materials. The goal of the Utility Reduction Program (URP) is to implement as many utility disconnects and/or building abandonments as possible to reduce maintenance requirements, minimize active areas, and realize a costs savings or avoidance. The URP Team evaluates all facilities, initially targeting those facilities that are presently shutdown or have little functional use.

The focus of the ISWL Project Team will be to collect information on present and future activities through the input of the team members. The information will be utilized to coordinate and integrate the activities of these organizations to:

- identify and describe integration activities and requirements;
- identify and describe organizational responsibilities;
- prioritize and sequence the integration;
- develop integrated schedules; and
- identify and resolve schedule constraints or limitations.
IDENTIFICATION OF INTEGRATION ACTIVITIES AND REQUIREMENTS

The text below will identify and discuss the ISWL integration activities. The activities have been identified as key integration points to complete the activities of the URP, SSP, Waste Programs Management (WPM), remediation of FEMP structures, and ongoing remediation projects. Each subsection will also include a bar chart which illustrates the relationship between the steps to complete an activity. Each step on a chart has been assigned a length indicating a duration. The durations of the steps can be compared to one another as a basis for comparing level of efforts.

Remediation Planning

The Remediation Planning Section under FERMCO’s Facilities Decontamination & Dismantlement Project (FD&DP) is the organization responsible for the integration of the planning and preparation of remediation documents and activities for Operable Unit 3 (OU3). FD&DP established project teams for the preparation of several major documents and milestone efforts, including the following:

- **Operable Unit 3 (OU3) Record of Decision for Interim Remedial Action** (June 1994) - established a legal, United States Environmental Protection Agency (USEPA) approved basis for decontaminating and dismantling OU3 components, material management, and limited disposition;

- **OU3 Remedial Design/Remedial Action Work Plan for Interim Remedial Action** (March 1995) - provided the framework which directs the performance of specific tasks and other activities necessary to perform remedial design and remedial action;

- **Implementation Plans for Above-Grade Decontamination and Dismantlement** - a USEPA design deliverable that provides a summary of the project-specific design and planning; and


Each of the projects were organized in a manner that employed key individuals from other groups at the FEMP in an effort to ensure integration of project planning. Equally as important as the above-listed projects, FD&DP Remediation Planning is chartered to provide key input into other projects that affect OU3. FD&DP Remediation Planning has been instrumental in the integration of a wide array of USEPA, Ohio Environmental Protection Agency (OEPA), and remedial design/remedial action (RD/RA) planning and regulatory requirements into the project-specific remedial designs. For both FD&DP Remediation Planning-lead projects, such as those listed above, and those that require key participation, FD&DP Remediation Planning ensures that such projects integrate their performance requirements with potentially affected OU3 programs.
Relocation/Evaluation of Ongoing Programs

The ISWL Project Team will address future and ongoing programs within facilities to ensure integration is performed when planning and implementing the integration activities. Facilities will be evaluated to determine if 1) a project is being planned to occur or being implemented in the facility, 2) a project has been completed and the facility may undergo utility reduction or safe shutdown, and 3) the facility has been identified as being needed for FEMP remediation. These three situations will be considered when determining whether the activities listed in the following subsections will be implemented in a facility.

The evaluation of ongoing programs will continue throughout the implementation of integration activities to ensure that continuous feedback is given to the ISWL Project Team as facilities undergo utility reduction and/or Safe Shutdown. The team will utilize the feedback to reduce Preventative Maintenance, Corrective Maintenance, and Landlord Programs.

Relocation of Records

The management and preservation of records at the FEMP is a DOE requirement under DOE Order 1324.5B. The ISWL Project Team ensures that records are retrieved and managed in a timely manner to support initiation of utility reduction and/or safe shutdown. The five components include:

- inspecting each facility within the former production area for records;
- determining if the records are contaminated;
- packaging the records for shipment;
- shipping the records to an approved storage facility; and
- evaluating the records for sensitivity.

Space Management/Relocation of Personnel

The ISWL Project Team coordinates with the Space Management Department to ensure that personnel are relocated prior to a facility undergoing utility disconnect and/or safe shutdown. The Space Management Department is responsible for allocation of space, both on- and off-site. These responsibilities vary from landlord functions, to movement of personnel. Each Division within Space Management coordinates such services as movement of phones/computers, movement, procurement and storage of furniture, design of office space layouts and furniture placement, and information necessary to update the Space Management database. Once Space Management receives a request to relocate a person, or provide space for a new employee, the following steps occur:

- Space Management evaluates the functional needs of the person;
- inspects the space for functionality, ergonomics, and life and safety issues;
- coordinates any reconfiguration and furniture placement;
schedules installation/relocation of telephone/computer service (installation, relocation, disconnections, or movement); and

schedules the labor for the move (both on- and off-site); and

coordinates any furniture procurement, movement, and storage.

Disposition of Equipment and/or Property

The identification and review of the personal and real property records will be performed to ensure that all items can be properly accounted for when a facility is being dismantled and dispositioned.

All of the equipment and property will be identified by performing a physical inventory of each facility to ensure complete and accurate coverage by the Property Tracking System and Real Property Inventory System. All personal property of value in the building will be removed or identified for excessing through sale or preservation prior to the Safe Shutdown activities. The Property Tracking System information will be reviewed for each item of equipment in a facility, and the Real Property Inventory System will be reviewed for each facility, to ensure that the status is consistent with Facility Reduction, Safe Shutdown, and (ultimate) sale or disposal of the item.

When the facility is verified as being secure and shutdown occurs, the remaining personal property will be considered of no value and removed from inventory requirements. DOE approval will be requested prior to disposition of the real property (building). The final disposition process will be initiated simultaneously with Safe Shutdown activities.

Relocation or Disposition of Waste and Nuclear Materials

The ISWL Project Team interacts with the WPM Division to support the activities of both Safe Shutdown and the URP by ensuring that all waste and nuclear materials are removed from the facilities in accordance with the program requirements.

Identify through the Sitewide Waste Information, Forecasting, and Tracking System (SWIFTS) or physical inventory, the waste/nuclear material contained in or outside the building. Determine whether containers are low-level, Resource Conservation and Recovery Act (RCRA), mixed, or nuclear material.

Visually verify status of containers for proper location, correct container count and type, proper lot coding and other labeling, pending/completed characterization, physical condition of containers, and current configuration (i.e. safe grouping).

Obtain copy of Material Evaluation Form (MEF), MEF verification, and the inventory attachment sheet for all containers.

Determine criticality concerns. Request that Nuclear Safety provide a Criticality Safety Analysis for storage and/or Nuclear Safety Operations Authorization for movement of containers.
Determine new storage location or staging area for off-site shipment.

Generate necessary task and work orders. Task orders will describe all personnel, equipment, and activities associated with relocation/disposition. These activities may include weighing or reweigh, overpacking, lot code stenciling, palletizing, strapping, etc.

Work is scheduled through the Work Coordination Center.

Generate movement sheet and chain-of-custody forms indicating the current and future location of the containers and personnel who sent, transported, and received the containers. Obtain appropriate signatures. All paperwork will be forwarded to MC&A to update the container information on SWIFTS.

Utility Reduction Program

The utility reduction activity includes identifying facilities or areas within facilities where utilities and maintenance requirements can be reduced or shut off to minimize active areas and realize a costs savings or avoidance. The utility reduction team evaluates all facilities or structures, initially targeting those facilities that are presently shutdown or have little functional use. The next group of facilities are those which may be occupied or have limited use where relocation, consolidation, or alteration of the facility occupants, contents, or utilities still provide a cost savings. Finally, the utility reduction team evaluates facilities which are currently occupied or operating and where utility usage could be reduced overall. The URP does not address facilities which are needed to support future remedial efforts or facilities to be disconnected through the Safe Shutdown Program. To facilitate the removal of these services, rerouting or alteration of utilities, consolidation of records, material and equipment, and consolidation or relation of personnel will be performed. Facility Owners and personnel responsible for building contents and safety systems will be consulted and involved with the planned action. Utility services for future Safe Shutdown operations will also be considered during the planning stages.

The goal of the URP is to implement as many utility and facility shutdowns as possible and place them in a controlled shutdown state. The elements of planning and implementing utility reduction are detailed and require integration with several other FERMCO projects and support groups.

Safe Shutdown Program

The purpose of the Safe Shutdown Program is to mitigate the potential for loss of containment of nuclear and hazardous hold-up material from existing equipment in the facilities. Safe Shutdown activities are limited to facilities known to contain hold-up material identified through process knowledge, visual inspections, existing RCRA determinations, radiological surveys, nuclear material inventory, and non-destructive assays. Facilities sequence and schedule for Safe Shutdown activities are consistent with the sequence and schedule for the decontamination and dismantlement (D&D) of structures as identified in the OU3 Prioritization & Sequencing Report.
The following bullets identify and define the Safe Shutdown activities:

- Removal of salvageable and stored equipment.
- Isolation of electrical power, steam, water, natural gas, and compressed air from all discrete pieces of equipment within or adjacent to each facility. Utilities will be disconnected outside each facility early in the Safe Shutdown process with the exception of electrical power. Some electrical power to each facility will be maintained to supply lighting, air monitoring equipment, HEPA vacuum cleaners, HEPA ventilators, and other equipment required to perform Safe Shutdown field activities. Electrical power will be terminated at each piece of unneeded equipment with the final termination of electrical power, external to the facility, at the conclusion of the removal action.
- Gross removal of nuclear holdup material from equipment, piping, and ductwork that is considered "reasonable."
- Gross removal of RCRA hazardous constituents.
- Gross decontamination of the remaining equipment and the interior of each facility. Gross decontamination performed as a Safe Shutdown field activity means general housekeeping by removing contaminated debris, vacuuming loose dust, and wiping down equipment (external), ductwork (external), piping (external) and the structure wall, and the removal of most visible residues.
- Turnover the facility to the Construction Division for D&D by a subcontractor.

CONCLUSION

The integration schedule presented in Figure 1 has been developed to apply to any facility at the FEMP. The sequence of activities listed in the schedule was determined by evaluating the priorities and interactions between each activity identified above. The next level of planning utilizes the activities and sequence identified in the integration schedule applied to a facility-specific schedule. The facility-specific schedules contain actual durations based on evaluations of quantities of waste and nuclear material present, quantities of records present, number of personnel to be relocated, etc.

Enhanced work planning has reduced redundant and uncoordinated planning while causing the correct actions to occur in the proper sequence within the proper time frame. Reduced replanning has allowed the facilities to enter into a reduced mode of operation earlier, thereby maximizing savings on the consumption of utilities, reduced maintenance (both labor and materials), janitorial/porter services, and inspection costs. Figure 2 represents the reduction in landlord costs realized through enhanced work planning.
FIGURE 1 - Integrated Safe Shutdown, Waste, and Landlord Project Schedule
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