Contents

Teamwork

FDD is a relatively small organization at SRS, but we take pride in how much we accomplish. The SRS teaming agreement makes it clear that what we earn is based on our performance. The key to a high level of performance is teamwork.

Our close-knit team has accomplished a lot with very limited resources, because we work as a team. We have learned how to save the government money by working closely and efficiently. We can all take pride in that because as a team, we all deserve the credit.

Our challenge is to extend that teamwork across the entire site. By helping other divisions with our resources and capabilities, eveyone benefits. Our Decontamination Facility has saved millions across the site, and will continue to do so. We can show all of SRS how to save on stewardship costs using Requirements Based Surveillance and Maintenance. We know how to mine the excess facilities for surplus equipment that can be used to reduce the cost of making old facilities disappear.

Thanks, FDD Team. Let's do even better in the coming year.

Robbie Cordani - Vice President and General Manager
Craig McMullin - Deputy General Manager
Roger Duke - Manager, Program Management and Support Servces
Heatherly Dukes - Manager, Excess Facilities
Dave Freeman - FDD Engineering Manager

Introduction

The purpose of this document is to describe the roles and responsibilities of the various FDD organizations and to lay out a plan for using the resources provided to carry out those responsibilities. This plan describes the way FDD is organized and the major activities that it carries out. It also includes plans for future work.

This document is written in the form of a business plan, using a manufacturing business as a model. In this model, the organization receives raw materials (inactive facilities), applies a transformation process (disposition program), keeps an inventory of in-process items (inactive facilities awaiting decommissioning), and produces an end product (decommissioned facility locations). The business model and how it relates to the facility disposition process defined by DOE Order O 430.1A, *Life Cycle Asset Management,* is described in detail in the subsequent chapters.

This plan contains both a progress report on the activities carried out in the previous year, FY-01, and the planned activities for the coming year. It is organized into five chapters. The first chapter describes the FDD organization. The next chapter describes activities that encompass the disposition process, including hazard identification and reduction, deactivation, safe storage including surveillance and maintenance, and final decontamination and decommissioning. The last chapters describe our accomplishments this past year, plans for next year, and initiatives to improve the process. Additional supporting information is included in appendices.

FDD Organization

FDD Mission

"To effectively manage SRS excess facilities and equipment disposition by identifying innovative solutions and reuse opportunities that will eliminate risks and minimize facility life cycle costs without compromising health, safety, or environmental quality."

The Facilities Decontamination and Decommissioning Program is divided into three departments:

FDD Engineering

This department is responsible for all engineering support to FDD. The Engineering Department provides facility engineering support (cognizant engineers, design authority, and subject matter experts) as well as program definition services and disposition task management.

Excess Facilities Management

This department is responsible for the care, maintenance, and operation of FDD facilities. It includes a maintenance section, an operations section, and the staff for the Decontamination Facility in 105-C.

Program Management and Support Services

This department provides long range planning, budgeting, asset management, training, procedures, and quality assurance services.

In addition, several other functions and services are supplied by staff that are matrixed into FDD from other organizations. This includes financial management and accounting, project management, and health and safety services.

Engineering

The mission of FDD Engineering is to provide guidance and lead the effort to apply the facility disposition program requirements, in order to minimize expenditures while ensuring the safety of workers, the public, and the environment. FDD Engineering consists of three sections:

D&D Engineering & Technology

- Manage and coordinate the transfer of inactive facilities to FDD
- Understand and define disposition requirements on behalf of the division and site
- Plan for facility safe shutdown, transition, transfer of custody, risk reduction, deactivation, surveillance and maintenance, and decommissioning
- Identify potential innovative technologies that can improve disposition activities and manage their demonstration and deployment.

Environmental Engineering

- Maintain and coordinate envronmental aspects of FDD disposition activities
- Provide continual environmental compliance oversight of disposition program
- Perform waste characterization activities, define sample requirements, determine disposition paths

Facilities Engineering

- Providing cognizant engineers, Cognizant Technical Function, and Design Authority for all systems, structures, and components that FDD is responsible for
- Maintaining and documenting a proper safety basis for all facilities where required
- Maintaining and documenting configuration control for structures, systems, and components where required
- Developing and minimizing facility surveillance and maintenance plans
- Assisting site organizations to implement Requirements Based S&M

Excess Facilities Management

The mission of the Excess Facilities Management Department is to manage the FDD excess facilities within facility disposition program requirements, to minimize expenditures, and to ensure the safety of workers, the public, and the environment.

The department consists of four sections:

Works Engineering (Maintenance)

- Maintenance services for equipment and systems required by the FDD facilities authorization basis documents
- Maintenance services for active FDD administrative facilities
- The FDD Work Control center, which prepares FDD work packages
- Maintenance expertise and manpower for FDD D&D projects

Waste Operations

- Programmatic oversight of the FDD waste program per the WSRC 1S manual requirements
- Coordination of FDD waste shipments
- Documentation and implementation of the FDD Waste Certification Plan and procedures that implement it
- Waste audits to ensure compliance with the FDD waste program
- Provision and tracking of all waste containers used within FDD
- Identification of potential methods and technologies for minimizing waste quantities generated by FDD

Facility Management Decon and D&D

- Maintaining surveillance and maintenance requirements for all FDD facilities
- Cognizant custodians for each FDD facility
- Decontamination services to the entire site from the Decontamination Facility
- Operations expertise and manpower for FDD D&D projects
- Waste packaging expertise during field activities
- Planning for risk reduction, deactivation, and decommissioning projects

Scheduling

- Integrated schedules for all FDD surveillance, maintenance, decontamination, deactivation, and decommissioning activities
- Plan of the Week, Plan of the Day, and Eight Week Look-Ahead schedules for designated planning meetings
- Outyear schedules for future FDD Activities
- Planning templates for FDD activities that have recurring planning requirements

Program Management and Support Services

The Program Management and Support Services Department provides services to the rest of FDD from the following three sections:

Program Management

- Long-range program planning
- Budgeting and financial planning
- Program controls
- Reporting, presentations, and communications

Asset Management

- Property control and disposition by Asset Management Specialists
- Manage the Assets for Services Program

Support Services

- Quality assurance servicess
- Division training coordination
- Procedure writing and administration

Disposition and FDD Business Model

The partnership contract under which WSRC manages and operates the Savannah River Site gives BWXT Savannah River Company the responsibility for the following scope of work:

> ***Decontamination and Decommissioning***
>
> *Facilities for which no alternate use can be found shall be decontaminated and decommissioned (D&D) as authorized and directed in the AOP. The Contractor shall provide the overall management of the D&D program at the SRS. These activities may include characterization, risk analysis, evaluation of alternatives, stabilization, and final closure.*

DOE Guidance

FADMC

1C Manual

DOE has defined Life Cycle Asset Management in DOE Order 430.1A, "Life Cycle Asset Management", with additional guidance in several DOE guides. Collectively, the references describe how DOE desires to manage inactive facility disposition activities.

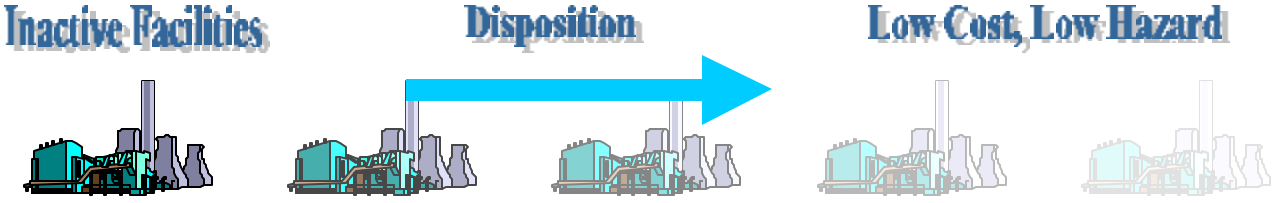
The Facilities Decontamination and Decommissioning Program exists to carry out the above scope of work in accordance with that DOE guidance. FDD is responsible for interpreting the DOE guidance and applying it to SRS using a graded approach, whereby the nature and degree of the requirements is commensurate with the complexity and hazard of the facility.

To implement these responsibilities, company-level policy has been stated in Management Policy 5.24. This policy has been developed by FDD into a site-level program, which is described in the 1C manual. A company-wide committee has been chartered to coordinate disposition activities with other divisions. The Facilities and Assets Disposition Management Committee also reviews and approves the 1C Manual procedures.

Business Model

Although managing the disposition of inactive government facilities is not a commercial business venture, it can be described in a way that is analogous to a manufacturing business. In this analogy, the raw materials we work with are inactive facilities, and the product we produce is a safe and stable configuration of assets that has minimal long-term costs. The "manufacturing" process is the whole array of activities that FDD carries out to transform those raw materials into the desired product.

The product unit, or "widget" of this manufacturing business is the facility. A facility is a building, group of buildings, or portion of a building that is dedicated to a common function. "Facility" includes the structure and the property within it; it excludes the land on which it is situated.

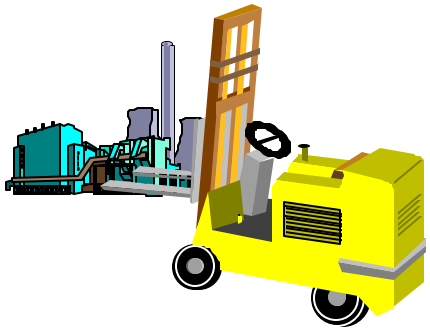


Raw Materials Input

Over time, as facilities cease operating and become inactive, many are relinquished by the organization that operated them and are turned over to FDD for disposition. The Excess Facilities Management Department assigns a custodian for each facility, and assumes the responsibility for care and maintenance. For those that are retained by the parent organization, that division is expected to follow the same disposition process as does FDD. FDD Engineering will support them to the extent requested.

If the list of current inactive facilities is regarded as the inventory of raw materials for our disposition program, certain inventory management requirements are necessary. These involve

1. knowing what you have and what condition it is in,
2. recording new acquisitions,
3. caring for the inventory items until they are used, and
4. keeping track of items that leave inventory.



Accounting System

The inventory management system includes a FileMaker database that lists all known inactive facilities. Keeping track of conditions and hazards in the inactive facilities is done by a combination of simple questionnaires that are filled out by facility custodians, and a hazards identification walkdown inspection. This information is also captured in the database.

Additions to inventory are recorded when the responsible division notifies FDD Engineering that a facility has become inactive, by filling out the hazard identification questionnaire. If the parent organization wishes to transfer custody of the facility to FDD, a Memorandum of Understanding is negotiated to formalize the transfer.

Warehousing (Facility Stewardship)

Facilities in our inventory need to be cared for properly until they can be decommissioned. This care involves both tangible surveillance and maintenance activities at the facility, and intangible administrative activities.

The Excess Facilities Management Department is responsible for carrying out the surveillance and maintenance. The Engineering Department provides oversight to ensure the facility configuration is maintained appropriately. In the business model, surveillance and maintenance is analogous to the warehousing function in a manufacturing business.

FDD recognizes that surveillance and maintenance is a continuous, ongoing activity applicable to all phases of a facility's life cycle. As such, it occurs throughout facility disposition, and it continually evolves to reflect the facility condition and configuration. FDD efforts to care for its inventory of raw material (excess facilities) occur throughout the entire disposition process.

When a facility reaches the end of its useful life or its mission ends, the facility no longer needs to operate and becomes inactive. It undergoes a transition from operational to surplus that involves the safe shutdown of the facility, and the formal transfer of the facility into the disposition program. This may involve the transfer of custody of the facility from the operating organization to FDD, or the operating organization may choose to perform disposition itself, under the guidance provided by FDD.

- When operations are finished, the facility is placed into a safe and stable shutdown condition by the parent organization in accordance with a written Safe Shutdown Plan.
- The status and condition of the facility at this time of transition is to be documented in a Facility Condition Documentation Package.
- Administrative records for the facility are updated by the parent organization to reflect the changed status of the facility. This includes such records as:
  - ❑ Safety basis/authorization basis documents
  - ❑ Asset management documentation
  - ❑ Configuration management, including drawing updates, cancellation or revision of procedures, license or permit changes, functional classifications, Fire Preplans, MC&A accounts, etc.
- The systems and equipment that must remain operational are identified, and a Surveillance and Maintenance Plan is written.
- For a facility that is to be transferred to FDD for disposition, a formal turnover of custody is performed. The turnover process includes:
  - ❑ A pre-transfer review by FDD Engineering of what has been done to shut the facility down and prepare it for turnover
  - ❑ A walkdown inspection of the facility to verify that it is in safe and stable condition, and that the documents being turned over with the facility are complete and represent its condition
  - ❑ A Memorandum of Agreement to formally document the change of custody and agreement on which of the items listed above will be done by the parent organization and which will be assumed by FDD.

Surveillance and Maintenance

For some facilities, the residual hazards require that expensive surveillance, maintenance, utilities or custodial services be dedicated to keep them under control. Some examples are:

- The presence of fissile material requires a whole array of precautions like special containers, spacing control, safeguards, and accountability that would not otherwise be needed
- The amount of combustible materials in the facility is high enough to require that fire detection, alarm, and suppression systems remain functional
- The amount and location of residual radioactive material requires that barriers to the spread of contamination, ventilation, and effluent monitoring systems remain operational

Hazard Identification and Reduction

This diagram illustrates the Inactive Facilities Risk Management Program. It starts with a simple risk questionnaire (screening checklist) in which the facility custodian identifies possible hazardous conditions. A numerical value is awarded to the answers, and the resulting score is used to decide which facilities warrant further investigation.

For the facilities with the highest level of residual hazard, a team of experts performs a detailed walkdown inspection. The walkdown reports identify the residual hazards in the facility.

The hazards from the walkdown inspections are entered into a computer database. A team of experts is convened to review the hazards and give them a numerical score by risk (risk is a combination of hazard consequence and likelihood of occurrence, expressed as a numerical value).

The database is sorted by risk score, and the hazards with the highest score are given priority for corrective action. For facilities that have risks chosen by this process for corrective action, a task manager is assigned and resources are provided to reduce or eliminate the hazards. Progress of the corrective actions is tracked in the same database.

FDD Engineering supports this process from top to bottom, by maintaining the databases, by organizing and conducting the walkdown inspections, by managing and documenting the risk rank scoring process, and by planning and leading the field activities to correct the hazards. Those field activities are carried out by the Excess Facilities Management department, with assistance via WAD from other site organizations where needed.

For some facilities, the residual hazards require that expensive surveillance, maintenance, utilities or custodial services be dedicated to keep them under control. Some examples are:

- The presence of fissile material requires a whole array of precautions like special containers, spacing control, safeguards, and accountability that would not otherwise be needed
- The amount of combustible materials in the facility is high enough to require that fire detection, alarm, and suppression systems remain functional
- The amount and location of residual radioactive material requires that barriers to the spread of contamination, ventilation, and effluent monitoring systems remain operational

In cases like these, a deactivation project is initiated to reduce or eliminate these hazards and thereby eliminate the ongoing costs. Since projects of this type can be expensive and take a long time, they are chosen judiciously on the basis that the major project investment will result in a significant reduction both of risk and long-term costs. In addition, there is the enhanced perception among our customers and stakeholders that we are cleaning up legacy facilities. FDD plans to have at least one major deactivation underway each year for the foreseeable future.

Decommissioning removes the hazards permanently, thus eliminating the risks to the worker, public and the environment, along with all surveillance and maintenance costs. Unfortunately, the cost to decommission is high and is difficult to justify in economic terms, considering the long payback period for the investment.

FDD is constantly evaluating facilities and performing cost/benefit analysis on facilities that have high surveillance and maintenance costs. Certain recurring costs like roof replacements carry a high price tag. In these cases, decommissioning can be justified as avoiding these recurring costs.

A good example of this is the analysis that was done for 321-M. The 321-M facility requires a new roof every 10 years at a current cost of $1.2M and the estimate to decommission the facility is $4.2M. Considering the yearly surveillance and maintenance costs and the time value of money, a payback period of 12 years was calculated.

Decommissioning entails either demolition of the facility, entombment, or cleanout and conversion for another use. Radiologically contaminated facilities are to be decommissioned according to the complex RCRA and CERCLA rules agreed to by DOE, EPA, and SCDHEC. As a result, there have only been a few such facilities decommissioned. For demolition of facilities that do not have radioactive contamination, it is a simple matter of obtaining the right permits and notifying SCDHEC.

Marketing and Services

Our Customers

DOE-SR

The primary customer for the services FDD performs is the U. S. Department of Energy Savannah River Operations Office.
The Environment, Safety, and Health Evaluation and Performance Division supervises our overall program definition, and monitors and evaluates FDD against performance criteria. The Nuclear Material Programs Division is responsible for oversight of our remedial action projects, such as facility decommissionings. The Science, Technology and Management Division provides oversight of our technology development and deployment efforts.

DOE-HQ Organizations

FDD works closely with headquarters DOE organizations, including Office of Environmental Management, Office of Science and Technology (EM-50), the Federal Energy Technology Center (FETC), and also with the Savannah River Technology Center to review and deploy innovative technologies that can lower costs and increase worker efficiency and safety. These technologies are targeted for future use across SRS and other DOE sites. Many of these technologies help reduce waste production and promote pollution prevention.

WSRC Organizations

FDD works closely with the cognizant site organizations to ensure that their programs meet the DOE requirements. We have helped Nuclear Material Stabilization and Storage Division, SRTC, and High Level Waste Division with deactivation planning.

The FDD Decontamination Facility has helped save millions of dollars across the site by providing decontamination and rollback services. Our innovative Assets For Services Program has eliminated surplus facilities across the site while saving additional millions. We have the potential of millions more in savings by helping all site operating organizations implement Risk-Based Surveillance and Maintenance.

Industry Organizations

The FDD pool of experts have also traveled frequently to other locations to provide assistance in planning upcoming deactivation and decommissioning projects. Assistance has been rendered to Mound, Rocky Flats, Hanford, and other DOE sites. FDD experts also serve on industry panels that write standards and D&D handbooks.

Communication

FDD communicates our successes and future plans with customers and stakeholders by a variety of methods.

- Major achievements and ongoing progress are reported to DOE and a wide variety of other interested parties in a biweekly division report
- FDD will set up a web page on ShRINE
- FDD presents papers and attends as many industry meetings and conferences as feasible, within budget constraints.
- FDD has representation on various policy-making councils and committees, including the Facilities and Assets Disposition Management Committee, Regulatory Compliance Council, Chemical Management Council, SRS Engineering Council, Environmental Management Council, Nuclear Criticality Safety Review Committee, Pressure Equipment Protection Committee, and Site Fire Protection Committee.

Decontamination Facility

The FDD Decontamination Facility is located inside the 105-C Reactor Building Assembly Wing. It has been established to provide centralized, cost-effective decontamination services for the entire site. The facility contains five primary work stations.

Dry Hut

This is a 15 by 15 foot stainless steel enclosure with HEPA-filtered ventilation. This hut is used for decontamination of components with methods that do not generate liquids, such as grit blasting, strippable coating, and "rub and scrub" techniques.

Wet Hut

This is a 15 by 15 foot stainless steel enclosure with elevated floor gratings, HEPA-filtered ventilation, demisters, and a pumping drainage system. This hut is used for decontamination of components with methods that generate liquids, such as superheated water blasting.

LSME

The Large Span Modular Enclosure is a 22 by 40 foot by 18 feet high stainless steel enclosure equipped with rollup doors and ceiling access ports. It is used to decontaminate large pieces of equipment with a variety of techniques, including chemicals, strippable coatings, grit blasting, and shrouded tools.

CO2 Blasting

This facility uses solid CO_2 pellets as blasting grit. The CO2 sublimates, removing contamination without generating large volumes of secondary waste.

Plastic Blasting

A stainless steel glovebox is equipped for blasting using plastic beads as grit. This arrangement allows the worker to remain outside of the radiological environment.

In addition, a wide array of portable decontamination equipment is available. This equipment can be moved in and out of the various enclosures or taken to other places on site where they are needed. This eliminates the need to detach components and bring them to the Decontamination Facility. This also provides flexibility in application and the means to deal with contaminated locations in place. Portable decontamination services include:

Kelly Vacuum System

This system uses superheated water under pressure for cleaning. It can be operated in two modes. When fitted with a spray wand, it can be used to clean irregular surfaces, such as equipment and components. This is generally done in the Wet Hut. When fitted with a shrouded vacuum head, it can be used to remove transferable contamination from floors, walls, and other flat surfaces in the field.

Strippable Coatings

A strippable coating is a variety of polyurethane paint that is formulated to be removed easily from a surface after it has cured. It flows into crevices in the surface when applied, and transferable contamination is removed with the coating. The Decontamination Facility has settled on three different coatings. TLC Stripcoat is suitable for indoor use. It is inexpensive and can be applied with conventional rollers or sprayers. It cures and can be removed in four to eight hours. ALARA 1146 is resistant to ultraviolet light, and consequently can be used outdoors. It also is relatively inexpensive and easily applied, and cures in 24 hours.

Instacote is much more expensive requires expensive specialized application equipment and experienced applicators. Its advantages are that it dries in a few seconds and that it is impervious to water and most chemicals, long-wearing , and weather resistant. It is especially useful in protecting rooms and outdoor areas from contamination spread when radiological work will be occurring over an extended period. It is also good for fixing contamination that cannot easily be removed to protect the area long-term from traffic and weather.

High and Low Abrasion Blasting

The Decontamination Facility has available several different blasting systems for aggressive decontamination of surfaces. Grit blasting systems that use either aluminum oxide or stainless steel grit are equipped with vacuum shrouds. The reusable grit is recycled automatically. If it is not acceptable to cause damage to the surface (for example, when cleaning tools) several other blasting systems are available. They use CO_2 pellets, plastic beads, or sponge media to remove the contamination without harming the surface.

All of this equipment has been put to good use in the last few years. Major services provided by the Decontamination Facility include:

Contamination Area Rollbacks

By decontaminating floors, walls, and equipment or by fixing the contamination in place, it is possible to downgrade or eliminate radiological postings in that area. This reduces the cost of periodic surveys and other radiological controls.

Stabilization of Fixed Contamination

Application of Instacote has contributed to rollbacks and has made work less costly in contamination areas by preventing cross-contamination and reducing or eliminating the need for respiratory protection and other radiological safeguards.

Decontamination of Lead and Tools

Cleaning lead shielding and tools allows these materials to be either returned to service or disposed without having to be treated as low level waste (or, in the case of lead, as mixed waste).

"Second Sort" and "Green is Clean" Services

Second Sort Operations reduce disposal volume requirements by sorting, segregating and repackaging materials at the Decontamination Facility for decontamination, incineration, compaction, or waste assessments. The Green is Clean Program segregates clean non-hazardous and associated waste from radioactive wastes at the point of generation to reduce LLW volumes. The segregated waste is surveyed and disposed as sanitary waste.

Contaminated Large Equipment Disposition

For contaminated equipment that is too large to place in a standard waste disposal container, the Decontamination Facility can assist by either cleaning the equipment for uncontaminated release, or by judicious disassembly and size reduction to segregate clean parts from contaminated. These actions reduce the waste disposal volume or allow the equipment to be reused or sold.

FDD has devised a method, recognized and approved by DOE SR, to reduce the cost of decommissioning at SRS using an Assets-for-Services (AFS) subcontracting approach. This approach transfers ownership of all property in a facility to be decommissioned to the subcontractor to offset the cost of decommissioning services. Ideally, the resultant subcontract cost is $0. If the value of the property does not have sufficient value to result in a zero dollar contract, additional surplus property is applied to the contract to further reduce the cost.

Through the end of FY-01, FDD has successfully used the Assets-for-Services concept to reduce the footprint of legacy facilities by over 70,000 ft^2. This was accomplished for a cost of less than $1.1M, a cost saving of approximately $10 million, when compared to the estimated cost of $11.1 million to perform the work using site resources.

There is a tendency for operating divisions to base S&M plans for inactive facilities on old operations and maintenance plans. These plans often implement more extensive and more frequent activities than required. This frequently leads to the expenditure of resources on activities that are no longer required. Pointless S&M activities can have negative repercussions:

- The resources could have been put to other, better use
- Safety suffers when workers are desensitized by having tasks with no real significance mixed with the important ones

DOE has recognized an opportunity to reduce costs and get more essential work done with limited resources, while still maintaining compliance and safety bases, by eliminating unnecessary surveillance and maintenance tasks. A process described as "Requirements-Based Surveillance and Maintenance" (RBSM) was developed at Hanford and is being sponsored across the complex by DOE-HQ. FDD, with the assistance of Hanford and DOE-HQ people, have piloted the use of the RBSM process at SRS.

RBSM consists of a systematic review of all activities being conducted at an inactive facility by a team with FDD and facility operations and maintenance representatives. The costs and frequency of each activity are tabulated, and each activity is evaluated to determine which law, regulation, standard, order, directive, or other driver requires that the activity be done. The complete set of activities is screened into four categories:

Candidate for cancellation	No driver can be determined, or changes in facility mission or conditions have made activity unnecessary
Candidate for frequency change	Required activity is being performed more often than specified by driver
Candidate for further Evaluation	Driver not clear, interpretation may be incorrect, driver may not be appropriate, or regulatory relief may be possible. Followup action may eliminate or reduce activity.
No Further Evaluation Required	Activity scope and frequency are as required by driver.

Significant savings can be realized by addressing the first two categories, and either eliminating or reducing the frequency of those activities. FDD has made significant savings in S&M costs for the FDD facilities for which the review has been performed. In addition, FDD offers RBSM reviews as a service to other divisions that have inactive facilities. For a description of the reviews performed and the savings realized to date, refer to page 24.

FY-01 Accomplishments and FY-02 Plans

Our Facilities

On October 1, 2000, FDD officially had custody of 114 structures. Of these, eight are still operational:

ID	Name	ID	Name
701002C	Gatehouse to 105-C	701001M	Gatehouse to M Area
105000C	Decontamination Facility	704000M	Area Administration Building
728000N	Cask Repair Facility	730000M	Engineering and Training Building
315000M	Essential Materials Warehouse	316001M	Chemical Storage Pad

A complete list of all the facilities and structures belonging to FDD is included in Appendix C.

During FY-01, an additional twelve structures went through the transition stage, and were officially turned over to FDD by a Memorandum of Understanding:

ID	Name	ID	Name
662000G	River Loading Dock	652022T	Electrical Substation
285003H	Cooling Tower #2	675000T	Cooling Tower
678000T	677-T/678-T Diesel Generator	675000T	Breathing Air Compressor
672000T	Emergency Diesel Generator	672001T	Cooling Tower Chemical Addition
672001T	Cooling Tower	679007T	Water Services Building
652025T	Electrical Substation	675000T	Slurry Receipt Tank

During FY-01, one major facility, the 284-F Powerhouse, was demolished by an Assets For Services subcontractor.

284-F Before

& After

Future Facilities

Besides the facilities that were turned over by MOU, there are a number of others that became the responsibility of FDD because of a 2001 reorganization of WSRC that combined FDD with portions of several other divisions. These include the remaining TNX facilities, along with additional structures in P, C, and L areas. During FY-02 FDD Engineering will work with the custodians of the newly acquired facilities to get them identified, entered into the inactive facility database, and get the hazards listed and screened for corrective action. The structures we might reasonably expect to be turned over to FDD in the next one to two years are listed in the next table.

ID	Name	ID	Name
607-A	Digester & Drying Beds	108-4K	Storage Building
190-C	Cooling Water Pump House	110-K	Storage Tank
701-1C	Guard House	185-1K	Storage Building
701-6C	Guard House	185-K	Cooling Tower
643-21E	Emergency Diesel Generator	186-1K	Storage Building
211-4F	Sample House	190-K	Pump House
285-F	Cooling Tower	191-K	Standby Pump House
607-29F	Pump Station	192-3K	Pump House
607-F	Digester & Drying Beds	614-2K	Monitoring Building
723-F	Laundry	110-L	Storage Tank
608-G	Truck Scale House	186-1L	Storage Tank
628-3G	Propane Tank	190-L	Pump House
681-1G	River Pump House	191-L	Standby Pump House
681-6G	PAR Pond Pump House	614-2L	Effluent Monitoring Building
707-G	Change House	709-1L	Fire Truck Shed
722-10G	Gunsite 51	723-3L	Change Facility
722-8G	Gunsite 51	730-N	Furniture Storage Warehouse
722-9G	Gunsite 51	183-2P	Filter & Softener Plant
230-H	Beta Gamma Incinerator	186-1P	Storage Tank
782-1H	Pump House	190-P	Pump House

Risk Identification and Risk Reduction

Annually FDD selects a number of structures for special walkdown inspections to examine the hazards in more detail. They are selected from the Inactive Facilities List, and include both FDD facilities and those belonging to other divisions. The hazards identified during the walkdown inspections are also entered into a database, and the highest hazards are slated for corrective action.

At the beginning of FY-01, a total of 59 facilities and structures had been inspected by the facility walkdown team. The order in which previous inspections were conducted was based on engineering review of the screening checklists that were provided by facility custodians.

Walkdown inspections in FY-01 included the following facilities and structures:

Structure No	Name	Structure No	Name
241-916H	Oxalic Acid Addition Facility	247-10F	NFF Deluge Valve House
242-H	Waste Evaporator	247-11F	NFF Outside Cold Feed Storage Control Building
242-18H	Concentrate Transfer System (CTS) Tank	247-12F	NFF Outside Cold Feed Storage Building
242-3H	Old CTS Tank	247-41F	NFF Warehouse
242-21H	CTS Tank Ventilation System	247-42F	NFF Warehouse
247-F	Naval Fuel Facility (NFF)	183-1R	Clarification Plant (Cooling Water)
247-F	NFF Emergency Generator	190-R	Cooling Water Pump House
247-4F	NFF Cooling Tower	186-R	Cooling Water Reservoir
247-5F	NFF Shed	186-P	Cooling Water Reservoir
247-7F	NFF EC Process Building	186-R	Cooling Water Reservoir
247-8F	NFF Compressed Gas Storage	662-G	River Loading Dock

The Performance measure SP-FD00-001 goal for FY-01 was to walk down fifteen facilities or structures by May 1, 2001. As can be seen in the above table, this objective was exceeded, and by April 1, 2001.

During FY-02 the emphasis for walkdown inspections will shift from working off the backlog of uninspected facilities, to a more long-term approach. The new approach includes a mix of the following:

- Inspecting the lower hazard facilities still in the backlog
- Reinspecting some higher hazard facilities to assess deterioration or improvements in condition
- Inspecting newly acquired inactive facilities as part of the transition process

Plans for FY-02 call for walkdown inspections of 30 more structures. In addition, two have bee chosen for reinspection; the Ford Building (690-N), and the Beta-Gamma Incinerator (230-H).

Risk Mitigation Activities

The inactive facility walkdown program began in FY-98, when the ten worst facilities were inspected by a team of experts. To date, a total of 81 structures have had detailed assessments. The walkdown reports have identified 306 hazards that were added to the database. Of these, there were 150 hazards that were considered significant (score of 15 or above) and 95 were evaluated as moderate (score between 1 and 15).

The walkdown inspection effort started with a backlog of over 130 facilities. Since we did not have the time nor the resources to inspect all of them at one time, the inspections were prioritized based on the answers to a simple facility condition checklist that was filled out for each inactive facility by its custodian. The checklists gave indications of potential hazards in the facility and allowed those with more such hazards to be given priority.

Over the four years the walkdown inspection program has been in place, most of the facilities with significant hazards have received an inspection. The total number of hazards has burgeoned, but is expected to level off as the remaining, mostly low-hazard facilities are added to the database.

The Corrective Action program concentrates on the significant hazards. There is a time lag between when a hazard is identified as significant and when it is finally corrected, due to the need for planning the corrective action, obtaining the needed resources, and execution of the action. In addition, some of the corrective actions, such as HEU removal or basin cleanup, have a longer duration than one year.

Performance to date in the risk mitigation program is shown below.

	FY-98	FY-99	FY-00	FY-01	FY-02
Facility Walkdown Inspections Completed	10	21	30	22	32(est)
Money Spent on Walkdowns ($ x 1,000)	433	766	643	830(est)	
Acceptable Hazards Identified (score <1)	18	8	29	5	10(est)
Moderate Hazards Identified (score between 1 and 15)	22	16	40	17	15(est)
Significant Hazards Identified (score >15)	22	19	70	38	15(est)
Previously Identified Hazards Corrected (corrective action completed)	--	5	33	41	28(est)
Money Spent on Corrective Actions ($ x 1,000)	--	39	518	647(est)	1,801(est)

In FY-02, FDD has selected 28 hazards for corrective action. Some of the more significant ones (based on hazard score or cost) are listed in the table below. FDD intends to correct all 28, and as many additional significant hazards as possible with the resources that are planned or that may become available.

Facility		Score	Hazard	Budget for FY-02 ($ x 1000)
662-G	River Loading Dock	300	D&R Dock per CSWE plans to mitigate potential injury to boaters	200
230-H	BGI Solvent Storage Tank	150	Tank closure per regulatory plan	170
105-R	Disassembly Basin	22.4	Reduce Basin water volume and radioactivity	491
247-F	Naval Fuels Facility	100	Eliminate mold growing in clean areas	32
105-C	Reactor Facility	29.5	Characterize and dispose rail car full of ZnBr	110

Decontamination Facility

The Decontamination Facility had an excellent performance year in FY-01. The Facility claimed savings of over $7.3 million as documented in the Solid Waste Pollution Prevention Activity forms which were submitted for work performed by the facility. This savings involved 429,981 lbs of material, 39,767 ft^3 of waste savings and 31,477 ft^2 of area decontaminated. These savings were achieved by the following work activities:

Polyurea Coatings

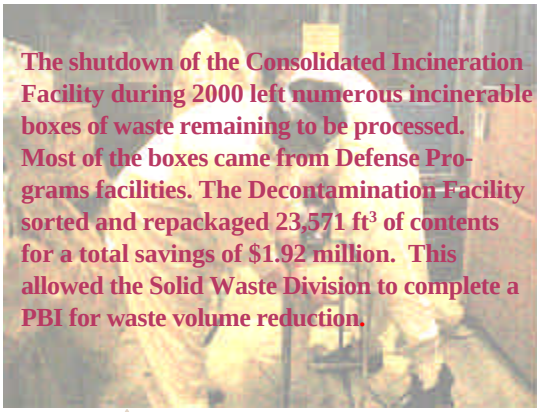
The Polyurea application process continues to be the main contributor to the savings observed by the Decontamination Facility. In F-Y01 polyurea coatings were applied:

- At the High Level Waste Division, tanks 33 and 34 were prepared and coated using polyurea material. This allowed 11,318 ft^2 to be rolled back from contaminated to a Radiological Buffer Area (RBA). The waste savings projected by this was 1616 ft^3 and 19,600 lb. The total savings associated with this activity was $414,745 each year for the next 10 years.
- At F-Tank Farm, tank 18 was coated using polyurea and 10,000 ft^2 was rolled back to an RBA with a total savings of $1.43 million per year over the next ten years. Tank 26 was coated, with 6,191 ft^3 rolled back to an RBA. The annualized savings for this was determined to be $511,925 over the next ten years.
- In the Spent Fuel Program, the 200 ft^2 area under the K-area Disassembly Heat exchangers, was rolled back to an RBA for a total savings of $262/yr. This was done for environmental, rather than cost reasons. The CD-5 cask car was also decontaminated, sprayed with Polyurea and returned to service.

Lead Decontamination

The Decontamination Facility continued to support the site's lead management program by providing consolidation and decontamination services. Lead services were provided to Solid Waste Department , Spent Fuels Programs (3767 lb.) and Defense Waste Processing Facility (75 lb.). In addition, the Decontamination Facility Characterized 8470 lb. of lead for the Solid Waste Department as part of their lead management program, with no reported cost saving associated with the effort.

Sort Activities



The shutdown of the Consolidated Incineration Facility during 2000 left numerous incinerable boxes of waste remaining to be processed. Most of the boxes came from Defense Programs facilities. The Decontamination Facility sorted and repackaged 23,571 ft^3 of contents for a total savings of $1.92 million. This allowed the Solid Waste Division to complete a PBI for waste volume reduction.

Additional Services to Other Divisions

- At the start of FY-01, the Environmental Restoration Division had a problem clearing the large earth moving equipment used to clean up the SREL basin in A-area. This equipment consisted of two (2) trackhoes and two (2) bulldozers. They represented 8350 ft^3 or material that would have to go to the disposal trench if not successfully decontaminated. The Decontamination Facility cleaned this equipment, allowed the project to be closed, and saved the site $1.83 million in disposal and replacement costs.
- The Nuclear Materials Management Division had a chiller that was destined for the disposal trench because it could not be cleared radiologically. The Decontamination Facility strategically dismantled the chiller and, working with Health Protection Technology and SRTC, proved the chiller was clean. This saved 360 ft^3 of disposal space and $29,238 in disposal costs.

Rollback technologies are a specialty for the Decontamination Facility. Walk-behind scabblers, hand-held shrouded tools and chemical "Rub and Scrub" are all part of the arsenal the Decontamination Facility has deployed to assist SRTC in the rollback needs. During FY-01, the Decontamination Facility used these technologies to rollback Room F-091 for SRTC which cleared 1928 ft^2 of workspace and led to a recognized cost savings of $35,700.

Plans for FY-02

The work planned for the Decon Facility in FY02 is as diverse as the work talent in the facility. Polyurea coatings again are the big hit with facilities with plans to coat tanks 1-4, 30 and 31 at High Level Waste tank farms. Sorting and characterization work will continue for the Solid Waste Division for legacy lead materials. Rollback efforts will continue at SRTC facilities and the new Plastic Waste Processor facility will be brought online to reduce the volume of FDD plastic wastes. The Plastic Waste Processor will expand service to other site facilities after initial deployment on FDD waste streams. A major milestone for FY-02 will be the installation of the new Remotely Operated Size Reduction System (ROSRS). The ROSR deployment is described in the Process Improvement section of this plan.

Deactivation Projects

FDD's major deactivation projects in FY-01 included the 321-M Fuel Fabrication Facility, the 341-8M Vendor Treatment Facility, and the R-Reactor Disassembly Basin.

Vendor Treatment Facility

The goal of the VTF deactivation was to de-inventory and decontaminate the facility and place it in a passively safe condition. This was accomplished by requiring the original contractor to fulfill his obligations, combined with a series of division-managed tasks funded through the annual cost budget. Deactivation activities included flushing and draining the melter, process lines and tanks. All residual chemicals, samples, materials, tools, and miscellaneous equipment were removed from the facility.

No significant decontamination or fixing of radioactive contamination was required. Pathways for the migration of any contamination out of the facility were sealed. The remaining equipment in the facility was abandoned in place without any further decontamination. All utilities were isolated placing the facility into a cold, dark and secure condition with only an annual building entry required. The deactivation of the VTF was an AOP milestone scheduled for August 31, 2001. It was completed ahead of schedule and under budget.

321-M Fuel Fabrication Facility

The deactivation of 321-M is a multi-year project that was originally begun in FY-99, was interrupted by the Large Scale Demonstration and Deployment Project (LSDDP) in FY-00, and resumed in FY-01. The main thrust of the deactivation project is to remove the high enrichment uranium (HEU) from the facility in order to eliminate the small radiological hazard, to ensure that inadvertent criticality is impossible, and to disestablish the Material Balance Area. The chosen approach was to remove the process equipment and ductwork in which the HEU was held up, rather than trying to extract the HEU from within them.

With the removal of the remaining process equipment in the fuel process rooms, FDD has completed an FY-01 AOP milestone that required HEU removal from the 321-M Alloy Fuel Fabrication Building and decontamination of the process areas. The exhaust systems for the process equipment were also removed from the building's roof by a large crane following disassembly. These large components will undergo further disassembly and size-reduction to allow for optimum waste minimization and disposal.

R-Basin Deactivation

R Reactor has been inactive for many years; however, the Disassembly Basin still contains a large volume of water that is contaminated with fission products. The most significant isotopes are Cs137, Sr90, and H3. As yet, there has been no detectable level of leakage into the surroundings, but that possibility increases with time because of aging of the basin and the relatively high water table in the area.

An ion exchange process was deployed under a NETL-funded demonstration to remove a large fraction of the cesium and strontium. The water was processed and returned back to the basin. The system was operated long enough to remove ~80% of the Cs and Sr, and to demonstrate that it could reduce the levels to near or below the EPA drinking water standards. This would have been sufficient to allow release to the normal surface streams. However, a decision was made to allow no releases to the surface waters (which are on the Federal Facilities Agreement List), regardless of radioisotope concentrations.

Since the R Disassembly Basin is listed in Appendix G of the FFA, its closure is being managed as a "non-time critical removal" under CERCLA. Nine different closure scenarios were evaluated in a Scoping Summary that was presented to EPA and SCDHEC. The Scoping Summary reduced the number of practical alternatives to three. When concurrence is received from the regulators, FDD will prepare a detailed Engineering Evaluation/Cost Analysis for the three alternatives. The preferred closure alternative called for reduction of the water volume by evaporation, grouting the remaining water in place in the basin, placing all remaining contaminated components in the basin, demolishing the structure and placing the rubble in the basin, and final closure with an engineered impermeable cap.

Funding for this closure scenario is not currently available, so an interim deactivation project has been started to reduce the hazards and the stewardship costs, and to place the facility into a long-term passively safe condition that is consistent with the final closure scenario. The deactivation project scope includes placement of the most contaminated components and equipment into the basin, evaporation of the water, and grouting.

Requirements-Based S&M

FDD has conducted informal RBSM evaluations in M Area, and in C, P, and R Reactor Areas. These evaluations indicated that an annual saving of over 50% could be achieved by eliminating or reducing the frequency of S&M activities that exceeded source document requirements.

FDD also participated in a formal RBSM evaluation of F-Canyon / FB Line radiological routines. This evaluation was performed by the contractor who developed the process for the National Facility Deactivation Initiative (NFDI). This process has resulted in an agreement to reduce the number and/or frequency of F Canyon / FB Line radiological routines and reduce labor requirements by over six thousand man-hours.

This year it is intended to implement the Category 1 and 2 recommendations arising from the RMSM review in C Area. Additional RBSM reviews are planned for other high-cost facilities that have been transferred to FDD.

Assets For Services

FDD has devised a method, recognized and approved by DOE SR, to reduce the cost of decommissioning at SRS using an Assets-for-Services (AFS) sub-contracting approach. This approach transfers ownership of all property in a facility to be decommissioned to the subcontractor to offset the cost of decommissioning services. Ideally, the resultant subcontract cost is $0. If the value of the property does not have sufficient value to result in a zero dollar contract, additional surplus property is applied to the contract to further reduce the cost.

Through the end of FY-01, FDD has successfully used the Assets-for-Services concept to reduce the footprint of legacy facilities by over 70,000 ft^2. This was accomplished for a cost of less than $1.1M, a cost saving of approximately $10 million, when compared to the estimated cost of $11.1 million to perform the work using site resources.

Process Improvement Initiatives

One of WSRC's five imperatives at the Savannah River Site is that of continulous improvement. FDD has a good track record in management of the facilities disposition program, and has provided excellent service to the other site organizations. To be able to do more with the resources we have, there are some planned improvements in our processes in the coming year. These include the deployment of some new technologies at the Decontamination Facility and in the remainder of the work activities, some organizational changes intended to allow resources to be used more effectively, and a variety of other improvements in other areas.

To maximize the productivity of the Decontamination Facility workforce, it is important to use our personnel across the site on projects with varying radiological and chemical hazards to increase our D&D expertise. By offering technologies and expertise not typically found elsewhere on site, we can lower funding expended on subcontractors while increasing the budget for FDD. Typically, the FDD decon staff is utilized for site mission imperatives and they continually contribute to the success of various AOP/PBI initiatives. To continue increasing our expertise and funding for FDD, the following will be pursued:

- Submit ASTD proposals for funding new decon and D&D technologies
- Increase FDD funding by submitting "Set Aside Fee" proposals to the Waste Minimization Committee for FDD Waste Reduction initiatives
- Increase FDD funding by completing projects from "Set Aside Fee" proposals submitted by other divisions for their Waste Reduction initiatives
- Review site AOP and PBI missions and milestones to determine where FDD resources could maximize fee for the site Partners
- Work with SW to review the site's legacy materials for volume reduction candidates for ROSRs

ROSRS

What Is ROSRS?

The Savannah River Site has identified the need for size reduction capabilities to dispose of a large and growing quantity of large contaminated equipment, provide improved second sort capabilities and to size-reduce newly generated waste. A Remote Operations Size Reduction System (ROSRS) was designed and constructed at a cost of approximately $9.5 million for use at the Rocky Flats Environmental Test Site Closure Project to size- reduce a variety of plutonium-contaminated gloveboxes.

The system has remotely-operated size reduction and material handling capabilities in a fully contained and ventilated environment. The system has these design features:

- Remotely operated systems for cutting and packaging of waste
- Remotely operated systems for decontamination
- Hard-sided containment module for size reduction equipment with HEPA filtration
- Ventilation for contamination control
- Remotely deployed fire suppression capability
- Remote operations with power manipulator assistance and/or computer robotics

In addition, ROSRS has been designed with the following in mind:

- Facilitate use of flame cutting technologies
- Maximize use of non-combustible construction
- Provide for rapid decontamination for spills and particle contamination
- Facilitate eventual re-use or D&D of facility

The system has passed acceptance testing performed at the vendor's facility in Shoreview, MN, the equipment has been fully paid for, and title has been transferred to the DOE. Since the Rocky Fllats operating contractor, Kaiser-Hill, does not intend to deploy the unit, DOE-RF, DOE-EM-50, and SRS have mutually agreed to complete the demonstration and deployment of the system at the Savannah River Site's Decontamination Facility.

What Will We Use It For?

SRS has identified the need for size reduction capabilities to:

- *Dispose of large contaminated equipment backlog*

  The SRS Solid Waste Committee has compiled a list of approximately 750,000 ft^3 of large contaminated equipment at various locations on site that requires disposition. A review of the Solid Waste Committee's listing against the ROSRS capabilities has identified approximately 120,000 ft^3 of equipment as direct candidates for size reduction by ROSRS. Reduction of the 120,000 ft^3 in ROSRS would reduce the resulting disposal volume by approximately 70,000 ft^3, and reduce the cost to dispose of this material by approximately $30 million.

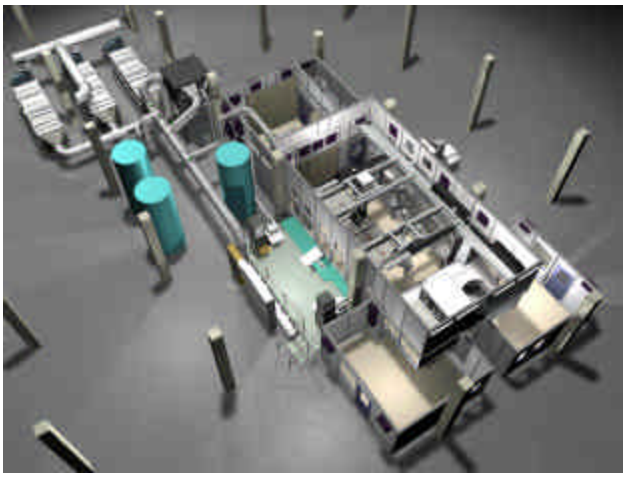
- *Size-reduce newly generated waste*

  SRS is scheduled to embark on significant Deactivation and Decommissioning activities starting in the 2010 time frame at the conclusion of Canyon Operations. These operations will generate significant quantities of contaminated equipment that will require size reduction for cost effective disposal. Installation of ROSRS at this time will afford the SRS with the opportunity to gain valuable experience on the system and be properly prepared to cost effectively address disposal of significant quantities of contaminated equipment to be generated from Deactivation and Decommissioning activities starting in the 2010 time frame.

What Happens in FY-02?

FDD has initiated a $2 million project to install ROSRS into the Decontamination Facility. There is an AOP milestone to complete the installation by September 30, 2002. ROSRS will be tailored to the needs of the site by the following modifications:

- Change configuration to accept B-12/B-25 waste boxes instead of TRU waste containers
- Change the layout of the HEPA system to be consistent with the decontamination facility layout



Several modifications to the SRS decontamination facility will be required to support the installation of ROSRS. These modifications include upgrading support utilities, some minor equipment removal, and improving access into the facility. Additional modifications may be made to ROSRS to improve its capability if funding becomes available.

Technology Deployments

Other new or innovative technologies have been deployed and evaluated over the past year. They are in various stages of approval for general use throghout FDD or the site. They include:

Keibler-Thompson Machine

The Decontamination Facility has obtained a remotely controlled tracked vehicle manufactured by the Keibler Thompson company. This machine can be fitted with a variety of end-effectors, including hydraulic shears. This will allow the large components to be segmented while the operator remains in a safe location.

This shear has been used to size-reduce some contaminated large equipment. It can also be taken anywhere on site. The equipment will be used to size reduce the FTF Pump Pit Jumper Box and reduce the mixed-waste component. Following completion of this task, the unit will be redeployed for various size-reducing tasks at the Decon Facility.

Vortex Amplifier

A recurring problem with radiological containment huts is dealing with upset conditions that destroy the negative pressure environment the hut is designed to maintain. This is conventionally dealt with by means of blowers and mechanical dampers that are controlled by the signal from a pressure sensor. Because of the lag time in response for this system, the negative pressure differential can be lost, and in extreme cases the hut can be damaged.

To overcome this problem in the United Kingdom, AEA Technology developed a non-mechanical, passive ventilation valve that responds instantaneously to the dynamics of a system. This device, known as a Vortex Amplifier, has no moving parts and is maintenance free. It is able to react instantaneously to pressure variations in a system, and is therefore inherently more reliable and more efficient than a “conventional” pressure equalizing unit.

A field trial of this device was held in a hut specially constructed for that purpose at the 105-C Decontamination Facility. The vendor is writing a technical report based on the data collected in the trial. This report will be used as a basis for a decision, working with Health Protection Technology, whether to use the vortex amplifier at SRS.

PAPRs

Powered Air Purifying Respirators are being piloted by FDD engineering to facilitate Inactive Facility Walkdowns where questionable molds could cause respiratory discomfort for the team members. Further deployments are being considered for FDD deactivation work since the PAPRs have a higher protection factor than conventional respirators and reduce perspiration buildup in the mask.

Sponge Jet Blaster

Sponge-Jet, Inc. manufactures, markets and services the Sponge Blasting System, an innovative commercial and industrial surface preparation technology. This dry, low dust decontamination process requires minimal containment, reduces downtime and offers a wide range of surface profiling. Reusable, abrasive or non-abrasive Sponge Media can be used on the toughest to the most sensitive surfaces. The Sponge-Jet system offers fast, dry, clean safe and flexible industrial surface decontamination at a cost often lower than traditional blasting technologies.

Sponge Media is an open celled, polyurethane particle, impregnated with abrasives, As a result, it has several cost and time saving benefits. The pliant nature of Sponge-Jet Sponge Media allows its particles to flatten on impact, exposing the abrasive. After leaving the surface, the media constricts, pulling and entrapping most of what would have become airborne contaminants under most traditional blasting technologies.

Site demonstrations of this technology have included clean demonstrations on a DWPF waste canister and contaminated decontamination demonstrations with FDD on a riser plug and a lead brick. Outstanding issues associated with these demonstrations include noise conservation, media recovery and reclassification.

Organizational Changes

One recent initiative to improve the disposition process within the Excess Facility Management Department is the reorganization that resulted in the organizational structure shown in the first chapter of this document. That reorganization had several objectives that are explained below.

Consolidation of Personnel

Assignment of personnel has been unnecessarily difficult in the past because some of the department personnel were located in C Area and some in M Area. The physical separation made work coordination difficult and communications inefficient. Separate schedules and planning meetings were held in both areas, which made it difficult to reallocate resources from one area when the other came up short.

The physical separation was a legacy from the previous organizations that were combined in FY-96 when FDD was formed. But with FDD managing facilities in most areas site-wide, there is no good reason to preserve that physical separation. Accordingly, early in FY-02, all of the Excess Facility Management Department will be relocated to one central site, C Area. It is likely that the rest of FDD will also relocate to C Area at a later date as office space becomes available.

Span of Control

The previous organization of the Excess Facility Management Department had too few first-line managers. The FLMs were spread too thin to effectively supervise their staff (one FLM had 22 direct reports). The new organization features a labor pool with five FLMs (one is a developmental position for a person yet to be named). This reduces the span of control and allows FLMs to more effectively manage the work assigned to them.

Also, handling of waste in the division became a problem because the waste management function was too centralized. The division effectively had only one GCO despite the fact that we were handling and storing multiple waste streams in multiple areas on multiple projects. The new organization will feature GCOs in virtually every group that may generate waste, with a small group doing overall coordination. This will also improve span of control because the work groups will now be directly responsible for proper handling of the waste they generate.

Integrated Schedule

The previous FDD organization had the scheduling specialists as a part of the Program Planning and Administration Department. They prepared individual schedules for a number of different work centers. These schedules were generally prepared independently of each other, and consequently could not be resource-loaded. The new organization has the schedulers in the Excess Facility Management Department, reporting directly to the Level 2 manager. This centralization will facilitate the preparation of a single, integrated, and resource-loaded schedule.

Team-Based Task Management

The previous organization was not set up well for executing a number of simultaneous small projects and efforts. These projects had each been assigned a Task Leader, and that person was responsible for all planning, estimating, scheduling, obtaining labor and material resources, managing the project, and reporting the results. The resources needed from each project were assigned from a central resource pool on an ad-hoc basis. This resulted in excessive turnover of personnel, and at times unnecessary competition for resources.

The new organization, using the integrated schedule, will allocate all these resources to a team of individuals who will work the project from beginning to end. Each project team will be led by two persons; a Task Lead from the Excess Facility Management Department and a Task Leader from Engineering. They will cooperate through all phases of the operation, with the Task Lead obtaining and directing the field labor forces, and with the engineer taking care of engineering support, scheduling, estimating and reporting.

Increase Reliability of the FDD Waste Program

The waste program had been separated out from other operations over the past year to ensure that waste issues were dealt with in a timely manner. In so doing, waste operators were not exposed to the customary "conduct of operations" rigors of normal operations assignments. To ensure that waste and conduct of operations issues are addressed adequately, the program has been reorganized again. A separate waste program will continue to exist that will consist of a Waste Lead and at least one programmatic GCO. Actual field waste activities will be conducted by operators that are cross-trained for waste, decon, and D&D activities. The program will be supplemented by "field" GCOs that will provide expertise in planning and overseeing waste activities while conducted in strict adherence to the Conduct of Operations 2S manual requirements. All field waste activities will be coordinated through the Waste Program Lead and programmatic GCO to ensure adherence to the 1S waste manual criteria and through the operations' supervisors to ensure Conduct of Operations requirements are met. This combination will allow waste and conduct of operations requirements to be and will allow our small organization to remain flexible in moving manpower to various project tasks.

Correction of Weaknesses Identified by FEB

From the 2001 FEB report, our overall conduct of operations needed improvement. An initiative to improve our ConOps performance has been outlined and implementation has begun and will continue throughout the year. Self-assessments, FEB assists, and the 2002 FEB review will grade our performance in this area. The changes that are intended include:

- The Facility Evaluation Board noted that while some of the requirements of WSRC Manual 1Y Procedure 8.20 process had been put in place, the work control process had not been fully implemented. Completing this work control process by using an eight week rolling schedule, resource loading of schedules, change control, work window critiques and mechanic feedback will help FDD Maintenance to utilize the manpower available to perform work more efficient and cost effectively.
- For some of our decon activities, Job Plan templates have been set up to increase our efficiency and reliability of planning for these tasks. This year, we plan on extending our use of templates to other tasks and repeating projects in both waste and D&D activities.
- Advanced Radworkers were originally used by FDD programs but has been abandoned in recent years. This year, we will review our activities to determine where Advanced Radworkers will enhance our productivity and re-implement the program.

Reduction in Facility Mortgage and Hazards

Over the next 5 years, FDD will acquire more facilities, but per the current contract, will need to maintain a "flat" budget for surveillance and maintenance activities. At the same time, FDD will need to ensure that hazards are lowered or maintained at a minimum level to ensure protection of the worker and environment. To meet this commitment, the following items will be pursued:

- Implement S&M Plans for all inactive FDD facilities
- Tailor all inactive facility Entry Plans from a template approved by all safety and health organizations (i.e. RadCon, Industrial Hygiene, Fire Safety, OSHA Safety, etc)
- Implement Team-Based S&M concept for facilities – increases engineering review of field conditions and frees up operators to perform decon and D&D activities
- Where possible, reduce entry into inactive facilities to once or twice per year
- Research and implement real-time surveying technologies to reduce RCO surveying time per facility

Program Planning Improvements

For the past two years, Program Management and Support Services (PMSS) has developed and implemented a very structured planning process. The process includes a new work breakdown structure, which captures all facilities on site, and ensures that all future disposition liabilities are planned. In addition, a cost-estimating model has been implemented to estimate all future disposition liabilities in a consistent manner. This approach has been validated twice via two Inspector General's Environmental Management Liability audits with no findings. The cost-estimating model has been applied to scope beyond FY2006. For scope prior to FY2006 to support the current contract period, a more detailed task analysis cost estimating approach has been implemented in conjunction with a more rigorous scheduling effort.

Program Control

With the recent change in outyear site funding assumptions from a flat funding case to a reduced funding case, more emphasis is needed on identifying, implementing and monitoring productivity improvements and cost savings. Planned improvements include increasing program control activities in four areas; surveillance and maintenance, disposition tasks, work-for-others, and division overhead. Program planners have been assigned to each of these areas with increased responsibilities of monitoring the execution of plans and ensuring that the work is being accomplished in the most cost-effective manner.

Change Control

Historically, productivity improvements and cost savings have been identified and implemented with no clear document trail confirming success. The PMSS planners have the responsibilities for implementation of a more rigorous change control process to ensure that resources, cost or manpower, resulting from these improvement initiatives are defined, documented and reallocated appropriately.

Assets-for-Services

The Assets-for-Services (AFS) program has been one of the site's most highly recognized programs for cost effectiveness. The AFS program is currently re-engineering itself due to limited availability of high market value facilities for decommissioning and competition for use of assets with community outreach programs. One initiative is to decouple the marketing of assets from the AFS contracts and investigate the use of a broker that specializes in the sale of assets. This initiative will result in an increase in revenues from the sale of the assets. These revenues are managed in an account, under the control of the Facilities and Assets Disposition Management Committee, used for the sole purpose of funding projects that accelerate the disposition of assets. A second initiative is to front-end load the process by developing complete packages of assets that can be easily be added to a AFS specification as needed to create the most attractive AFS project.

ShRINE Web Site

It was intended to expand the ShRINE web pages that currently exist for the Decontamination Facility to include all of the areas that FDD is involved in. To that end, a copy of Microsoft Front Page was obtained, and a SCUREF student was assigned to develop the web pages. However, because of the short-term nature of the SCUREF assignment and the other responsibilities that the person had, no work was done on this initiative. It is still intended to develop a web site for FDD, and that activity has been carried over into the current year.

Decommissioning Procedures for 1C Manual

During FY-01 the prospects for any decommissioning work being included in the FDD scope remained very unlikely. Consequently, work on the decommissioning procedures that are intended for section 5 of the WSRC 1C Facility Disposition Manual has been deferred to allow for higher priority work.

The 1C manual has been effective and in use for two years as of the end of FY-01. A biennial review of all the procedures was performed. Each was revised to incorporate organizational changes, lessons learned from two years of use of the procedure, suggested improvements, and the findings of a Facility Evaluation Board. These changes were approved by the site Facilities and Assets Disposition management Committee and were signed by the WSRC President at the end of FY-01.

End Points Checklist Method

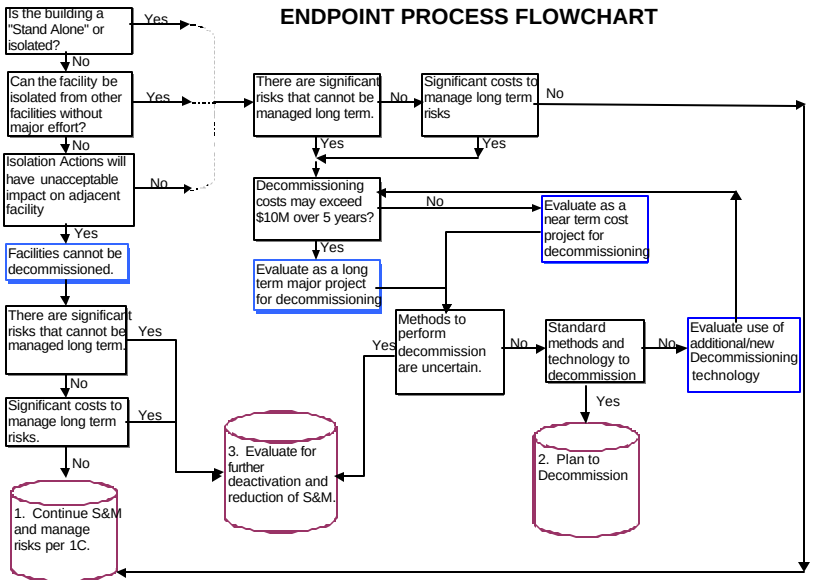
The DOE “Facility Deactivation Guide – Methods and Practices Handbook”, DOE/EM-0318, describes two ways of determining end points for disposition projects; the “hierarchical” method, and the “checklist” method. Application of the graded approach to disposition by FDD has led to the conclusion that the majority of disposition projects should use the less complex checklist method.

To ensure that all disposition projects that use the checklist method for determining project endpoints do so in a consistent manner, FDD Engineering issued a desktop instruction for determining end points with the checklist method. Refer to WSRC-TR-2001-00208, “Determining End Points For Disposition Projects Using The Checklist Method”.

Formalize End State Planning Process

Most of the advance planning in the disposition program centers around deactivation, surveillance, and maintenance. These activities reduce the residual hazards and keep the remaining ones under control. For some facilities, however, the hazards are numerous and perhaps deterioration increases the cost every year. Rather than continuing in the safe storage mode, such facilities should be decommissioned. FDD Engineering has devised a way of screening the highest hazard facilities and coming to a formal decision about whether each should continue in safe storage or be decommissioned.

The logic diagram on the right is the result of a concerted expert effort to formalize a method of deciding on deactivation, decommissioning, or continued safe storage. The decision logic requires both a knowledge of the remaining hazards in the facility and cost estimates. A series of decision factors (such as; risk to public and workers, cost of taking action, regulatory compliance considerations, etc.) were devised, and a simple scoring system (0, 1, or 2 points) was assigned to each factor. This allowed facilities of different size, age, and condition to be compared on the same basis.

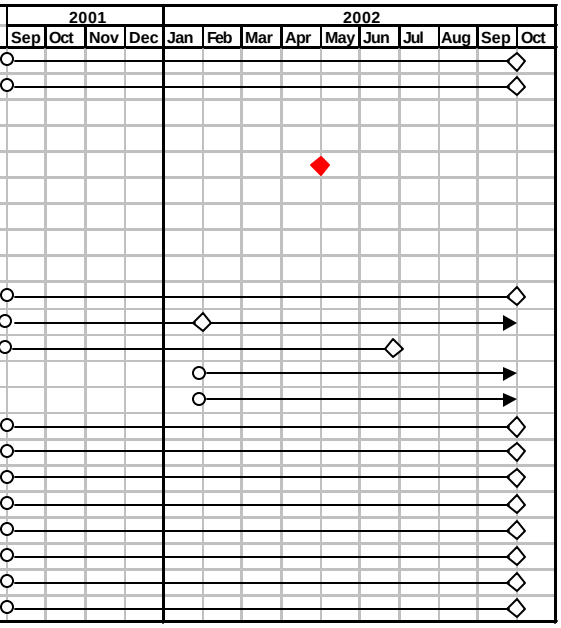


The top twenty (in terms of risk) facilities on site were subjected to the process shown in the diagram, and each ended up in one of the end state "bins" (deactivation, decommissioning, or continued safe storage). The relative score from the decision factor matrix was then used to determine priority order for planning within each bin. The results of the evaluation are shown in the table below.

Bin 1: Continue S&M and Manage Risks per 1C Manual	Bin 2: Decommission	Bin 3: Evaluate for further deactivation and S&M reduction
190-C	242-3F CTS Pit	105-C Reactor Bldg.
190-P	242-F Evaporator	105-R Reactor Bldg.
190-L	321-M Fuel Fabrication	105-P Reactor Bldg.
BGI(230-H)	284-F Powerhouse	Old HB line (221-H)
PEF (235-F)	247-F Naval Fuels	SED (773-A)
242-H Evaporator	285-3H Cooling Tower	PuFF (235-F)
242-3H		
717-C		

The chart below shows the major milestone activities planned for FY-02 for the division.

ID	MILESTONE	TASK NAME	FINISH
1	AOP-SC-FA00-011	ROSRS Installation	9/30/02
2	PBI-FDD-1	Inactive Facility Risk Reduction	9/30/02
		C Settler Tank Cleanout	
		P Settler Tank Cleanout	
	Consent Order	BGI Underground Tank	4/20/02
		Zinc Bromide in Tanker	
		285-3H Cooling Tower	
		247-F Assorted Hazards	
		TNX Boat Dock	
3		321-M Fuel Fab Facility Deactivation	9/30/02
4		R Disassembly Basin Evaporation	9/30/02
5		TNX Phase III Transition	6/27/02
6		777-10A Source Removal	
7		C Disassembly Basin Characterization	
8		S&M Naval Fuels	9/30/02
9		S&M C Area	9/30/02
10		S&M P Area	9/30/02
11		S&M R Area	9/30/02
12		S&M 777-10A	9/30/02
13		S&M M Area	9/30/02
14		S&M D Area	9/30/02
15		S&M TNX	9/30/02



The long-range plan for the use of FDD resources is laid out in the table below, for the next five years.

Area	Activity Description	FY02	FY03	FY04	FY05	FY06	FY07
F	247-F Surveillance & Maintenance						
M	Remove Contaminated Equipment from 320-M						
M	Complete Deactivation of 321-M						
M	Remove External Contaminated Ductwork from 322-M						
M	Perform Deactivation of 340-M						
M	Deactivate the Balance of M-Area						
M	M-Area Surveillance and Maintenance						
M	777-10A Surveillance & Maintenance						
D	D-Area Surveillance and maintenance						
C	C-Basin Characterization						
C	Deactivation Planning - C						
C	C Area Settler/Sandfilter Hazard Mitigation						
C	C-Area S&M						
C	Decon Center Operations & Maintenance						
P	P-Area S&M						
P	Deactivation Planning - P						
P	P Area Settler/Sand Filter Hazard Mitigation						
P	Deactivation - P						
R	Deactivation - R						
R	Deactivation Planning - R						
R	R-Area S&M						
T	TNX Surveillance and maintenance						
ALL	Inactive Facility Assessments						
ALL	Mitigating Actions						
GEN	Inactive Facilities Database Maintenance						
GEN	S&M Program Improvements						
GEN	MOUs for Inactive Facilities						
WFO	232-H Facility Deactivation Planning						
WFO	SFGS - K Area Decon Support						
WFO	SFGS - L Area Decon Support						
WFO	SFGS - RBOF Decon Support						
WFO	SRTC - Decon Support to LSD						
WFO	Decon Facility Support for SRTC						
WFO	LLW Operations Support						

Appendix B. List of FDD Facilities

These tables are a listing of the facilities and structures that are FDD responsibility as of October 1, 2001. The colored bars show the name of the facility, and the structure(s) associated with that facility are listed below. Please refer to the definition of "facility" in the glossary in Appendix D.

Area	FacilityName	
A	BldgNumbe	BldgName
	PDP/SPRX Test Physics Laboratory	
	777010A	Site Utilities Office Facility
C		
	C Reactor Facility	
	105000C	Reactor Building
	105001C	No. 3 and 6 Basin Deionizers (POR) Pad Fac
	105005C	Basin Filter (Portable)
	105006C	Change Building
	105007C	Change Building
	106000C	Process Water Storage Tank
	107000C	Cooling Water Effluent Sump
	108001C	Engine House
	108002C	Engine House
	108004C	Emergency Diesel Gener and Fuel Oil Storage
	191000C	Standby Pump House
	608000C	Change Building
	614002C	Effluent Monitoring Building
	701002C	Gatehouse Entrance at Bldg 105
	717000C	Contaminated Maintenance Facility
	Decontamination Facility	
	105000C	Reactor Building
	728000N	Cask Repair Facility
D		
	D Area Electrical	
	452001D	Secondary Transformer Station W of 717-D
	452004D	Secondary Transformer Station E of 420-D
	452008D	Substation Transformer Station 421-2D
	452014D	Oil Filled Transformer for 772-D
	501000D	Emergency Diesel
	D Area Miscellaneous	
	403000D	Soil Bio-Remediation Facility
	411000D	Alt Control Room
	412004D	Mask Maintenance Bldg
	421005D	Loading Dock
	715000D	Gasoline Station
	D Area Process Effluent Monitoring	
	420003D	Tritium Effluent Water Monitor Building
	D Area Storage and Administrative	
	412000D	Control Room
	421006D	Heavy Water Equipment Storage
	480002D	Maintenance Material Storage
	701001D	Maintenance Support Administration Building
	711000D	T and T Office and Storage Building
	711001D	Storage Building
	717000D	Shops, Stores and Change House
	717001D	Storage Building
	772000D	Control Laboratory and Supervisor's Office

Area	FacilityName	
D	BldgNumbe	BldgName
	Moderator Processing and Storage	
	420000D	Concentrator Building
	420002D	Rework Handling Facility
	421000D	Finishing Building
	421002D	Moderator Handling and Storage
	421004D	Drum Storage
F		
	Miscellaneous F-Area Facilities	
	254002F	DIESEL GENERATOR FACILITY, 246-F
	Naval Fuels Facility	
	247000F	Manufacturing Building
	247005F	Shed
	247007F	EC Process Building
	247010F	Deluge Valve House
	247041F	Warehouse
	247042F	Warehouse
G		
	General Site (G Area)	
	662000G	River Loading Dock
H		
	285-3H Cooling Tower	
	285003H	Cooling Tower #2
M		
	313-M Slug Fabrication Facility	
	313000M	Canning Building
	330000M	Slug Warehouse
	331000M	Core Storage Warehouse
	320-M Alloy Fabrication Facility	
	320000M	Alloy Building
	320-M Laboratory Facility	
	320000M	Alloy Building
	321-M Fuel Fabrication Facility	
	321000M	Manufacturing Building
	324000M	Vertical Press Building (Abandoned)
	701004M	Harden entry control facility to 321-M
	322-M Metallurgical Laboratory	
	322000M	Metallurgical Laboratory
	340000M	Lab Waste Treatment Facility
	Chemical Transfer Facility	
	313000M	Canning Building
	Dilute Effluent Treatment Facility	
	341000M	Dilute Effluent Treatment Facility
	Interim Treatment and Storage Facility	
	341001M	Tank Farm Containment Cover
	341002M	Truck Operator Shelter
	341003M	Motor Control Center
	341004M	Motor Control Center
	341005M	Storage Building

Area	FacilityName	
M	BldgNumbe	BldgName
	Lithium Storage Facility	
	710000M	Storage Building
	M Area Administrative Facility	
	315000M	Essential Materials Warehouse
	701001M	Main Gatehouse
	704000M	Area Administraton Building
	730000M	Engineering and Training Building
	M Area Storage Pads	
	316001M	Chemical Storage Pad
	Vendor Treatment Facility	
	341008M	Vendor Treatment Facility
N		
	Ford Building	
	690000N	Process Heat Exchanger Repair Fac
P		
	P Area Miscellaneous	
	717009P	Pipe Fab Shop
	P Reactor Facility	
	105000P	Reactor Building
	105001P	No 2&5 Basin Deionizers (POR) Pad Fac
	105013P	Heavy Water Storage Facility
	106000P	Process Water Storage Tank
	107000P	Cooling Water Effluent Sump
	107001P	Cooling Water Effluent Sump
	107003P	Diversion Box
	108001P	Engine House
	108002P	Engine House
	110000P	Helium Storage Tank
	152007P	Generator Room
	191000P	Standby Pump House
	608000P	Change Facility
	614002P	Effluent Monitoring Building
	701001P	Area Gatehouse and Patrol HQ
	701002P	Gatehouse Entrance at Bldg 105
	704000P	Area Adm. And Services Building
	711000P	Storage Building
	711001P	Storage Building

Area	FacilityName	
R	BldgNumbe	BldgName
	R Reactor Facility	
	105000R	Reactor Building
	106000R	Process Water Storage Tank (In Standby)
	107000R	Cooling Water Effluent Sump (In Standby)
	108001R	Engine House (Standby)
	108002R	Engine House (Standby)
	122000R	Process Storage Building
	186000R	Cooling Water Reservoir (Standby)
	190000R	Cooling Water Pump Huse (Standby)
T		
	Chemical Semi-Works	
	678000T	677-T/678-T Diesel Generator
	DWPF Semi-Works	
	672000T	Emergency Diesel Generator
	672001T	Cooling Tower
	672001T	Cooling Tower Chemical Addition
	Glass Melter	
	675000T	Breathing Air Compressor
	675000T	Cooling Tower
	675000T	Slurry Receipt Tank
	TNX Facility	
	607046T	Organic Removal Facility
	652022T	Electrical Substation
	652025T	Electrical Substation
	671000T	Service Tankage Facilities, TNX
	673000T	Containerization Equipment Dev Fac TNX
	678000T	Chemical Semiworks Bldg (TNX)
	679007T	Treatment Facility
	679007T	Water Services Building
	682000T	Manufacturing Building (PHEF)
	684000T	Solvent Storage Building
	692000T	ECR/ICR Building
	694002T	Carpenter Shop
	711000T	Mechanical Services Bldg (TNX)
U		
	Heavy Water Components Test Reactor	
	770000U	Test Reactor Bldg (Excess)

Appendix C. Buildings That Have Been Decommissioned

The following table lists buildings that were demolished over the last sevenyears. This was performed either as a straight demolition (for uncontaminated facilities), as a decommissioning project, or in conjunction with other projects.

BLDG	BUILDING NAME	FATE
782001 A	150,000 GAL DOMESTIC WATER TANK	Demolished 9/97 in conjunction with SUD domestic water upgrade.
779010 A	Lunch Room – Change Room	Demolished FY00.
704000 B	ENVIRONMENTAL PLAN BLDG	No longer exists. Demolished FY97 (HWCTR project).
704001 B	Storage Building	No longer exists. Demolished FY97 (HWCTR project).
704002 B	Environmental Transport Equipment Storage	No longer exists. Demolished FY97 (HWCTR project).
704003 B	TC-1,A,B,C,F, ROTUNDA	No longer exists. Demolished FY97 (HWCTR project).
704004 B	Modular Office	No longer exists. Removed FY98 (HWCTR project).
711000 B	SUPPLEMENTAL STORES STORAGE (E-WING)	No longer exists. Demolished FY97 (HWCTR project).
787001 B	Water Tower for HWCTR	No longer exists. Demolished FY97 (HWCTR project).
110000 C	Helium Storage Tank Bldg.	No longer exists. Demolished FY94. ($3M Initiative)
183002 C	Filter and Softener Plant	Demolished FY98
183003 C	Diesel Generator and MCC	Demolished FY98
183004 C	Clarification Plant	Demolished FY98
184001 C	POWERHOUSE	Demolished FY98, per D. Freeman email dated 11/30/99.
184002 C	SERVICE BUILDING	Demolished FY98, per D. Freeman email dated 11/30/99.
186001 C	SODIUM HYPOCHLORITE TANK STORAGE	Demolished FY98/99, per D. Freeman email dated 11/30/99
401000 D	Gas Plant	Demolished FY96.
401001 D	Gas Plant Control Building	Demolished FY96.
401002 D	Breathing Air Cylinder Shed	Demolished FY96.
401003 D	East Platform, Working	Demolished FY96.
401004 D	West Platform, Working	Demolished FY96.
402000 D	Tank Farm	Demolished FY96.
412001 D	HW Extraction Facility	Demolished FY96.
412005 D	Shelter and Shop Building	Demolished FY96.
419000 D	Flare Tower	Demolished FY96.
452002 D	Secondary Transformer Sta. S of 401-D	Removed FY99.
452012 D	13.8 KV Air Switch for 452-10D	Removed FY00.
452014 D	Oil-Filled Transformer for 772-D	Removed FY00.
772002 D	Storage Shed	Demolished FY99.
772003 D	Storage Shed	Demolished FY99.
217000 F	STORAGE BUILDING	Demolished 9/97 to make way for APSF.
232000 F	Old Tritium Facility	Decommissioned by B&W NESI – project completed FY97.
247001 F	Emergency Generator	Removed FY00.
247004 F	Cooling Tower	Demolished FY00.
247011 F	Outside Cold Feed Storage- Power/Control	Demolished FY00.
247012 F	Outside Cold Feed Storage	Demolished FY00.
701005 F	GATEHOUSE ENTRANCE TO 217-F	Demolished 9/97 to make way for APSF.
782000 F	Water Storage Tank	Demolished FY00.
782001 F	Pumphouse	Demolished FY00.
717000 G	Contaminated Equipment Workshop	No longer exists. Demolished FY94. ($3M Initiative)
151005 K	Relay House	Demolished FY00.
152008 K	Transformer	Removed FY00.
153001 K	ECR/ICR Building	Demolished FY00.
191001 K	Pump Sump	Dismantled FY00.
192003 K	Fire Pump House	Demolished FY00.
108004 L	Emergency Diesel Gen/Fuel Oil Storage	Dismantled FY00.

Appendix C. Buildings That Have Been Decommissioned

BLDG	BUILDING NAME	FATE
305001 M	Admin. Building	Demolished FY98.
311000 M	Tank Farm	Demolished FY98.
312000 M	Tank Farm	Demolished FY98.
313004 M	Stack	Demolished FY99.
313007 M	Storage Building	Demolished FY99.
313009 M	Slug Fabrication Monitoring Building	Demolished FY99.
319000 M	Air Compressor House	Demolished FY99.
319001 M	Air Compressor House	Demolished FY99.
320007 M	CYLINDER SHED	Demolished FY99, per D. Freeman email dated 11/30/99.
321001 M	Pickling Room Process Exhaust Stack	Removed FY99.
321003 M	Drum Storage Shelter	Demolished FY99.
321004 M	Storage Shed	Demolished FY99.
321005 M	Cylinder Shed	Demolished FY99.
322001 M	Glove Box Shelter House	Demolished FY99.
352001 M	Secondary Transformer Sta S of 777-M	Removed FY98.
352007 M	Secondary Transformer Sta N of 321-M	Removed FY99.
352009 M	Secondary Transformer Sta N of 315-M	Removed FY99.
352011 M	Emergency Generator Building	Demolished FY98.
701005 M	Entrance Control Facility, 320-M	Demolished FY96.
701006 M	Gatehouse Entrance to 321-M	Demolished FY99.
701007 M	Gatehouse Monitoring Building	Demolished FY99.
717001 M	Construction Building	Demolished FY98.
681009 N	PUMP HOUSE	Demolished 9/97 in conjunction with SUD domestic water upgrade.
681010 N	NO. 3 PUMP HOUSE	Demolished 9/97 in conjunction with SUD domestic water upgrade.
681011 N	NO. 14 PUMP HOUSE	Demolished 9/97 in conjunction with SUD domestic water upgrade.
681012 N	STORAGE TANK	Demolished 9/97 in conjunction with SUD domestic water upgrade.
184000 P	POWERHOUSE	Demolished FY98 (AFS contract)
184003 P	COAL CAR SHAKER	Demolished FY98, per D. Freeman email dated 11/30/99.
184005 P	COAL HANDLER OBSERVATION BUILDING	Demolished FY98, per D. Freeman email dated 11/30/99.
185000 P	COOLING TOWER	Demolished FY98, per D. Freeman email dated 11/30/99.
185001 P	CHLORINATOR HOUSE	Demolished FY98, per D. Freeman email dated 11/30/99.
715000 P	GASOLINE STATION	Demolshed 9/97.
110000 R	Helium Storage Tank Bldg.	No longer exists. Demolished FY94. ($3M Initiative)
183001 R	Clarification Plant -Chemical Building	No longer exists. Demolished FY94. ($3M Initiative)
183001 R	Clarification Plant -Chemical building - Silos	No longer exists. Demolished FY94. ($3M Initiative)
183002 R	Filter and Softener Plant	No longer exists. Demolished FY94. ($3M Initiative)
701001 R	Gate House	No longer exists. Demolished FY94. ($3M Initiative)
701002 R	Gate House	No longer exists. Demolished FY94. ($3M Initiative)
701003 R	Gate House	No longer exists. Demolished FY94. ($3M Initiative)
704000 R	Area Admin & Services Bldg	Demolished FY98 (AFS contract)
670000 T	Pilot Plant/Robotics Building	Demolished FY00 (AFS contract)
674001 T	Drum Storage Facility	Demolished FY00 (AFS contract)
674002 T	DWPF Canister Storage Facility	Given to Tri-County Alliance, FY00.
717002 T	Construction Fabrication Shop	Demolished FY00 (AFS contract)
734000 U	Compressed Gases Storage (Excess)	No longer exists. Demolished FY97 (HWCTR project).
735000 U	Health Physics Monitoring Bldg (Excess)	No longer exists. Demolished FY97 (HWCTR project).
752000 U	Substation (Excess)	No longer exists. Demolished FY97 (HWCTR project).
771000 U	Mechanical Equipment Building	No longer exists. Demolished FY94 (HWCTR project).
774000 U	Reactor Control Building (Excess)	No longer exists. Demolished FY97 (HWCTR project).
781000 U	Caustic Tank	No longer exists. Demolished FY98 (HWCTR project).
787000 U	Secondary Cooling System Aux. Building	No longer exists. Demolished FY94 (HWCTR project).
788000 B(U)	HWCTR Deluge Bldg	No longer exists. Demolished FY97 (HWCTR project).
791000 U	Reactor Building Stack (Excess In Place)	No longer exists. Demolished FY97 (HWCTR project).
904001 U	Underground Storage Tank	No longer exists. Demolished FY98 (HWCTR project).

Term	Meaning
Asset	Property owned by DOE or used and controlled by DOE. DOE classifies assets into the following categories: ***Real Property*** - Land, including any improvements or structures on it. This also includes equipment and components that are a permanent part of the structure and that cannot be removed without substantially altering the structure, such as elevators, plumbing, etc. ***Personal Property*** - Property that can be moved or that is not permanently fixed to the real property. Examples are computers, laboratory equipment, tools, etc. ***Related Personal Property*** - A subcategory of personal property that includes items that, when installed, become an integral part of the facility and which, if removed, would substantially reduce the value of the property. Examples are pumps, tanks, and other process equipment, telephone systems, computer network components, etc.
Closure	The term is analogous to disposition (see below), but applied to sites, rather than facilities. Thus it is generally used in situations where soil or groundwater are or could be contaminated. DOE and EPA regulations define two types of closure: ***Operational Closure*** - Those actions that are taken upon completion of operations to prepare the disposal site or disposal unit for custodial care (e.g., addition of cover, grading, drainage, erosion control). ***Final Site Closure*** - Those actions that are taken as part of a formal decommissioning or remedial action plan, the purpose of which is to achieve long-term stability of the disposal site and to eliminate to the extent practical the need for active maintenance so that only surveillance, monitoring, and minor custodial care are required.
Disposition	Those activities that follow completion of program mission, including, but not limited to transition, deactivation, decontamination, decommissioning, and removal of equipment for reuse or sale.
End Point	A detailed specification of changes to be made, by system and by space within the facility. End points are justified against a specific project objective as necessary to achieve the planned End State. End point specifications are also used to verify that each end point has been satisfactorily completed.
End State	The overall status of a facility after deactivation or decommissioning; e.g. Post Deactivation End State or Post Decommissioning End State. The desired end state identifies when the project is complete.
Facility	The buildings , utilities, structures, and other land improvements associated with an operation or service and dedicated to a common function. A facility can be contained inside a single building or portion of a building, or it can encompass several related buildings or other structures. A facility is a grouping of assets (see Asset). During disposition, a facility can have any of the following statuses: ***Inactive*** - A facility or portion of a facility which has ceased or discontinued to operate from its authorized mission. ***Excess*** - A formal Declaration of Excess Form and/or Adjustment of Capital Equipment (ACE) are completed by an Asset Management Specialist and submitted to Asset Management. ***Surplus*** - Government property that has been formally declared excess through Asset Management and has completed all government screenings for reuse within the DOE complex and other federal agencies.
Parent Organization	The organization that had custody and operated a facility until the time it became inactive.