

# QUARTERLY UPDATE

FOR JANUARY 1994 THROUGH MARCH 1994

DECONTAMINATION FACILITIES  
903A PAD AND PA PAD

PREPARED BY

ENVIRONMENTAL RESTORATION  
ENVIRONMENTAL OPERATIONS MANAGEMENT

EG&G ROCKY FLATS, INC.

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## **INTRODUCTION**

The Decontamination Facilities are designed to decontaminate field equipment to prevent cross contamination between sample retrieval sites and provide a mechanism to clean equipment to meet data quality objectives. Decontamination facilities support Environmental Restoration activities performing [Resource Conservation and Recovery Act] Facility Investigation/Remedial Investigation (RFI/RI) and remedial action field work for operable units on plant site in accordance with the Interagency Agreement (IAG). There are two decontamination facilities at the Rocky Flats Plant. The Main Decontamination Facility (MDF), also known as the 903A Pad, is located at the east end of the Environmental Field Operations Yard. The Protected Area Decontamination Facility (PADF), is located in the northeast corner of the Protected Area.

Personnel working for the Decontamination Facilities (DF) are also responsible for movement of Environmental Operations Management (EOM) drums and pallets from the field and within the Field Operations Yard. This support ranges from moving equipment and unloading trucks for other subcontractors, decontaminating equipment for subcontractors, removing snow in the yard and supplying water to the shower trailer.

Golder Associates, Inc. currently operates and maintains the Decontamination Facilities for EG&G Rocky Flats, Inc. Golder Associates's contract expires June 1995.

## **REPORTS/CORRESPONDENCE**

FO.12, Rev. 2, Decontamination Facility Operation, has been revised and internally reviewed. The procedure was submitted to the Department of Energy (DOE) for comments. Changes were incorporated and the procedure has been resubmitted for internal review.

The 1993 4th Quarter Report, was submitted to DOE in fulfillment of the external milestone.

The Health and Safety Plan for the DF has been approved by all the appropriate parties. The plan has been submitted to Document Control for printing and will be available as a "Controlled Document".

The Waste Stream Identification and Characterization Book (WSRIC) for the DF was updated. The changes consisted of clearly identifying the unknown hazards that were originally stated in the WSRIC for the Resource Conservation and Recovery Act (RCRA) Hazardous Waste category. All previously unknown hazards have now been identified based on two years of historical analytical data.

## **SAMPLES**

Attached is a list of all samples taken during decontamination work during the last quarter. DWXXXXXGA indicates sampling of the decontamination water. SDXXXXXGA indicates the decontamination sediment/soil sample taken from the sump. Tanks 1-5 are the MDF tanks, and 6-10 belong to the PADF.

The sediment/soil sample is a composite sample taken from the sump and placed into approximately eight 55 gallon gray drums. After the drums are properly sealed, labeled, and smeared, they are transferred to Unit 18.03 (Tent 1), pending characterization. Based on data for the first 167 drums, no RCRA constituents have been identified and the drums are being relocated from RCRA storage (Unit 18.03). Future drums are being labeled non-hazardous and confirmation of this determination is being made upon receipt of the analytical data. The non-hazardous drums from the DF are stored in the Field Operations Yard.

## **PROBLEMS/MAINTENANCE**

The electrical steam cleaner that was ordered for the MDF has not been installed. The work order was submitted on September 27, 1993 and has been through the Davis-Bacon determination. It is estimated that

installation of the steam cleaner will be completed by April 24, 1994.

An electric diaphragm pump for the MDF is on order. Pump #2 has been repaired several times and is presently beyond repair. All the existing gas-powered diaphragm pumps are scheduled for replacement. Electric diaphragm pumps are more efficient, and will reduce air emissions.

A work package is in place to upgrade the DF, particularly the MDF. A Hazard Assessment for both DF has been performed. The assessment revealed that the rinsate and sediment from the decontamination facilities tanks are below the RCRA regulated levels. The facilities are classified below Category 3 facilities as per DOE, Standard 1027-92, because the test results of samples taken from the DF water and sediment tanks indicate no radioactive materials are present. A Statement of Work (SOW) for the modification of the facility has been written and is being reviewed. It is anticipated that improvements will begin on the MDF toward the end of July.

A preventative maintenance program is being put together for the equipment at the DF. The program will consist of a list of all the applicable equipment to include the serial no., property no., preventative maintenance requirements, and the frequency of performing the preventative maintenance.

## **ENVIRONMENTAL COMPLIANCE**

Daily RCRA inspections continue to be conducted at the MDF. Radiological and Environmental Readings were at background levels throughout the quarter.

A waste determination has been made on the decontamination wash water. Based on two years of analytical data, the decontamination water has been determined non-hazardous. A letter was written to DOE requesting withdrawal of the MDF from Interim Status. EOM has compiled all data from the first day in operation to present in support of the finding. EOM is

presently awaiting DOE's concurrence.

Radsorb, a non-hazardous, nonradioactive, cross-linked homopolymer which absorbs free liquids has been approved for use in the drums. The absorbent has been ordered and will be utilized when filling drums with soil/sediments that are generated at the DF.

Approximately 500 Investigative Derived Material (IDM) drums were moved in from the buffer zone this quarter. The drums were moved into the Field Operations Yard and are being managed by EOM.

#### **ANTICIPATED OPERATIONS FOR NEXT QUARTER**

PADF support will be given to the Operable Unit 4 (OU4) Solar Pond Project and the Integrated Operable Units. Both projects anticipate using the facility from May through July.

It is anticipated that the MDF will be withdrawn from Interim Status. When this occurs, the daily RCRA tank inspection will no longer be required. Normal weekly inspections will continue. Alternative treatment/disposal facilities will be sought when the MDF is withdrawn from Interim Status. Preliminary steps have been taken to take the decontamination water to the Sewage Treatment Plant (STP). A more in depth study and formal documentation is needed prior to using the STP as a disposal facility for the water.

The non-hazardous drums that are stored in Unit 18.03 are in the process of being moved into the Field Operations Yard. A permanent storage area for these drums is being sought.

AccuVac™ reagent vials are ampules containing chemicals that react with aqueous sample allowing measurement of specific parameters using a colorimetric spectrophotometer. The AccuVac™ vials are used in the Groundwater and Surface Water programs. It was determined that the vials used to sample for nitrates/nitrites contain detectable levels of

cadmium. The cadmium-containing liquid has been determined to be a RCRA waste. Segregation of the RCRA liquid waste from the glass vials and plastic containers is expected to take place next quarter. A Health & Safety Plan and draft procedures have been written for the safe operation and handling of this task. Surface Water and Groundwater, the two groups that use these vials to sample for the nitrates/nitrites has eliminated the use of AccuVacs™.

## **SUMMARY/CONCLUSIONS**

Golder Associates is the designated subcontractor to operate and maintain the Decontamination Facilities. Presently, MDF support is required only minimally for decontamination operations. It is primarily being utilized to dispose of non-RCRA contaminated wellhead purge water.

A hazardous waste determination has been made on the water and the sediment/soils generated at the facility. Analytical data reveals that the decontamination water and sediment/soils are far below the maximum concentration limits, deemed hazardous by RCRA.

The Health & Safety Plan will be distributed as a controlled document. FO.12 and the Field Sampling Plan (FSP) are presently undergoing internal review.

The Qualification Standard Package (QSP) for the Decontamination Facilities has been approved and is being utilized to train all personnel that use the DF. Training consists of an oral examination followed by on the job training. A qualification badge is issued when the training is complete.

## SAMPLE IDENTIFICATION NUMBERS (SUMP SEDIMENT)

QUARTER: 1 (JANUARY 1 THROUGH MARCH 31)

SAMPLE #	DRUM #'S	SAMPLE DATE	ANALYSIS TYPE	SUITE SHIP	LABS	MDF/PADF
SD00008GA	4450,4451,4452	02/01/94	INORGANICS/ORGANICS	02/03/94	ITLSL	MDF
	4453,4454,4455		RADS: PU/AM/U	02/03/94	TMAN	
SD00009GA	4450,4451,4452	02/23/94	INORGANICS/ORGANICS	02/23/94	ITLSL	MDF
	4453,4454,4455					
SD00010GA	4456,4457,4458	03/02/94	INORGANICS/ORGANICS	03/03/94	ITLSL	MDF
	4459 4460,4461,4462		RADS: PU/AM/U	03/03/94	TMAN	

## SAMPLE IDENTIFICATION NUMBERS (DECON WATER)

QUARTER: 1 (JANUARY 1 THROUGH MARCH 31)

SAMPLE #	TANK #	SAMPLE DATE	ANALYSIS TYPE	SUITE SHIP	LABS	MDF/PADF
DW00015GA	2	02/15/94	INORGANICS/ORGANICS/W-Q	02/16/94	RFWG	MDF
			RADS: GROSS ALPHA/BETA	02/16/94	TMAN	
DW00016GA	3	02/15/94	INORGANICS/ORGANICS/W-Q	02/16/94	RFWG	MDF
			RADS: GROSS ALPHA/BETA	02/16/94	TMAN	
DW00017GA	1	03/09/94	INORGANICS/ORGANICS/W-Q	03/10/94	RFWG	MDF
			RADS: GROSS ALPHA/BETA	03/10/94	TMAN	
DW00018GA	4	03/16/94	INORGANICS/ORGANICS/W-Q	03/17/94	RFWG	MDF
			RADS: GROSS ALPHA/BETA	03/17/94	TMAN	
DW00019GA	3	03/28/94	INORGANICS/ORGANICS/W-Q	03/29/94	RFWG	MDF
			RADS: GROSS ALPHA/BETA	03/29/94	TMAN	
DW000204G	7	03/09/94	INORGANICS/ORGANICS/W-Q	03/10/94	RFWG	MDF
			RADS: GROSS ALPHA/BETA	03/10/94	TMAN	