

**ROCKY FLATS ENVIRONMENTAL  
TECHNOLOGY SITE  
ERPD OPERATING  
PROCEDURES MANUAL  
VOL I: FIELD OPERATIONS**

**Manual No.: 5-21000-OPS-FO  
Procedure No.: Table of Contents, Rev 86  
Page: 1 of 3  
Effective Date: 09/11/95  
Organization: Environmental Restoration**

**THIS IS ONE VOLUME OF A SIX VOLUME SET WHICH INCLUDES:**

**VOLUME I: FIELD OPERATIONS (FO)  
VOLUME II: GROUNDWATER (GW)  
VOLUME III: GEOTECHNICAL (GT)  
VOLUME IV: SURFACE WATER (SW)  
VOLUME V: ECOLOGY (EE)  
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FO.01	Air Monitoring and Dust Control	2	05/12/92
FO.02	94-DMR-000563 - Cancellation of Transmittal of QA Records	3	04/15/94
FO.03	Field Decontamination Operations	2	05/12/92
94-DMR-001021	Section FO.03 Text Addition	2	05/26/94
94-DMR-001224	Equipment Decontamination Location Adjustment	2	07/15/94
95-DMR-000096	Quality Control Samples	2	02/16/95
4-S02-ENV-OPS-FO.04	Decontamination of Equipment at Decontamination Facilities	3	04/20/95
4-H66-ER-OPS-FO.05	Handling of Purge and Development Water	3	06/30/95
FO.06	Handling of Personal Protective Equipment	2	05/12/92
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95-DMR-000331	Text Modification	3	05/22/95
FO.09	Handling of Residual Samples	2	05/12/92
4-K55-ENV-OPS-FO.10	Receiving, Marking, and Labeling Environmental Materials Containers	3	04/17/95
95-DMR-000330	Text Modification	3	05/22/95
FO.11	Field Communications	2	05/12/92

**DOCUMENT CLASSIFICATION REVIEW WAIVED  
PER R.B. HOFFMAN, CLASSIFICATION OFFICE  
JUNE 11, 1991**

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94-DMR-002244	Change of Decontamination Site for Field Equipment	2	12/22/94
FO.13	Containerization, Preserving, Handling and Shipping of Soil and Water Samples	2	05/12/92
93-DMR-000530	Section FO.13 Modification	2	11/04/93
93-DMR-000667	Section FO.13 Modification	2	11/20/93
94-DMR-000143	Composite Sampling Clarification	2	02/11/94
94-DMR-001670	New Statement of Work	2	09/15/94
4-B29-ER-OPS-FO.14	Field Data Management	3	09/09/94
95-DMR-000097	Revision of Form FO.14L	3	02/16/95
FO.15	Photoionization Detectors and Flame Ionization Detectors	2	05/12/92
95-DMR-000098	Change to Form FO.15A	2	02/16/95
FO.16	Field Radiological Measurements	2	05/12/92
95-DMR-000099	Editorial Correction to Form FO.16B	2	02/16/95
FO.18	Environmental Sample Radioactivity Content Screening	1	05/12/92
95-DMR-000100	Change to necessary forms for FO.18A & FO.18B	1	02/16/95
FO.19	Base Laboratory Work	2	05/12/92
4-F99-ENV-OPS-FO.23	Management of Soil and Sediment Investigative Derived Materials (IDM)	1	09/11/95
4-B11-ER-OPS-FO.25	Shipment of Radioactive Materials Samples	0	12/01/93
4-B01-ER-OPS-FO.27	Collection of Floor/Equipment Hot Water Rinsate Samples	0	07/26/93
4-H46-ENV-OPS-FO.29	Disposition of Soil and Sediment Investigation-Derived Materials	0	06/24/94
94-DMR-001226	Allowance of Procedural Use for Waste Piles	0	07/15/94
94-DMR-001741	Permission of Use of Computer-Generated Forms and Other Minor Corrections	0	10/07/94

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**ROCKY FLATS ENVIRONMENTAL  
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<b><u>Procedure No.</u></b>	<b><u>Title</u></b>	<b><u>Rev. No.</u></b>	<b><u>Effective Date</u></b>
4-I11-ER-OPS-FO.30	Environmental Restoration Program Division Equipment Operation	0	10/07/94
FO.31-FO.39 have been incorporated into the OU1 Specific Operating Procedures Manual.			
FO.43 has been incorporated into the OU2 Specific Operating Procedures Manual.			
4-J39-ENV-OPS-FO.47	Disposal of Residual Accuvac™ Reagent Ampules	0	02/14/95

\*All Limited Scope DMR's have been removed from the Table of Contents to more accurately reflect the contents of your manual. Work can still be performed to these DMR's if they haven't expired. If you have any questions, call Technical Publications at 966-8622.

# Rocky Flats Environmental Technology Site

4-F99-ENV-OPS-FO.23

## REVISION 1

### MANAGEMENT OF SOIL AND SEDIMENT INVESTIGATIVE DERIVED MATERIALS (IDM)

APPROVED BY:  DOUGLAS E. STEFFEN 7/13/95  
 Manager, Environmental Operations Management Print Name Date

 JOHN PENNEY 7/13/95  
 Manager, Quality Assurance/Total Quality Management Print Name Date

DOE RFFO/ER Submittal required:  Yes  No  NA

Environmental Protection Agency Review Required:  Yes  No  NA

Responsible Organization: Environmental Operations Management

Effective Date: 9-11-95

REVIEW BY THE FOLLOWING DISCIPLINES IS DOCUMENTED IN THE PROCEDURE HISTORY FILE:

Data Management and Reporting Services  
 Environmental Operations Management  
 Radiological Engineering  
 Industrial Hygiene  
 Occupational Safety  
 Sample Management

Group 1 Closures  
 Operable Unit 2 Closure  
 Operable Units 5, 6, and 7 Closures  
 Industrial Area OU Closure  
 Solar Ponds Project

### USE CATEGORY 3

ORC review not required

The following have been incorporated in this revision:

94-DMR-000137  
 94-DMR-000148  
 94-DMR-001108  
 94-DMR-001350

This procedure supersedes 4-F99-OPS-FO.23, Revision 0.

Periodic review frequency: 3 years from the effective date

Background information: No Site procedure exists that will fulfill the requirements of this document. Good management practice requires proper methods of managing Soil and Sediment Investigative Derived Materials (IDM) generated during environmental investigations.

**LIST OF EFFECTIVE PAGES**

<u>Pages</u>	<u>Effective Date</u>	<u>Change Number</u>
1 - 21	<u>9/11/95</u>	95-DMR-00092

TOTAL NUMBER OF PAGES: 21

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## 1. PURPOSE

This procedure provides instructions on managing Soil and Sediment Investigative Derived Materials (IDM) generated during environmental investigations at the Rocky Flats Environmental Technology Site (Site). Specifically, this procedure addresses criteria related to the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for interim management of containerized IDM. Further, this procedure addresses Department of Energy (DOE) requirements in DOE Order 5400.5, Radiation Protection of the Public and the Environment, for screening materials suspected to contain residual radionuclide constituents and performance objectives for certification of nonradioactive hazardous waste.

## 2. SCOPE

This procedure applies to Site employees and subcontractors who:

- Generate IDM
- Perform IDM preliminary hazardous waste determination and handling
- Move and manage containerized IDM
- Dispose of IDM

This procedure addresses:

- Preliminary Hazardous Waste Determination
- Container Filling and Labeling Process
- Handling IDM
- Movement and Management of Filled Containers
- Final Waste Determination Handling

## 3. RESPONSIBILITIES

### 3.1 ERPD Environmental Operations Management (EOM) Personnel

Assists subcontractor field personnel with the management of IDM containers.

Ensures IDM are managed in accordance with applicable regulations and procedures.

Determines if the project is within an Individual Hazardous Substance Site (IHSS), a Potential Area of Concern (PAC) boundary, or a Radiological Material Management Area (RMMA).

### 3.2 ERPD EOM RCRA Coordinator

Updates EOM container tracking database with container generation point, generator, and disposition information which provides access to the Rocky Flats Environmental Database System (RFEDS).

### 3.3 REEDS

Advises ERPD EOM of the analytical results within 30 days of the data being available.

**3.4 Site Project Manager**

Is a qualified hazardous Waste Generator.

Conducts a preliminary hazardous waste determination on the project work area.

Monitors handling of all IDM generated during environmental investigations.

Ensures that all personnel, including subcontractors, are trained and qualified to perform the duties, tasks, and responsibilities described in this procedure.

Ensures that the core and Environmental Restoration Program Division (ERPD)-specific training has been completed and documented and that copies of all documentation have been forwarded to the ERPD training files.

Ensures that this procedure is performed correctly.

**3.5 Site Regulated Waste Operation (RWO) Coordinator**

Manages IDM containers in the 90-day Accumulation Areas.

Arranges for movement of containers from 90-day Accumulation Areas to Permitted or Interim Status Storage Areas.

Manages IDM containers in the Permitted or Interim Status Storage Area.

**3.6 Site Waste Environmental Management System (WEMS) Coordinator**

Updates WEMS database.

**3.7 Subcontractor Field Personnel**

Arranges through ERPD EOM personnel for transportation of IDM containers to the 90-day Accumulation Areas or a Permitted or Interim Status Storage Area.

Verifies that IDM generated during field activities are handled in accordance with this procedure and 4-K56-ENV-OPS-FO.08, Monitoring and Containerizing Drilling Fluids and Cuttings.

**3.8 Subcontractor Project Manager**

Assists the Site Project Manager with preliminary and final waste determinations to identify proper management of IDM.

#### 4. LIMITATIONS AND PRECAUTIONS

- Containers filled with contents that have been designated as potentially "hazardous" (including hazardous and radioactive) through the preliminary hazardous waste determination may not be stored overnight at a borehole location. Drums must be properly managed from time of generation. (Rocky Flats Interagency Agreement)
- The types of contamination that may be encountered within potentially contaminated work areas, based on historical data, include:
  - Low-level radioactive contaminated materials
  - Nonradioactive RCRA-regulated contaminants
  - Mixed (low-level radioactive and RCRA-regulated hazardous) materials
  - Non-RCRA contaminated materials which may contain Toxic Substances Control Act (TSCA)-regulated hazardous materials with no radionuclide concerns
  - Low-level radioactive and non-RCRA contaminated materials which may contain TSCA-regulated hazardous materials

#### 5. PREREQUISITE ACTIONS

##### 5.1 Planning and Coordination

###### Subcontractor Project Manager

- [1] Verify that, at a minimum, two Subcontractor Field Personnel are qualified, trained, and available to perform this procedure.
- [2] Prepare a database to track container information in accordance with 4-K55-ENV-OPS-FO.10, Receiving, Marking, and Labeling Environmental Material Containers.

This activity allows the immediate tracking of any environmental data used by a subcontractor during ERPD field activities and will provide a backup to the field log forms.

##### 5.2 Materials and Equipment

###### 5.2.1 Special Tools and Equipment

###### Subcontractor Field Personnel

- [1] Ensure that the following equipment, as required, is available for field operations:
  - Hydraulic excavator with container grappler, front-end loader, or forklift
  - Truck, roller conveyor equipped with solid rollers, or a container cart

###### 5.2.2 Consumables

###### Subcontractor Field Personnel

- [1] Ensure that personal protective equipment (PPE) as specified in the project-specific Health and Safety Plan (HASp) or, as applicable, a Radiation Work Permit (RWP) is available.

**6. INSTRUCTIONS**

**6.1 Preliminary Hazardous Waste Determination**

**Site Project Manager**

- [1] Obtain and review historical release reports and other available information on process knowledge for the area in which the planned intrusive work will occur.
- [2] Ensure that Form EM.001A, Hazardous Waste Determination, is utilized in accordance with 1-F20-ER-EMR-EM.001, Environmental Approval Process for Construction/Excavation Activities on or near Individual Hazardous Substance Sites (IHSSs).
- [3] Document the following, as required, on Form FO.23A, Soil and Sediment IDM, for each well, boring, or sampling location:
  - Associated Well, Boring, or Sampling Location
  - Origination Site
  - Suspected Contamination
  - Justification (WSRIC or Process Knowledge)
  - Preliminary Container Disposition
  - Site Project Manager Signature and Date
  - Field Screen Soils and Sediment

Appendix 1, Soil and Sediment IDM Form, is provided as an example of Form FO.23A.

- [4] Determine which containers of IDM require immediate transport to a 90-day Accumulation Area pending analytical characterization based on Appendix 2, IDM Management Flow Chart, and Section 6.3, Handling IDM.
- [5] Determine which containers of IDM require a composite sample to be taken for analytical characterization based on Appendix 2 and Section 6.3.
- [6] Analyze available historical data to determine if radionuclide concentrations meet the compliance standards provided in DOE Order 5400.5 and as implemented in 4-U50-REP-1006, Radiological Characterization of Bulk or Volume Solid Materials.
- [7] Inform the Subcontractor Project Manager and/or Subcontractor Field Personnel of preliminary hazardous waste determination results.
- [8] Sign and date the top half of Form FO.23A.

## 6.2 Container Filling and Labeling Process

### Subcontractor Field Personnel

- [1] Fill containers in accordance with 4-K56-ENV-OPS-FO.08.
- [2] Label containers in accordance with 4-K55-ENV-OPS-FO.10.
- [3] Document appropriate information on the following:
  - Form FO.10A, Drum Field Log Form
  - RF 47386, Waste/Residue Traveler
  - Form FO.14A, Field Data Transmittal Form
- [4] Arrange with ERPD EOM Personnel to immediately transfer filled containers.
  - [A] Contact ERPD EOM Personnel or their representative to move containers to the appropriate storage area.

### ERPD EOM RCRA Coordinator

- [5] Update the EOM container tracking database to log individual container points of generation, generator, and disposition.

### Site WEMS Coordinator

- [6] Update the WEMS database in accordance with the WEMS Container Worksheet provided by ERPD EOM Personnel.

## 6.3 Handling IDM

IDM from Individual Hazardous Substance Sites (IHSSs), PAC, and Additional Areas of Concern (AAC), are containerized in accordance with 4-K56-ENV-OPS-FO.08, and labeled in accordance with 4-K55-ENV-OPS-FO.10.

The process for handling residual soils and sediments generated during environmental activities is summarized on Appendix 2. Containers may be filled with IDM from any of four areas: known IHSSs, PAC, AAC, or background areas.

Representative samples may be collected before IDM is containerized in accordance with the OU Site-Specific Sampling Plan or after IDM are containerized in accordance with 4-Q68-ENV-OPS-FO.20, Sampling Liquids and Solids from Environmental Materials Containers.

A sampling hierarchy has been established in 4-H46-ENV-OPS-FO.29, Disposition of Soil and Sediment IDM, and should be used to determine if analytical data from a borehole within the same IHSS can be used to provide a more complete characterization of IDM.

### 6.3 Handling IDM (continued)

#### Site Project Manager and Subcontractor Project Manager

- [1] **IF** activities determined by the Site Project Manager occur within an AAC (as shown on Appendix 3) or in an IHSS or PAC as determined by ERPD EOM Personnel, **AND** geological material can be characterized as potentially nonhazardous through field screening process knowledge or historical data, **THEN:**

- [A] Containerize the IDM in accordance with 4-K56-ENV-OPS-FO.08.
- [B] Label the IDM in accordance with 4-K55-ENV-OPS-FO.10.
- [C] **IF** required to further characterize the IDM, **THEN** collect a representative sample of IDM from each container in accordance with 4-Q68-ENV-OPS-FO.20.
- [D] Arrange to have each container transported to a 90-day Accumulation Area within 24 hours of filling.

Initial determination is based on Operational Unit (OU)-specific process knowledge characterization. Final hazardous waste determinations are made using analytical results in accordance with 4-H46-ENV-OPS-FO.29.

- [2] **IF** the IDM are generated within an IHSS, PAC, or AAC, **AND** sampling for the purpose of geological material characterization is planned, **THEN:**

- [A] Collect a representative sample of IDM in accordance with the OU Site-Specific Sampling Plan.
- [B] Containerize the IDM in accordance with 4-K56-ENV-OPS-FO.08.
- [C] Label the IDM in accordance with 4-K55-ENV-OPS-FO.10.
- [D] Arrange to have each container transported to a 90-day Accumulation Area within 24 hours of filling.

Initial determination is based on OU-specific process knowledge characterization. Final hazardous waste determinations are made using analytical results in accordance with 4-H46-ENV-OPS-FO.29.

- [E] **IF** analytical results are **NOT** available within 90 days, **THEN** arrange to have the containers transported to a Permitted or Interim Status Storage Area.

**6.3 Handling IDM (continued)**

**Site Project Manager and Subcontractor Project Manager (continued)**

- [3] **IF** the IDM are generated within an IHSS, PAC, or AAC,  
**AND** sampling for the purpose of geological material characterization is **NOT**  
planned,  
**THEN:**
- [A] Collect a representative sample of IDM in accordance with the OU Site-Specific Sampling Plan.
  - [B] Containerize the IDM in accordance with 4-K56-ENV-OPS-FO.08.
  - [C] Label the IDM in accordance with 4-K55-ENV-OPS-FO.10.
  - [D] Transport the containers to a 90-day Accumulation Area based on site characterization in accordance with the OU-Specific Waste Stream and Residue Identification and Characterization (WSRIC) book.
  - [E] Record and process container samples in accordance with 4-B29-ER-OPS-FO.14, Field Data Management, and 4-B35-ER-OPS-FO.13, Containerization, Preserving, Handling, and Shipping of Samples.
  - [F] Analyze the container sample for appropriate constituents based on historical and process knowledge as defined in the OU Site-Specific Sampling Plan.
  - [G] **IF** determined hazardous based on analytical results,  
**THEN:**
    - [a] Arrange to have the containers properly dispositioned through EOM.
    - [b] Manage the containers as hazardous until an IDM characterization is completed in accordance with 4-H46-ENV-OPS-FO.29.
  - [H] **IF** determined nonhazardous based on analytical results,  
**THEN:**
    - [a] Arrange to have the containers properly dispositioned through EOM.

**6.3 Handling IDM (continued)**

**Site Project Manager and Subcontractor Project Manager (continued)**

[4] IF the IDM are generated outside an IHSS, PAC, or AAC, and ALL of the following exist:

- Sampling for the purpose of geological material characterization is planned based on the OU Site-Specific Sampling Plan.
- Verified field screening results are above background as defined in 4-K56-ENV-OPS-FO.08.

**THEN:**

- [A] Collect a representative sample of IDM in accordance with the OU Site-Specific Sampling Plan.
- [B] Containerize the IDM in accordance with 4-K56-ENV-OPS-FO.08.
- [C] Label the IDM in accordance with 4-K55-ENV-OPS-FO.10.
- [D] Arrange to have the containers transported to a 90-day Accumulation Area.
- [E] IF characterization CANNOT be completed on IDM within 90 days, THEN arrange to have the containers transported to a Permitted or Interim Status Storage Area.
- [F] Manage the containers as hazardous until an IDM characterization is completed in accordance with 4-H46-ENV-OPS-FO.29.

[5] IF the IDM are generated outside an IHSS, PAC, or AAC, and ALL of the following exist:

- The area is in the OU where it is down gradient from the adjacent IHSS, PAC, AAC, or a suspect area in the OU where previous sampling showed areas of contamination.
- Sampling for the purpose of geological material characterization is planned based on the OU Site-Specific Sampling Plan.
- Verified field screening results are NOT above background as defined in 4-K56-ENV-OPS-FO.08 and 3-21000-OPS-EMRG, Environmental Management Radiological Guidelines.

**THEN:**

- [A] Collect a representative sample of IDM from each container in accordance with the OU Site-Specific Sampling Plan.
- [B] Containerize the IDM in accordance with 4-K56-ENV-OPS-FO.08.
- [C] Label in accordance with 4-K55-ENV-OPS-FO.10.

6.3 Handling IDM (continued)

**Site Project Manager and Subcontractor Project Manager (continued)**

- [D] Transport the containers to a 90-day Accumulation Area based on site characterization in accordance with the OU WSRIC book.
- [E] **IF** analytical results are **NOT** available within 90 days,  
**THEN** arrange to have the containers transported to a Permitted or Interim Status Storage Area.
- [F] Manage the containers as "hazardous" until an IDM characterization is completed in accordance with 4-H46-ENV-OPS-FO.29.

[6] **IF** the IDM are generated outside an IHSS, PAC, or AAC, and ALL of the following exist:

- The area is in the OU where it is down gradient from the adjacent IHSS, PAC, AAC, or a suspect area in the OU where previous sampling showed areas of contamination.
- Sampling for the purpose of geological material characterization is **NOT** planned.
- Verified field screening results are above background as defined in 4-K56-ENV-OPS-FO.08 and 3-21000-OPS-EMRG.

**THEN:**

- [A] Collect a representative sample of IDM in accordance with the OU Site-Specific Sampling Plan.
- [B] Containerize the IDM in accordance with 4-K56-ENV-OPS-FO.08.
- [C] Label the IDM in accordance with 4-K55-ENV-OPS-FO.10.
- [D] Transport the containers to a 90-day Accumulation Area based on the site characterization in accordance with the OU WSRIC book.
- [E] **IF** analytical results are **NOT** available within 90 days,  
**THEN** arrange to have the containers transported to a Permitted or Interim Status Storage Area.
- [F] Record and process container samples in accordance with 4-B29-ER-OPS-FO.14 and 4-B35-ER-OPS-FO.13.
- [G] Analyze the sample(s) for appropriate constituents based on historical and process knowledge as defined in the OU Site-Specific Sampling Plan.
- [H] **IF** the IDM are suspected to contain RCRA-listed constituents,  
**THEN** manage the containers as "hazardous" until an IDM characterization is completed in accordance with 4-H46-ENV-OPS-FO.29.

**6.3 Handling IDM (continued)**

**Site Project Manager and Subcontractor Project Manager (continued)**

- [I] IF IDM are NOT suspected to contain RCRA-listed constituents, THEN remove the containers from storage and manage as "nonhazardous" until an IDM characterization is completed in accordance with 4-H46-ENV-OPS-FO.29.
- [7] IF the IDM are generated outside an IHSS, PAC, or AAC, and **ALL** of the following exist:
- The area is in the OU where it is down gradient from the adjacent IHSS, PAC, AAC, or a suspect area in the OU where previous sampling showed areas of contamination.
  - Sampling for the purpose of geological material characterization is NOT planned.
  - Verified field screening results are NOT above background as defined in 4-K56-ENV-OPS-FO.08 and 3-21000-OPS-EMRG.
- THEN:**
- [A] Collect a representative sample of IDM in accordance with the OU Site-Specific Sampling Plan.
- [B] Containerize the IDM in accordance with 4-K56-ENV-OPS-FO.08.
- [C] Label the IDM in accordance with 4-K55-ENV-OPS-FO.10.
- [D] Transport the containers to a 90-day Accumulation Area based on site characterization in accordance with the OU WSRIC book.
- [E] IF analytical results are NOT available within 90 days, THEN arrange to have the containers transported to a Permitted or Interim Status Storage Area.
- [F] Record and process container samples in accordance with 4-B29-ER-OPS-FO.14 and 4-B35-ER-OPS-FO.13.
- [G] Manage the containers as "hazardous" until an IDM characterization is completed in accordance with 4-H46-ENV-OPS-FO.29.
- [H] IF the IDM are determined to be nonhazardous after IDM characterization, THEN complete one of the following:
- [a] Dispose of the IDM in the landfill.
  - [b] Dispose of the IDM as clean fill onsite.

**6.3 Handling IDM (continued)**

**Site Project Manager and Subcontractor Project Manager (continued)**

**NOTE 1** *Clean IDM are dispersed and leveled within the disturbed area and reseeded in accordance with the Rocky Flats Watershed Management Plan.*

**NOTE 2** *The Site Ecology Department is contacted for guidance regarding reseeding.*

**[8] IF** IDM are generated outside an IHSS, PAC, or AAC, and **ALL** of the following exist:

- The area is **NOT** down gradient from the adjacent IHSS, PAC, AAC, or a suspect area where previous sampling showed areas of contamination.
- Sampling of IDM for analytical characterization purposes is **NOT** planned.
- Verified field screening results are **NOT** above background as defined in 4-K56-ENV-OPS-FO.08 and 5-21000-OPS-EMRG.
- IDM from boreholes or wells contain **less** than 20 feet of bedrock.

**THEN:**

**[A]** Accumulate the IDM on the ground at the work site.

**NOTE** *National Environmental Policy Act (NEPA) approval is required prior to dispersement of IDM to the surrounding area.*

**[B]** **WHEN** the NEPA requirements have been met,  
**AND** drilling operations at the site have concluded,  
**THEN** disperse the IDM to the surrounding area.

**[9] IF** IDM are generated outside an IHSS, PAC, or AAC, and **ALL** of the following exist:

- The area is **NOT** down gradient from the adjacent IHSS, PAC, AAC, or a suspect area where previous sampling showed areas of contamination.
- Sampling of IDM for analytical characterization purposes is **NOT** planned.
- Verified field screening results are **NOT** above background as defined in 4-K56-ENV-OPS-FO.08 and 5-21000-OPS-EMRG.
- IDM from boreholes or wells contain **more** than 20 feet of bedrock.

**THEN:**

**[A]** Containerize the IDM.

**[B]** Request transportation of the IDM to the landfill for disposal in accordance with 1-947000-Traffic-110, On-Site Transportation Manual.

**[C]** Rinse or wash the empty containers, as applicable, in accordance with 4-SO2-ENV-OPS-FO.04, Decontamination of Equipment at Decontamination Facilities.

#### 6.4 Movement and Management of Filled Containers

##### **Subcontractor Field Personnel**

- [1] Conduct radiological screening on the exterior of the container in accordance with 3-21000-OPS-ERMG before the container leaves:
  - A Radiologically Controlled Area (RCA).
  - A Radiological Materials Management Area (RMMA).

##### **ERPD EOM RCRA Coordinator**

- [2] Ensure, prior to moving, that the containers have been monitored and inspected with respect to radiological screening, integrity, labeling, and appropriate documentation.
- [3] Update the EOM container tracking database to log individual containers point of generation, generator, and disposition.
- [4] Contact Site ERPD EOM personnel to transport the containers to the 90-day Accumulation Area and/or the Permitted or Interim Status Storage Area.
- [5] Transmit the original completed Drum Field Log Form (FO.10A) and the Waste/Residue Traveler, RF 47386, to the Site EOM RCRA Coordinator when container custody is transferred.
  - [A] Retain a copy of each of these forms.

##### **ERPD EOM Personnel**

- [6] Notify and coordinate with the Site RWO Coordinator when containers are received.

##### **Site RWO Coordinator**

The RCRA 90-day Accumulation Area Weekly Inspection Log Sheet is used to ensure proper container management while the containers are in the 90-day Accumulation Area.

The Hazardous Waste Management Container Area Weekly Inspection Log Sheet, in accordance with 1-10000-HWRM, Hazardous Waste Requirements Manual, is utilized by the Site RWO Coordinator to ensure proper management within the Permitted or Interim Status Storage Area.

- [7] Inspect the IDM container integrity and the documentation for deficiencies.
- [8] **IF** no deficiencies are identified,  
**THEN:**
  - [a] Sign the Waste/Residue Traveler, RF 47386.
  - [b] Go to Step [12].
- [9] Forward the Waste/Residue Traveler, RF 47386, to the Site EOM RCRA Coordinator on an appropriate transmittal sheet.

#### 6.4 Movement and Management of Filled Containers (continued)

##### ERPD EOM RCRA Coordinator

[10] Correct the deficiencies identified by the Site RWO Coordinator.

[11] Transmit the original Waste/Residue Traveler, RF 47386, to the Site RWO Coordinator with an appropriate transmittal receipt.

##### Site RWO Coordinator

[12] Contact the Site WEMS Coordinator to ensure the containers have been entered into the WEMS database.

[13] Retain the original copy of the Waste/Residue Traveler, RF 47386, and the Hazardous Waste Management Container Area Weekly Inspection Log Sheet.

#### 6.5 Final Waste Determination Handling

**NOTE**     *The Site Project Manager evaluates sample analytical results and determines the classification of the IDM.*

##### RFEDS

[1] Furnish ERPD EOM with sample analytical results within 30 days of availability.

##### Site Project Manager

[2] Determine the waste characterization of the IDM by performing 4-H46-ENV-OPS-FO.29.

#### 7. RECORDS

A permanent record of the implementation of this procedure written in black, waterproof ink will be kept by documenting field observations and data on the forms referenced in this procedure.

Subcontracting personnel may also choose to document the observations and data in a field logbook in addition to the log forms. If a field logbook is used, entries are made with a black, waterproof ink pen in a bound, waterproof logbook with consecutively numbered pages in accordance with 2-S47-ER-ADM-05.14, Use of Field Logbooks.

Management of all records is consistent with 1-77000-RM-001, Records Management Guidance for Records Sources.

##### Site Project Manager

[1] Obtain the ERPD EOM Project Manager signature on each Form FO.23A upon completion.

**7. RECORDS (continued)**

**Subcontractor Field Personnel and ERPD EOM RCRA Coordinator**

[2] Retain a copy of Form FO.10A, Drum Field Log Form.

**Site Project Manager and ERPD EOM Personnel**

[3] Ensure that the original and one copy, as required, of the following Quality Assurance (QA) records are transmitted to the ERPD Project File Center (PFC) in accordance with 2-G18-ER-ADM-17.01, Quality Assurance Records Management:

- Form FO.10A, Drum Field Log Form
- Form FO.23A, Soil and Sediment IDM
- Hazardous Waste Management Container Area Weekly Inspection Log Sheet
- Waste/Residue Traveler (RF 47386)
- Form FO.14A, Field Data Transmittal Form
- Field Logbook

Submission of record copies to the ERPD PFC is in accordance with Administrative Records requirements as defined in 2-S65-ER-ADM-17.02, Administrative Records Document Identification and Transmittal.

There are no non-QA records generated by this procedure.

**8. REFERENCES**

DOE, Radiation Protection of the Public and the Environment, Chapter IV, Residual Radioactive Material. U.S. DOE Order 5400.5

National Environmental Policy Act (NEPA)

OU-Specific Waste Stream and Residue Identification and Characterization (WSRIC) book

Rocky Flats Interagency Agreement

Rocky Flats Watershed Management Plan

1-F20-ER-EMR-EM.001, Environmental Approval Process for Construction/Excavation Activities on or near Individual Hazardous Substance Sites (IHSSs)

1-10000-HWRM, Hazardous Waste Requirements Manual

1-77000-RM-001, Records Management Guidance for Records Sources

1-94700-Traffic-110, On-Site Transportation Manual

2-G18-ER-ADM-17.01, Quality Assurance Records Management

**8. REFERENCES (continued)**

2-S47-ER-ADM-05.14, Use of Field Logbooks

2-S65-ER-ADM-17.02, Administrative Records Document Identification and Transmittal

3-21000-OPS-EMRG, Environmental Management Radiological Guidelines

4-B29-ER-OPS.FO.14, Field Data Management

4-B35-ER-OPS-FO.13, Containerization, Preserving, Handling and Shipping of Samples.

4-H46-ENV-OPS-FO.29, Disposition of Soil and Sediment IDM

4-K55-ENV-OPS-FO.10, Receiving, Marking, and Labeling Environmental Material Containers

4-K56-ENV-OPS-FO.08, Monitoring and Containerizing Drilling Fluids and Cuttings

4-Q68-ENV-OPS-FO.20, Sampling Liquids and Solids from Environmental Materials Containers

4-SO2-ENV-OPS-FO.04, Decontamination of Equipment at Decontamination Facilities

4-U50-REP-1006, Radiological Characterization of Bulk or Volume Solid Materials

**APPENDIX 1**

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**SOIL AND SEDIMENT IDM FORM**

<i>Rocky Flats</i> <i>Environmental Technology Site</i> <b>ENVIRONMENTAL MANAGEMENT</b> <b>DEPARTMENT</b>	<b>SOIL AND SEDIMENT IDM</b>	<b>Form FO.23A</b> <b>REVISION 1</b> <b>Page 1 of 1</b>
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**THIS PORTION IS COMPLETED BY THE SITE PROJECT MANAGER**

1. Associated Well, Boring or Sampling Location \_\_\_\_\_
2. Origination Site IHSS/PAC/AAC/Background \_\_\_\_\_
3. Suspected Contamination Hazardous/Radioactive/Mixed \_\_\_\_\_
4. Justification (Step 3 Selection) \_\_\_\_\_
  
5. Is Soil Sampling planned in accordance with the Site-Specific Work Plan? Yes  No
6. Preliminary Container Disposition (check one only)
  - 6.1 Remove containers from site and manage as nonhazardous Yes  No
  - 6.2 Move containers to a 90-day Accumulation Area pending characterization Yes  No
  - 6.3 Sample container and either
    - 6.3.1 Remove containers from site and manage as nonhazardous Yes  No
    - 6.3.2 Move containers to a 90-day Accumulation Area Yes  No
7. Field screen soils and sediment Yes  No

**Note:** Soils and sediments identified as potentially contaminated by field screening must be characterized.

Site Project Manager \_\_\_\_\_ Date \_\_\_\_\_  
(Signature) must also initial any changes to Step 7

**THIS PORTION IS COMPLETED BY BOM OR SUBCONTRACTOR FIELD PERSONNEL**

**7. ASSOCIATED Container NUMBERS**

Container Number	Container Number	Container Number

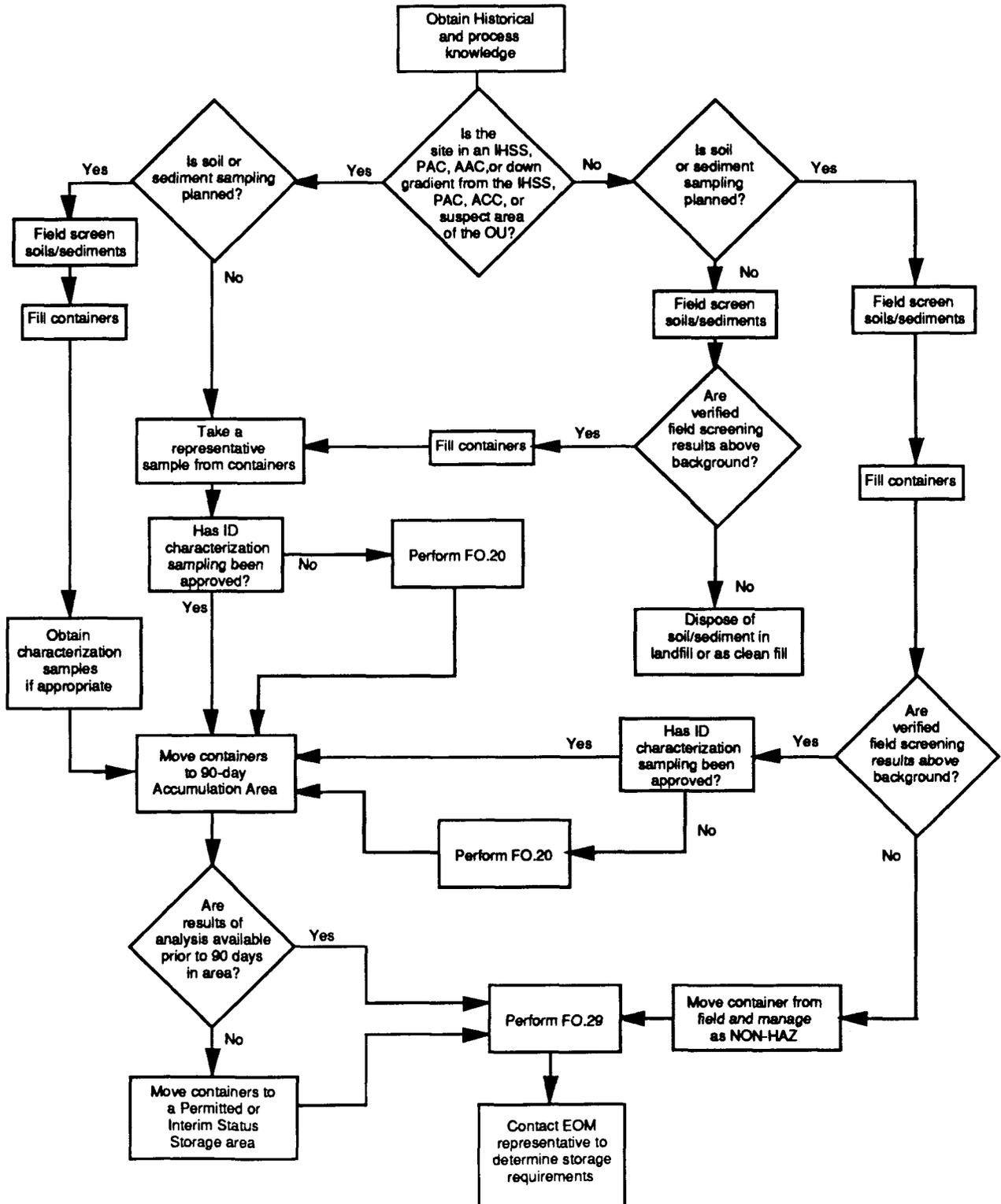
Site Project Manager: \_\_\_\_\_ Date: \_\_\_\_\_

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_

**APPENDIX 2**

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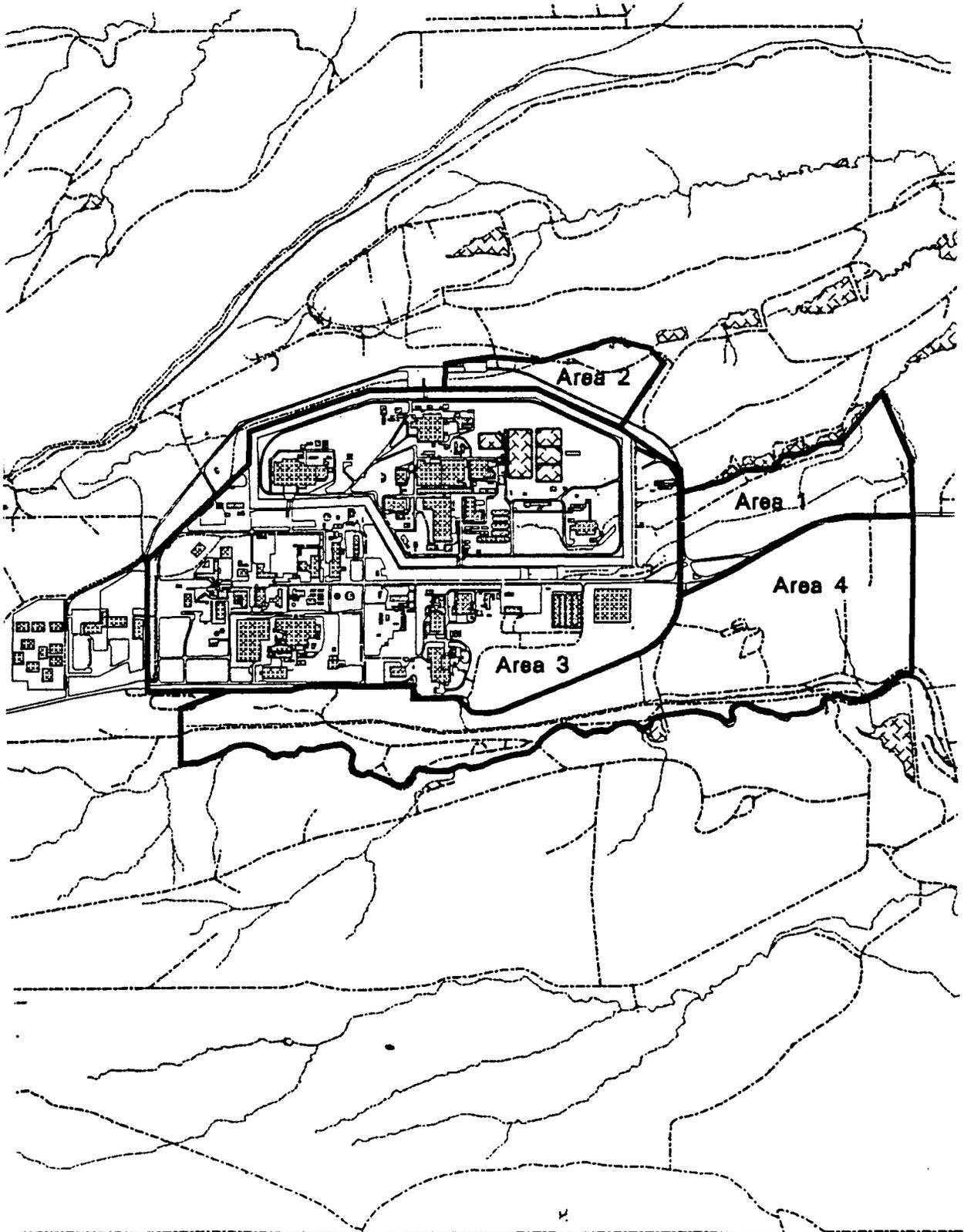
**IDM MANAGEMENT FLOW CHART**



**APPENDIX 3**

Page 1 of 1

**ADDITIONAL AREAS OF CONCERN**



**THIS PORTION IS COMPLETED BY THE SITE PROJECT MANAGER**

1. Associated Well, Boring or Sampling Location \_\_\_\_\_
2. Origination Site IHSS/PAC/AAC/Background \_\_\_\_\_
3. Suspected Contamination Hazardous/Radioactive/Mixed \_\_\_\_\_
4. Justification (Step 3 Selection) \_\_\_\_\_
5. Is Soil Sampling planned in accordance with the Site-Specific Work Plan? Yes  No
6. Preliminary Container Disposition (check one only)
  - 6.1 Remove containers from site and manage as non-hazardous Yes  No
  - 6.2 Move containers to 90-day Accumulation Area pending characterization Yes  No
  - 6.3 Sample container and either
    - 6.3.1 Remove containers from site and manage as non-hazardous Yes  No
    - 6.3.2 Move containers to 90-day Accumulation Area Yes  No
7. Field screen soils and sediment Yes  No

**Note: Soils and sediments identified as potentially contaminated by field screening must be characterized.**

Site Project Manager \_\_\_\_\_ Date \_\_\_\_\_  
 (Signature) must also initial any changes to Step 7

**THIS PORTION IS COMPLETED BY EOM OR SUBCONTRACTOR FIELD PERSONNEL**

8. ASSOCIATED Container NUMBERS

Container No.	Container No.	Container No.

Site Project Manager: \_\_\_\_\_ Date: \_\_\_\_\_

Environmental Operations Manager: \_\_\_\_\_ Date: \_\_\_\_\_

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_