RFS-ERDF- 002.8
Rev. 1

Environmental Excellence
HANFORD

Environmental Restoration Disposal Facility

Waste Disposal Operations

Waste Minimization Plan

Work Performed for
Bechtel Hanford Inc.
Under Subcontract
0600X-SC-G0006

Waste Management
Federal Services, Inc.

Record of Revisions

Revision/PCN No.	Date Entered	Entered By (Handwritten Signature)
Revision 1	9-1-98	L. L Weeks

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1.0 Purpose and Scope

1.1 Purpose - The purpose of this plan is to establish a waste minimization and pollution prevention program to reduce the quantity and toxicity of waste generated as a result of operations of the Environmental Restoration Disposal Facility (ERDF). This plan can also be used to reduce the volume of toxicity of waste received at the ERDF from operable unit remediation. This plan will not establish or evaluate goals for the operable unit sites. It will provide a mechanism for ERDF employees to raise waste reduction ideas that could be implemented at the operable unit sites.

1.2 Scope - This plan is specific to wastes to be generated by ERDF operations, including waste volume increases due to placement operations of wastes received from the Remedial Action Sites. The ERDF waste disposal operations will also generate specific decontamination wastes, leachate wastes, and maintenance wastes which are also covered by this plan.

2.0 Waste Minimization Policy Statements

2.1 Source Reduction - Source reduction is the preferred method to reduce the generation of waste. Sections 3 through 7 include several controls to ensure source reduction occurs.

2.2 Hazardous Material Use - Generally, the use of hazardous materials will not be allowed at the ERDF. The ERDF Waste Acceptance Manager is responsible for implementing this philosophy through the following activities.

2.2.1 Material Substitution - Hazardous materials used at the ERDF to perform operations and maintenance activities will be reviewed prior to use using "Hazardous Materials Use Justification Form," (Appendix 1). To use a hazardous material at the site will require the project manager's approval. Nonhazardous alternatives will be used when possible.

2.2.2 Hazardous Material Tracking - If hazardous material is brought on the ERDF Site, it will be identified as hazardous material, its intended use will be clearly defined on the container, it will be assigned a unique identifier and will be entered into the hazardous material Control and Tracking Logbook. See Appendix 2.

2.2.3 Storage Management/Disposal Requirements - The hazardous materials storage, management and disposal requirements will also be determined prior to using the material.

2.3 Operating Plans and Procedures - Operations plans and procedures will be developed such that waste minimization is an integrated part of the development process.

2.4 Awareness - Employees will be kept aware of the importance of waste minimization during annual training sessions, memos, posters placed on bulletin boards, and morning tool box meeting.

2.5 Awards and Recognition - A recognition program for waste minimization will be established. All exempt and non-exempt employees (not participating in the Management Incentive Plan, or any other incentive plan) are eligible to participate in the Pay for Performance (PFP) Plan, which rewards participants with a monetary award payout based on Waste Management Federal Services, Inc (WMFS) reporting unit's achievement on budget goals. The waste minimization activities performed at ERDF affect the financial performance of WMFS. Participants therefore, have a strong incentive opportunity to submit ideas for waste minimization at ERDF.

2.6 Goals - The goals will be approved by the project manager and be displayed on a bulleting board. The intent of establishing goals is to provide numberic values to evaluate the success of the ERDF Waste Minimization Program. Goals are also established to implement processes or process changes in the field that effect the quantity and toxicity of waste generated. Preliminary goals will be established during the first quarter of ERDF operatios.

2.7 Reporting - A quarterly waste minimization report will be issued to establish goals, report performance against current goals, and provide technical information on specific waste minimization activities. A copy of the quarterly Waste Minimization Report will be submitted to the ERDF waste minimization coordinator for inclusion in the Hanford Site Report.

2.8 Affirmative Procurement - An affirmative procurement program will be established (40CFR247.6) to ensure recycled products are purchased when possible. The program will obtain certificates of recycled material content and provide an annual review of program effectiveness.

3.0 Office Waste Minimization

3.1 Aluminum - Containers are provided in the lunchrooms for collection of aluminum soft drink cans which are recycled.

3.2 Paper - Containers are provided in office areas for paper recycling. These papers are collected and bulked. The used paper will be recycled by an area recycler.

3.3 Other - Containers are provided for the collection of glass, cardboard, plastics, and other metals for recycling.

3.4 Double-Sided Copying - When possible, copies will be double-sided to eliminate excessive paper utilization.

4.0 Facility Maintenance

4.1 Maintenance Materials - The Operations Manager is responsible for ensuring that the generation of waste oil products, solvents and batteries from operations equipment is minimized wherever possible and that these materials are recycled where possible. Generally materials found to be contaminated will be disposed of in the ERDF. Wastes disposed of at the ERDF will meet the established waste acceptance requirements for ERDF. It is anticipated that maintenance waste generated at the ERDF will meet the waste acceptance requirements. Waste materials that are not placed in the ERDF will be disposed of in an appropriate radiological onsite or offsite disposal facility.

4.1.1 Used Oil - Used oil will be released and transported to an area recycler.

4.1.2 Used Lead Acid Batteries - Used lead acid batteries will be release surveyed, and recycled.

4.1.3 Used Antifreeze - Used antifreeze will be recycled onsite or sent to an area recycler.

4.1.4 Parts Cleaning Solutions - Parts cleaning solutions will be a nonhazardous substance such as Aquatene 571.

4.1.5 Tires - Used tires will be release surveyed and sent to an area recycler.

4.1.6 Filters - Used filters will be drained of fluids prior to disposal.

4.2 Maintenance Performance - The Operations Manager is responsible for administering the Preventive Maintenance Program in such a way as to ensure waste reduction through continual inspection and replacement of seals, gaskets, etc., in order to minimize leaks. General maintenance should be performed in areas where soil will not be contaminated in the event of a spill. This can be accomplished by performing maintenance on "hard surfaces" or with the use of plastic sheeting

5.0 Decontamination Wastes

5.1 Decontamination - Generally, decontamination will be accomplished using dry methods (wipes, brooms, etc.) At the unloading location. This action will minimize the use of water at the decontamination pad and reduce the quantity of decontamination rinsate generated.

5.2 In-Cell Servicing - Controlled in-cell equipment will be serviced in the cell to eliminate the need for decontamination prior to the performance of maintenance.

5.3 Rinsate Use - Decontamination rinsate from the activity at the decontamination pad may be stored and recycled. The recycled rinsate may be used for dust control during

the placement and spreading activity. The actual management of rinsate is covered in the Leachate Management Plan.

6.0 Leachate Management

6.1 Water Addition - The addition of water to facilitate waste compaction will be minimized. Water will only be added during the placement and spreading operation to minimize dust generation. This action will minimize the generation of leachate from water used to facilitate adequate compaction.

6.2 Road Maintenance - Roads and ditches will be graded to prevent "clean precipitation" from draining into the waste cells from the surrounding areas.

6.3 Cell Management - Filling of the ERDF may start in Cell 2. During the initial filling of Cell 2, leachate from Cell 1 may be segregated and released as clean water. An adequate buffer area between Cell 1 and Cell 2 will be maintained so that Cell 1 will not be contaminated with leachate from Cell 2. The actual management of leachate is covered in the Leachate Management Plan.

6.4 Leachate Disposition - Leachate from the ERDF may be stored and recycled. The recycled leachate may be used for dust control during the placement and spreading activity. Refer to the leachate management plan for actual disposition of leachate and applicable recycle limits.

7.0 Dust Control

7.1 Road Dust - Facility roads will be watered with raw water during dry periods to prevent dust generation from vehicle traffic.

7.2 Vehicle Use - Employees will operate vehicles only on improved roadways, and avoid driving in non-active areas in order to minimize disturbing of the top soil and prevent damage to the natural habitat.

7.3 Water Use - Water will be used to control dust during the waste placement and spreading operations. Recycled leachate or decontamination rinsate may be used to control dust during the waste placement and spreading operations.

7.4 Dust Fixative - At the end of each shift, a soil crusting agent will be applied over the waste that was placed during the shift. This action will fix the soil in place and prevent suspension of soil particles from wind erosion. The dust fixative will be a non-hazardous inert material. The initial dust fixative will be lignosite or Soil Sement.

Appendix A - Hazardous Materials Use Justification Form

Hazardous Materials Use Justification Form		
1. Date:		**WASTE MINIMIZATION** **SUBSTITUTION** **REDUCE** **RECYCLE**
2. Requester:		
3. Name of Product:		
4. Intended Use:		
5. Estimated Quantity Required:		
6. List three possible nonhazardous substitutions:		
a.	b.	c.
7. Why are nonhazardous substitutions not acceptable?		
8. Project Manager Approval _____		9. Date

Appendix B - Hazardous Materials Tracking

Hazardous Material Tracking

If hazardous material is brought onto the ERDF Site, it will be identified as hazardous material, its intended use will be clearly defined on the container, it will be assigned a unique identifier, and it will be entered into the hazardous material Control and Tracking Logbook.

1.0 Labeling - The following label will be placed on all hazardous materials brought on the ERDF Site by the waste acceptance manager or his designee:

HAZARDOUS MATERIAL
Specified Use _____
Unique Number _____

2.0 Logging - Hazardous material brought onto the ERDF Site will be entered in the Hazardous Material Control and Tracking Logbook. This logbook will be maintained by the Waste Acceptance Manager or his designee. The following information will be entered for all hazardous material brought onto the ERDF Site: date brought onsite, assigned responsible person, intended use, quantity of material, and unique number. The unique number will be assigned in the following manner: XX-YYY; XX is the last two digits of the calendar year and YYY is the next sequential number from the logbook.

3.0 Hazard Communication - An MSDS for hazardous materials brought to the ERDF Site will be given to the ES&H Manager for inclusion in the Hazard Communication Program.