



Rocky Mountain  
Remediation Services, L.L.C.  
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# PROCEDURE

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**Handling of Field Decontamination Water  
and Field Wash Water**

RMRS/OPS-PRO.112

Rev.0

Date Effective: 12/30/98

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APPROVED: \_\_\_\_\_

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1. **PURPOSE**

This document describes procedures used by subcontractors at Rocky Flats Environmental Technology Site (RFETS) to handle field decontamination water and field wash water.

2. **SCOPE**

This procedure applies to all Water Operations workers handling decontamination water including: groundwater, surface water and decontamination facility personnel. Proper handling, storage and treatment of decontamination generated water is required to minimize the potential spread of contamination to other areas and personnel.

This document is a total rewrite and replaces 5-21000-OPS-FO.07, Rev. 2, Handling of Decontamination Water and Wash Water.

3. **DEFINITIONS**

**Approved Detergent** - Liquinox or other laboratory grade phosphate free detergent.

**Decontamination Water** - Water with an approved detergent or clean water used for cleaning and rinsing equipment, personnel, samples or vehicles in work areas characterized as potentially contaminated or in areas where field monitoring detected readings above background. Also, all water used to clean subsurface soil equipment (drilling equipment, Geoprobe vehicles) will be considered decontamination water, regardless of work area characterization.

**Wash Water** - Approved detergent water or clean water used to clean equipment, personnel, samples, or vehicles used at work areas characterized as not potentially contaminated and where **NO** field monitoring readings above background were detected.

**Potentially Contaminated** - Areas characterized as potentially contaminated or areas where field monitoring detected readings above background.

**NOT Potentially Contaminated** - Areas characterized as not potentially contaminated and where **NO** field monitoring readings above background were detected.

#### 4. **REQUIREMENTS**

All personnel working with decontamination water and wash water will have the proper training. Training requirements will be verified by the RFETS Project Manager.

Training may include:

- OSHA 40 Hour Hazardous Waste Operations
- Radiation Worker Level II
- Any other training required by RFETS Project Management

#### 5. **INSTRUCTIONS**

The work area will be characterized by RFETS prior to starting any field activity. Work area characterization will be based on historical chemical and radiological results of soil and groundwater samples. Radiological field monitoring surveys conducted by Health and Safety Specialists (HSSs) or Radiological Control Technicians (RCTs) will also be used to characterize an area. Types of contamination encountered may include:

- Non-Radioactive RCRA regulated hazardous substances
- Low Level radioactive contaminated substances
- Mixed Waste (Low level radioactive combined with RCRA hazardous substances)

Equipment needed to handle decontamination water or wash water may include the following:

- Enclosed Truck or trailer for holding liquid waste containers
- Personal splash protection
- Pump (hand or peristaltic)
- Drums or liquid waste containers
- Drum handling equipment (if required)

#### **Decontamination Water and Wash Water**

Decontamination water and wash water will be held in liquid material containers. Every container will be inspected for holes, leaks and adequate seals before each use. Each container must have a secure fitting lid, which will not leak if overturned. Container lids will be securely in place prior to movement. Containers will be appropriately labeled. All containers will be placed in an enclosed truck or trailer for transport. Container transport will follow the applicable procedures outlined in 1-T91-TRAFFIC-100,

Transportation Manual and 1-T93-TRAFFIC-110, On-site Transportation of Hazardous and Radioactive Materials Manual.

If required an HSS or RCT will conduct Radiological surveys on equipment, samples, containers, personnel or vehicles before leaving the work area. Radiological surveys will be conducted in accordance with the Radiological Safety Practices Manual.

#### **Water Disposition**

Filled containers will be taken to a Decontamination Facility (B966 or B903A) or to B891 Consolidated Water Treatment Facility (CWTF) for treatment. The location for water disposition will be based on historical knowledge and sediment levels. The CWTF will accept water based on criteria outlined in RF/ER-96-0018, Consolidated Water Treatment Facility Sampling and Analysis Plan.

When the containers are empty and the job is completed the containers will be decontaminated according to 5-21000-OPS-FO.03, General Equipment Decontamination.

#### **References**

5-21000-OPS-FO.03, General Equipment Decontamination

5-21000-OPS-FO.04, Heavy Equipment Decontamination

RMRS/OPS-PRO.141, Protected Area Decontamination Facility Operations

OPS-PRO.008, Main Decontamination Facility Normal Operations-FO.17

1-T91-TRAFFIC-100, Transportation Manual

1-T93-TRAFFIC-110, On-site Transportation of Hazardous and Radioactive Materials Manual

RF/ER-96-0018, Consolidated Water Treatment Facility Sampling and Analysis Plan

Radiological Safety Practices Manual