

Rocky Flats Environmental Technology Site

4-K55-ENV-OPS-FO.10

REVISION 3

RECEIVING, MARKING, AND LABELING ENVIRONMENTAL MATERIALS CONTAINERS

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DOE RFFO/ER Concurrence on File: Yes No NA

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Responsible Organization: Environmental Restoration Program Division Effective Date: 4/17/95 *sjb*

CONCURRENCE BY THE FOLLOWING DISCIPLINES WILL BE DOCUMENTED IN THE
PROCEDURE HISTORY FILE:

Data Management and Reporting Services
 ERPD Environmental Operations Management
 ERPD Solar Ponds Project

Industrial Hygiene
 Occupational Safety
 Radiological Health and Engineering

USE CATEGORY 3

ORC review not required

The following 94-DMR-000798 has been incorporated in this revision.

This procedure supersedes procedure 5-21000-OPS-FO-FO.10, Revision 2.

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 methodology for handling and identifying Investigation Derived Material (IDM) containers generated from environmental field activities. The IAG requires a procedural framework for developing, implementing, and monitoring appropriate response actions at the site in accordance with CERCLA, RCRA, and CHWA, implementing regulations of these statutes, including the NCP, and CERCLA, RCRA, and CHWA guidance and policy.

LIST OF EFFECTIVE PAGES

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6.2 Drum Color Codes

Rocky Flats has segregated drums into a color coding scheme for identification to ensure the proper management of waste. As noted in 4-K56-ENV-OPS-FO.08, Monitoring and Containerizing Drilling Fluids and Cuttings, gray, green, black/white or white drums are used for IDM generated during environmental investigation field activities.

Subcontractor Field Personnel or Rocky Flats Personnel

- [1] Fill gray drums with IDM that has been designated as potentially non-radioactive, non-RCRA, and non-TSCA through preliminary hazardous waste determination in accordance with 4-K56-ENV-OPS-FO.08.

Gray drums are 30-gal or 55-gal, DOT approved, open-top (removable top) drums with a plastic liner and a 10-mil plastic round-bottomed liner. Gray, 30-gal DOT approved drums will include two 5-mil plastic drum liners.

- [2] Fill white drums with IDM that has been designated as known low-level radioactive or mixed (low-level radioactive and RCRA-regulated) soil and sediment IDM through preliminary hazardous waste determination in accordance with 4-C77-WO-1101, or 4-D99-WO-1100.

White drums are 55-gal, DOT approved, open-top (removable top) drums. White, 55-gal DOT approved drums, include a fiberboard liner and two 10-mil plastic liners in accordance with Item Description Code (IDC).

- [3] Fill green drums with IDM that has been designated as known non-radioactive, non-RCRA, and non-TSCA environmental liquids through preliminary hazardous waste determination in accordance with 4-K56-ENV-OPS-FO.08 or 1-C88-WP-1027-NONRAD.

Green drums are 55-gal, DOT approved, bung-top drums.

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6.2 Drum Color Codes (continued)

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- [4] Fill black/white drums with IDM that has been designated as known non-radioactive, RCRA and/or TSCA soil and sediment IDM, through preliminary hazardous waste determination in accordance with 4-K56-ENV-OPS-FO.08 or 1-C88-WP-1027-NONRAD.

Black/white drums are 55-gal, DOT approved, open-top (removable top) drums with a liner, depending on the waste form code (WFC).

6.3 Drum Marking and Labeling

Each drum will be uniquely marked and labeled to ensure proper handling and tracking.

Rocky Flats WEMS Personnel

- [1] Assign an ID number to each drum.

The drum ID number is assigned in a bar-code format.

Subcontractor Field Personnel or Rocky Flats Personnel

- [2] Ensure that all identifying markings are legible, approximately 1 in. high, and written on two (opposite) sides and on top of the container.
- [3] Mark a two-letter subcontractor ID directly after the drum ID number with a black paint pen.

[A] The letter ID will be assigned by Rocky Flats WEMS personnel and will be marked on each drum (e.g., "EO1326999901589WC" would identify Drum Number EO1326, handled by Woodward-Clyde).

- E01326 - Drum Number
- 9999 - Prefix
- 01589 - Extended Number
- WC - Subcontractor ID

A two-letter ID is obtained from 5-21000-OPS-FO.14, Field Data Management.

- [4] Place information to the right of the stenciled area indicated in Appendix 1, on two (opposite) sides and on the top of the container.

6.3 **Drum Marking and Labeling (continued)**

NOTE *An example of the gray drum marking format is shown in Appendix 1.*

The following marking and labeling procedures described below apply to any containers used to contain IDM:

NOTE 1 *Drill cuttings from drilling activities shall be placed in drums designated by the drilled interval and the depth interval. The drilled interval represents the top and bottom footage of material contained in a specific drum. The depth interval for drums shall be from the top of the drilled interval to the bottom of the drilled interval. Analytical samples within the drilled interval shall be used, in part, for the drum characterization process described in 4-H46-ENV-OPS-FO.29, Disposition of Soil and Sediment IDM.*

NOTE 2 *The use of a black paint pen to apply identifying marks on IDM containers shall ensure that the markings will not be washed away during decontamination or precipitation. To prevent contamination of samples, paint should not be applied in the vicinity of sampling or field monitoring activities.*

- [5] Mark the location code (i.e., borehole, trench, etc.), project location (e.g., Operable Unit Number), drum fill date (when first material is put in the drum), and drilled interval in feet (rounded to nearest foot) on soil and sediment IDM containers.
- [6] Mark liquid containers with the words "NONPOTABLE PENDING ANALYSIS" in addition to the identification number above the marked drum number.
- [7] Print the drum contents (e.g., soil) with a black paint pen below the drum label on each drum.
- [8] Print the words "FREE LIQUIDS" or "NO FREE LIQUIDS" with a black paint pen above each drum label on each drum.

Free liquids are defined as "liquids that readily separate from the solid portion of a waste under ambient temperature and pressure."

- [9] **IF** questions arise concerning determination of free liquids,
THEN consult Rocky Flats ERPD EOM personnel for guidance.

6.3 Drum Marking and Labeling (continued)

[10] Manage containers that have been designated as known "radioactive" through the preliminary hazardous waste determination in accordance with 4-F99-ENV-OPS-FO.23, and label with a "Radiological On-Site Shipping" label.

[A] The subcontractor Project Manager or Rocky Flats Project Manager will consult the Waste Requirements Procedures (WRP) and Rocky Flats ERPD EOM personnel for guidance on packaging, marking and labeling containers that have been given a "radioactive" preliminary hazardous waste determination.

[11] Manage containers that have been designated as known "mixed" (RCRA-regulated hazardous and low-level radioactive) or low-level radioactive CERCLA/TSCA" (CERCLA and/or TSCA-regulated hazardous and low-level radioactive) through the preliminary hazardous waste determination in accordance with 4-F99-ENV-OPS-FO.23, the WRP and the On-Site Transportation Manual requirements and label with an "On-Site Hazardous Waste" and "Radioactive On-Site Shipping" labels.

[A] The subcontractor Project Manager or Rocky Flats Project Manager will consult the WRP and with Rocky Flats ERPD EOM personnel for guidance on packaging, marking and labeling containers that have been given a "mixed" or "low-level radioactive CERCLA/TSCA" preliminary hazardous waste determination.

NOTE *Gray IDM drums may have an "On-Site Hazardous Waste Label" in accordance with Rocky Flats Policy, 6-10, and 1-C88-WP-1027-NONRAD.*

[12] Manage containers that have been designated as known hazardous" through the preliminary hazardous waste determination in accordance with 4-F99-ENV-OPS-FO.23, and label with an "On-Site Hazardous Waste" label.

[A] Place an "On-Site Hazardous Waste" label on these containers under the bolt assembly 90° counterclockwise from the seam on 6-in. vinyl tape.

[B] Contact Rocky Flats ERPD EOM personnel for movement and management of the drum.

NOTE *An example of an Rocky Flats ERPD EOM label is shown in Appendix 2.*

Rocky Flats ERPD EOM Personnel

[13] Place a Rocky Flats ERPD EOM label on the top third of all gray drums.

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6.4 **Drum Handling**

NOTE *All IDM containers shall meet DOT specifications for containers, marking, and labeling.*

Subcontractor Field Personnel or Rocky Flats Personnel

- [1] Fill containers in accordance with 4-K56-ENV-OPS-FO.08.
- [2] Manage the IDM in accordance with 4-F99-ENV-OPS-FO.23.
- [3] Evaluate disposition of containers in accordance with 4-H46-ENV-OPS-FO.29.
- [4] Document appropriate information on the Drum Log Form (FO.10A) shown in Appendix 3; Soil and Sediment IDM Form (FO.23A), and the Waste/Residue Traveler (RF 47386). See Appendix 3.
- [5] Independently verify information provided on FO.10A for accuracy and completeness by comparing it against the Drum Field Log QA/QC Form. See Appendix 4.

WARNING

Drums filled with contents that have been designated as potentially "hazardous," including hazardous and radioactive, through the preliminary hazardous waste determinations should not be stored overnight at a borehole location. These drums must be transferred to the custody of Rocky Flats ERPD EOM personnel on the day filled in accordance with 4-K55-ENV-OPS-FO-10. Improper handling of the drums can result in potential noncompliance with state and federal regulations and/or contamination of personnel, equipment, and surrounding areas, if they come from a RCA or Radioactive Materials Management Area (RMMA).

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6.4 **Drum Handling (continued)**

[6] Arrange with Rocky Flats ERPD EOM personnel to immediately transfer filled drums.

[A] Contact Rocky Flats ERPD EOM personnel or their representative to move drums on pallets (drums must be secured) inside trucks with enclosed sides to the transfer/storage area.

Rocky Flats Radiological Control Technician or Subcontractor HSS

[B] Conduct a radiation screening on the exterior of the drum before the drum leaves a radiologically controlled area (RCA) or RMMA in accordance with 5-21000-OPS-FO.16, Field Radiological Measurements, and 3-21000-OPS-EMRG, Environmental Management Radiological Guidelines.

NOTE *Drums shall be surveyed for radiation before they are moved.*

Subcontractor Field Personnel or Rocky Flats Personnel

[7] Transmit the original completed Drum Log Form (FO.10A), Drum Field Log Form (QA/QC), and Waste/Residue Traveler (RF 47386) to Rocky Flats ERPD EOM personnel within 3 days when drum custody is transferred.

[A] A copy of each of these forms will be retained by the subcontractor Project Manager or Rocky Flats Project Manager.

6.5 **Documentation**

Subcontractor or Field Personnel or Rocky Flats Personnel

[1] Provide the original copies of the completed Drum Log Form (FO.10A) to Rocky Flats ERPD EOM personnel within 3 days of transferring drums.

Rocky Flats ERPD EOM Personnel will send the original Drum Log Form (FO.10A) to the ERPD Records Center and one copy to the Rocky Flats Database Systems (RFEDS).

[2] Rocky Flats ERPD EOM personnel will retain the original Drum Log Forms, and the subcontractor will retain a signed copy of each form in the project files.

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6.6 Drum Field Log Form

Retain the Drum Field Log Forms (FO.10A) and Drum Field Log QA/AC Forms (FO.10B) for each drum from the time the drum is issued until it is returned to Rocky Flats ERPD EOM personnel.

Subcontractor Field Personnel or Rocky Flats Personnel

- [1] **IF** drum composite samples are collected,
THEN circle composite on Form FO.10A and Form 10B.

- [2] **IF** drum composite samples are not collected,
THEN circle non-composite on Form FO.10A and Form 10B.

Rocky Flats ERPD EOM Personnel

NOTE *In addition to the drum labeling, the Drum Log Forms shall identify the drum location code (i.e., borehole number, trench number, etc.), drum depth interval, OU numbers, and associated sample numbers of the material contained in the drum. The drum log forms shall be used to track the movement of environmental materials generated during environmental field operations.*

- [3] Check and correct Form FO.10A and FO.10B, if necessary, when drum custody is transferred from the subcontractor.

6.7 Computer Database

A database must be used to track drum information. This activity will allow the immediate tracking of any environmental drum used by a subcontractor during environmental field operations and will provide a backup to the field log forms.

Subcontractor Field Personnel or Rocky Flats Project Personnel

- [1] Maintain a simple structured database to produce ASCII files (i.e., LOTUS or EXCEL spreadsheets; dBASE IV; etc.) that clearly relate the following parameters:
 - IDM drum identification numbers
 - Drum fill date
 - Location code (i.e., source location of the IDM)
 - Drilled interval (ground surface to bottom of drum interval)
 - Project name
 - Associated analytical chemistry sample identification numbers for entire depth interval (including radiation screens) of the IDM that is in the drum

6.7 Computer Database (continued)

- [2] Transcribe drum information from Forms FO.10A to digital data files.
- [3] Maintain the resulting digital information.
- [4] After the project is completed, the drum digital information in IBM compatible format will be submitted on 3-1/2" floppy discs to the subcontractor Project Manager or Rocky Flats Project Manager with annotation in the digital file and on the outer disc label to indicate the nature of the data (i.e., correlation of IDM drums to analytical chemistry samples).

7. RECORDS

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

ERP D RECORDS SOURCE

- [1] Ensure that the original and one copy, as required, of the following quality Assurance (QA) records are transmitted to the ERP D Project File Center (PFC) in accordance with 2-G18-ER-ADM-17.01, Record Capture and Transmittal:
 - Form FO.10A
 - Form FO.10B

Submission of record copies to the ERP D PFC satisfies Administrative Records Requirements, as defined in 2-S65-ER-ADM-17.02, Administrative Record Document Identification and Transmittal.

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

8. REFERENCES

EPA/540/P-87/001, A Compendium of Superfund Field Operations Methods

EPA/NIOSH/OSHA, Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities

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8. REFERENCES (continued)

Hall, Ridgway M. Jr., Tom Watson, Jeffrey J. Davidson, David R. Case,
Nancy S. Bryson, RCRA Hazardous Wastes Handbook

Policy 6-10, Rocky Flats Policy Manual

Waste Requirements Procedures

Waste Stream and Residue Identification and Characterization

Waste Environmental Management Systems

1-C88-WP-1027-NONRAD, Nonradioactive Waste Packaging

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

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

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

2-G18-ER-ADM-17.01, Records Capture and Transmittal

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

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

4-C77-WO-1101, Solid Radioactive Waste Packaging Outside of the Protected Area

4-D99-WO-1100, Solid Radioactive Waste Packaging Inside of the Protected Area

4-F99-ENV-OPS-FO.23, Management of Soil and Sediment Investigation Derived
Materials (IDM)

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

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8. **REFERENCES (continued)**

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

5-21000-OPS-FO.14, Field Data Management

5-21000-OPS-FO.16, Field Radiological Measurements