

ROCKY FLATS PLANT
EMD OPERATING
PROCEDURES MANUAL

Manual No 5-21000-OPS-FO
Procedure No Table of Contents, Rev 2
Page 1 of 2
Effective Date 10/18/91
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)

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FOR VOLUME I FIELD OPERATIONS

<u>New Proc No</u>	<u>Old Proc No</u>	<u>Title</u>	<u>Rev No</u>	<u>Effective Date</u>
FO 01	1 1	Air Monitoring and Dust Control	1	8/30/91
FO 02	1 2	Transmittal of Field QA Records	2	9/23/91
FO 03	1 3	General Equipment Decontamination	1	8/30/91
FO 04	1 4	Heavy Equipment Decontamination	1	8/30/91
FO 05	1 5	Handling of Purge and Development Water	1	8/30/91
FO 06	1 6	Handling of Personal Protective Equipment	1	8/30/91
DCN 91 01		Approved practices for disposal of surface water monitoring PPE	1	9/19/91
FO 07	1 7	Handling of Decontamination Water and Wash Water	1	8/30/91
DCN 91 01		Grout mixing equipment wash water	1	10/22/91
FO 08	1 8	Handling of Drilling Fluids and Cuttings	1	8/30/91
DCN 91 01		Delete locking requirement from drum sealing	1	8/30/91
FO 09	1 9	Handling of Residual Samples	1	8/30/91

REVIEWED FOR CLASSIFICATION/UC:1

By [Signature]

U376 11/7/91

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<u>New Proc No</u>	<u>Old Proc No</u>	<u>Title</u>	<u>Rev No</u>	<u>Effective Date</u>
FO 10	1 10	Receiving, Labeling, and Handling Environmental Materials Containers	1	8/30/91
DCN 91 01		Delete use of indelible markers	1	9/26/91
FO 11	1 11	Field Communications	1	8/30/91
FO 12	1 12	Decontamination Facility Operations	1	8/30/91
FO 13	1 13	Containerization, Preserving, Handling and Shipping of Soil and Water Samples	1	8/30/91
FO 14	1 14	Field Data Management	1	8/30/91
FO 15	1 15	Photoionization Detectors (PIDs) and Flame Ionization Detectors (FIDs)	1	8/30/91
FO 16	1 16	Field Radiological Measurements	1	8/30/91
FO 17	1 17	Determining Out-Of-Specification Analytical Results for Environmental Samples		To Be Added
FO 18	1 18	Environmental Sample Radioactivity Content Screening	1	8/30/91
FO 19	1 19	Base Laboratory Work	1	8/30/91

ENVIRONMENTAL MANAGEMENT DOCUMENT CHANGE NOTICE (DCN)

Procedure Number 5-21000-OPS- 57 Rev 1

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Title Handling of Decontamination Water and Wash Water	Date 10-17-91	DCN Number 5-21000-OPS- EQ 7 Rev 1 91 01
Expires <u>Upon Incorporation or Not</u> Procedure Revision Required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>LATER THAN 1/17/92</u>		
Scope Limitation <u>none</u>		

Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)
1	7 of 8	612 paragraph 2	Change the first sentence to read "Wash water used to clean equipment, personnel and vehicles during surface soil sampling, groundwater sampling and grout mixing equipment used during post drilling activities in work areas characterized as not potentially contaminated"

Justification (Reason for Change – Provide Numbers To Reference Corresponding Items Above)

The grout is composed of bentonite, a natural substance, mixed with RFP potable water. No downhole materials are returned to the grout plant so there is no potential for contamination.

Concurrence	Organization	Req	Date	Concurrence	Organization	Req	Date
<i>[Signature]</i>	QAPM	X	10/22/91	<i>[Signature]</i>	User	X	10/22/91
				<i>[Signature]</i>	User		10/22/91
Approval of Responsible Manager <i>[Signature]</i>			Date 10/22/91	Is Posting Req'd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, By What Date?		Date Posted

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PROCEDURES MANUAL

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VOLUME VI AIR (AP)

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FOR VOLUME III. GEOTECHNICAL

<u>New Proc No</u>	<u>Old Proc No</u>	<u>Title</u>	<u>Rev No</u>	<u>Effective Date</u>
GT 01	3 1	Logging Alluvial and Bedrock Matenal	1	8/30/91
GT 02	3 2	Drilling and Sampling Using Hollow Stem Auger Techniques	1	8/30/91
GT 03	3 3	Isolating Bedrock From the Alluvium with Grouted Surface Casing	1	8/30/91
DCN 91 01		Change in criteria for cement grouting	1	10/02/91
GT 04	3 4	Rotary Drilling and Rock Corng	1	8/30/91
DCN 91 01		Core barrel decontamination	1	10/22/91
GT 05	3 5	Plugging and Abandonment of Boreholes	1	8/30/91
DCN 91 01		Surface casing classification	1	10/22/91
GT 06	3 6	Monitoring Wells and Piezometer Installation	1	8/30/91
DCN 91 01		Industry Standard is 1 foot into Bedrock	1	10/15/91
DCN 91 02		For the Sitewide Program, Claystone Smearing does not seem to be a problem	1	10/15/91
GT 07	3 7	Logging and Sampling of Test Pits and Trenches	1	8/30/91

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<u>New Proc No.</u>	<u>Old Proc No</u>	<u>Title</u>	<u>Rev No</u>	<u>Effective Date</u>
GT 08	3 8	Surface Soil Sampling	1	8/30/91
GT 09	3 9	Soil Gas Sampling and Field Analysis	1	8/30/91
GT 10	3 10	Borehole Clearing	1	8/30/91
GT 11	3 11	Plugging and Abandonment of Wells	1	8/30/91
GT 15	3 15	Geophysical Borehole Logging	1	8/30/91
DCN 91 01		No Hole will be left Unlogged at the end of the day	1	10/15/91
GT 17	3 17	Land Surveying	1	8/30/91
GT 18	3 18	Surface Geophysical Surveys	1	8/30/91
GT 19	3 19	Field Gas Chromatographs	1	8/30/91
GT 20	3 20	Procedures for Soil Interstitial Water Sampling and Sampler Installation	1	8/30/91

ENVIRONMENTAL MANAGEMENT DOCUMENT CHANGE NOTICE (DCN)

Procedure Number 5-21000-OPS-GT 4, Rev 1

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THIS IS A

Title Rotary Drilling and Rock Coring	Date 10 18-91	DCN Number 5-21000-OPS- GT 4 91-01
Expires <u>UPON INCORPORATION OR</u> Procedure Revision Required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>NOT LATER THAN 1/10/92</u>		
Scope Limitation <u>Sitewide Geologic</u>		

Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)
1	8 of 10	60 paragraph 1	Add the following to the end of the paragraph "When coring bedrock using water as a circulating medium, no decontamination of core barrels is necessary between coring runs The core barrels will be decontaminated after each boring is complete "

Justification (Reason for Change – Provide Numbers To Reference Corresponding Items Above)

The potentially contaminated alluvium has already been isolated from the bedrock In addition, the borehole is filled with liquid and there is constant communication between the drilling fluid, the exposed borehole and the core barrels

Concurrence	Organization	Req	Date	Concurrence	Organization	Req	Date
<i>[Signature]</i>	QAPM	X	10/22/91	<i>[Signature]</i>	User	X	10/12/91

Approval of Responsible Manager <i>[Signature]</i>	Date 10/22/91	Is Posting Req'd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, By What Date? 10-24-91	Date Posted
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This is a

Procedure Number 5-21000-OPS-GT 5, Rev 1

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Title Plugging and Abandonment of Boreholes	Date 10/22/91	DCN Number 5-21000-OPS-GT 5, Rev 1
Expires <u>Upon Incorporation</u> or NOT <i>LATER THAN 1/22/92</i>		
Procedure Revision Required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Scope Limitation <u>None</u>		

Item Number	Page	Step or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)
1	6 of 8	Parag 1, line 4	Insert the following sentence AFTER approximately 3 feet. "If surface casing has been set in the borehole, see following paragraph "
2	6 of 8	Parag 2	Change "A grouted surface casing" to "A cemented surface casing"

Justification (Reason for Change – Provide Numbers To Reference Corresponding Items Above)

Wording change is to better define intent of procedure

Concurrence	Organization	Req	Date	Concurrence	Organization	Req	Date
<i>[Signature]</i>	QAPM	X	10/22/91		User	X	

Approval of Responsible Manager <i>[Signature]</i>	Date 10/22/91	Is Posting Req'd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, By What Date? 10-24-91	Date Posted
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