

ROCKY FLATS PLANT
EMD OPERATING
PROCEDURES MANUAL

Manual No.: 5-21000-OPS-FO
New Manual No.: 4-11000-ER-OPS-FO
Procedure No.: Table of Contents, Rev 56
Page: 1 of 4
Effective Date: 11/04/93
Organization: Environmental Management

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)
VOLUME VI: AIR (AP)

**EG&G
SUPERSEDED
DOCUMENT**

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FO.01	Air Monitoring and Dust Control	2	05/12/92
FO.02	Transmittal of Field QA Records	3	05/22/92
DCN 93.01	Working Base Maps	3	05/12/93
FO.03	General Equipment Decontamination	2	05/12/92
DCN 92.01	EXPIRED (Clarification of Decontamination)	2	Expired
DCN 92.02	Update to Clarification of Decontamination	2	12/12/92
DCN 93.01	CPT Rods	2	02/16/93
FO.04	Heavy Equipment Decontamination	2	05/12/92
DCN 92.01	Expired	1	Expired
DCN 92.02	Expired	1	Expired
DCN 92.03	Consistency Change	1	09/18/92
DCN 92.04	Update to Clarification of Decontamination	2	12/17/92
FO.05	Handling of Purge and Development Water	2	05/12/92

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

ADMIN RECORD

A-SW-001281

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DCN 92.01	Monitoring Change	2	09/18/92
DCN 93.01	Plastic Bagging Modification	2	02/17/93
FO.07	Handling of Decontamination Water and Wash Water	2	05/12/92
DCN 92.01	Consistency Change	2	09/18/92
FO.08	Handling of Drilling Fluids and Cuttings	2	05/12/92
DCN 92.04	EXPIRED (Clarification of Drill Cuttings)	2	Expired
DCN 92.05	EXPIRED (Handling of Drilling Fluids and Cuttings)	2	Expired
DCN 92.06	Clarification of Responsibility	2	09/09/92
DCN 92.07	Elimination of Drilling Requirements on Earthen Dams	2	09/10/92
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DCN 92.09	Clarification of Augering Technique for OU-6	2	10/28/92
DCN 92.10	Improve Tracking of Samples	2	12/07/92
DCN 93.01	Better Consistency of Drum Handling	2	06/29/93
FO.09	Handling of Residual Samples	2	05/12/92
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DCN 92.03	EXPIRED (Replaced by DCN 93.01 dated 2/10/93)	2	Expired
DCN 92.04	EXPIRED (Decrease in Weekly Inspections of Gray Drums)	3	Expired
DCN 92.05	Requirement Reduction	2	09/16/92
DCN 92.06	Improve Accountability	2	10/15/92
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DCN 92.08	Drum Log F or M Change	2	12/03/92
DCN 93.01	Clarification on Drums (REPLACES DCN 92.03)	2	02/10/93
DCN 93.02	Renewal (DCN 92.07)	2	03/17/93
DCN 93.03	Number of Drums per Pallet	2	05/11/93
DCN 93.04	Sample to Drum Traceability	2	06/23/93
DCN 93.05	Drum Labeling Change	2	06/29/93
DCN 93.06	Drum Sample Numbers	2	06/29/93
DCN 93.07	SVE Sampling Overlap	2	0818/93

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FO.12	Decontamination Facility Operations	2	05/12/92
DCN 93.01	Tank Inspection Log	2	04/13/93
FO.13	Containerization, Preserving, Handling and Shipping of Soil and Water Samples	2	05/12/92
DCN 92.01	Chain of Custody EXPIRED	2	EXPIRED
DCN 92.02	Improve Tracking of Samples	2	12/08/92
DCN 93.01	Chain of Custody Record	2	02/10/93
DCN 93.02	Air Bill COC	2	05/18/93
*93-DMR-000530		2	11/04/93
FO.14	Field Data Management	2	05/12/92
DCN 92.01	EXPIRED (Update Bottle Codes and Lab Codes to Current Status)	2	Expired
DCN 92.02	Clarification of Biological Locations (07/08/92- Extended)	2	11/20/92
DCN 92.03	Changes in Procedures (07/08/92 - Extended)	2	11/20/92
DCN 92.04	Expired	2	Expired
DCN 92.05	Update QA/QC Code List	2	09/28/92
DCN 92.06	Clarify Description	2	09/28/92
DCN 92.07	Update Bottle Code List	2	09/28/92
DCN 92.08	Add Sub-Contractor Abbreviations	2	10/14/92
DCN 92.09	Major Form Revision	2	11/03/92
DCN 92.10	Elimination of Non-Required Section	2	11/10/92
DCN 92.11	Update Bottle Code & Lab Codes to Current Status	2	12/09/92
DCN 93.01	New Codes	2	01/15/93
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DCN 93.03	Field Data for RFEDS	2	02/10/93
DCN 93.04	RFEDS Back-up	2	03/18/93
DCN 93.05	Replacement of Form 14 C	2	10/06/93
FO.15	Photoionization Detectors (PIDs) and Flame Ionization Detectors (FIDs)	2	05/12/92

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FO.16	Field Radiological Measurements	2	05/12/92
DCN 92.04	EXPIRED (Seismic Lines)	1	Expired
DCN 92.05	Addition of HPGe	2	11/24/92
DCN 93.01	FIDLER Surveys	2	01/15/93
DCN 93.02	LUDLUM/FIDLER Guidance	2	06/29/93
FO.17	Determining Out-Of-Specification Analytical Results for Environmental Samples		To Be Added
FO.18	Environmental Sample Radioactivity Content Screening	1	05/12/92
DCN 93.01	Clarification of Procedure	1	01/11/93
FO.19	Base Laboratory Work	2	05/12/92
FO.27	4-BO1-ER-OPS-FO.27 Collection of Floor/Equipment Hot Water Rinsate Samples	0	07/26/93
DCN 93.01	VOC Preservatives	0	8/11/93
DCN 93.02	Fresh Water Samples	0	8/30/93

DOCUMENT MODIFICATION REQUEST (DMR)

Refer to I-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures)

1. Date 8-30-93	25. DMR. No. 93-DMR- 000530
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2. Existing Document Number/Revision 5-21000-0PS-FO.13, Rev. 2	3. New Document Number or Document Number if it is to be changed with this Revision NA NA 5R-0PS-FO.13 NA
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4. Originator's Name/Phone/Page/Location B. A. Montano X8596 D3837 Bldg.080	5. Document Title Containerization, preserving, handling and shipping of soil and water samples
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6. Document Type <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Other	7. Document Modification Type (Check only one) <input type="checkbox"/> New <input checked="" type="checkbox"/> Revision <input type="checkbox"/> Intent Change <input type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Cancellation
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8. Item	9. Page	10. Step	11. Proposed Modifications
1	6	¶ 2	Delete the entire second paragraph " The on-site General Laboratories will need to be contacted before sample shipment for radiological screening and categorization of field samples".
2	Apply Water Matrix FO.13A Table		<p>adjust to "Nutrients" the following:</p> <p>Nitrate as N , Nitrite as N</p> <p>500 ml / P.G under sample volume/container</p> <p>Cool, 4°C under preservatives</p> <p>48 hours under Holding Time</p> <p align="right">DOCUMENT CLASSIFICATION REVIEW WAIVER PER R.B. HOFFMAN, CLASSIFICATION OFFICE JUNE 11, 1991</p>

12. Justification (Reason for Modification, EJO#, TPI, etc.)

This statement is not true and is not performed. We have contracts with these labs and notification of individual sample shipments not required.

If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concuror prints, and signs in Block 14, and dates in Block 15.

13. Organization	14. Print and Sign (if applicable)	15. Date (if applicable)
POM	Signature on File / M. C. Broussard N/A	9/9/93
GAS	<i>[Signature]</i>	8/21/93
RPM	Signature on File / W. S. Busby N/A	9/14/93
RE	Signature on File / R. W. Norton / NA	9/28/93
IH	Signature on File / L. A. Nilaned N/A	9/9/93
SME	<i>[Signature]</i>	8/31/93

16. Originator's Supervisor (print/sign/date)
D. D. Stagg *[Signature]* / X 6991

17. Assigned SME/Phone/Page/Location Patty Kiefer / 2698/7447/ Bldg 80	18. Cost Center 03003	19. Charge Number 986632-00	20. Requested Completion Date	21. Effective Date NA
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22. Accelerated Review? Yes No 23. ORC Review
ORC Review Not Required

24. Responsible Manager (print, sign, date)
[Signature] DERRYL R. STAGG 3 Sept 93

REVIEWED FOR CLASSIFICATION/UCN

BY NA

RECEIVING, LABELING, AND HANDLING ENVIRONMENTAL MATERIALS CONTAINERS

EG&G ROCKY FLATS PLANT
EMD MANUAL OPERATION SOP

Manual:
Procedure No.:
Page:
Effective Date:
Organization:

5-21000-OPS
FO.10, Rev. 2
1 of 19
March 1, 1992
Environmental Management

Category 2

TITLE:
RECEIVING, LABELING, AND
HANDLING ENVIRONMENTAL
MATERIALS CONTAINERS

Approved By:


(Name of Approver)

5/12/92
(Date)

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TABLE A-1 (continued)

SAMPLE CONTAINERS, SAMPLE PRESERVATION, AND SAMPLE HOLDING TIMES
FOR MISCELLANEOUS PARAMETERS

WATER MATRIX

Parameter	Sample Volume* /Container	Preservative	Holding Time
<u>Liquid - Low to Medium Concentration Samples (continued)</u>			
Toxicity Characteristic Leaching Procedure (TCLP)	4 L amber glass	Cool, 4°C	Extract within 7 days, analyze within 40 days
Fluoride	1 L/P	None	28 days
Hardness	300 mL/P, G	1:1 Nitric Acid, pH<2	6 mo
Nutrients ^b	2 L/P, G	1:1 Sulfuric Acid, pH<2, Cool, 4°C	28 days
Oil and Grease	1-L widemouth amber glass with Teflon liner	1:1 Sulfuric Acid, pH<2, Cool, 4°C	28 days
Organic Halides - Total (TOX)	250 mL amber glass with Teflon lined septum closure	Sulfuric Acid, pH<2; Cool, 4°C	14 days
pH	In situ, beaker or bucket	None	Analyze Immediately
Phenols	1-L amber glass with Teflon lined closure	1:1 Sulfuric Acid, pH<2, Cool, 4°C	28 days
Phosphate-Ortho	1-L/P, G	Cool, 4°C	48 hr
Phosphorus, Total Dissolved	500 mL/P, G	1:1 Sulfuric Acid, pH<2, Cool, 4°C	28 days
 Nitrate Nitrite	500 mL/P, G	Cool, 4°C	48 hr

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* P = Plastic (polyethylene); G = Glass

^b May include nitrogen series (ammonia, total Kjeldahl, nitrogen, nitrate-nitrite), total phosphorus, chemical oxygen demand.

CONTAINERIZATION, PRESERVING, HANDLING AND SHIPPING OF SOIL AND WATER SAMPLES

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Appropriate uses for the equipment listed are detailed in the following sections of this SOP.

5.2 DEPARTMENT/OFFICE CONTACT LIST

EG&G or its designee is responsible for providing the appropriate documentation for RAD screening, and monitoring of all field samples for shipment off site.

~~The on-site General Laboratories will need to be contacted before sample shipment for radiological screening and categorization of field samples.~~

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000530

6.0 PROCEDURES

Procedures for the containerizing, preserving, handling and shipping of soil and water samples detailed in this SOP follow strict criteria of the USEPA's Contract Laboratory Program. This SOP is intended to present general guidelines for proper sample handling and any deviations or modifications will be documented in the Scope of Work or specific Task Order as well as SOP addendum forms.

6.1 SAMPLE CONTAINERS AND PRESERVATIVE

Only sample containers certified as clean by the manufacturer will be used for sample collection. The containers and preservatives may be obtained from the contracted analytical laboratory, their designated supplier, or a suitable chemical supply company. Any preservative(s) required may be added to the container by the contracted analytical laboratory, field sampling team, sample manager, and/or on-site chemist prior to or during sample collection.