SWMU 25 - Containment Pad Area

Table of Contents

List of Tables

List of Figures

5.5.25 SWMU 25 - Containment Pad Area

The location of Solid Waste Management Unit (SWMU) 25 is shown on Figure 5.5.25-1a and SWMU 25 monitoring stations and sample locations are provided on Figure 5.5.25-1b. SWMU 25, the Containment Pad Area, is located north of SWMU 15, west of SWMU 5, and east of the pond water return channel. Monitoring wells MW-06-25 and MW-97-7 are located southeast and west, receptively, of SWMU 25. These wells are side-gradient to SWMU 25 based on groundwater flow contours.

The containment pad was constructed in 2002 as a work area for packaging the phosphorus containing precipitator dust and cleaning the metal pans described in Section 5.5.17. The area where the containment pad was constructed was never used for phosphorus production and there are no underground utilities or process pipes in the area. The containment pad was constructed to contain the solids and water used in the cleaning operations. The concrete pad has secondary containment with a leak detection system.

The excess water used in the cleaning operations collected in the containment pad's sump and was reused in the packaging operations. The solids were removed from the sump at the completion of the packaging operations and the remaining water (a.k.a. "sump water") was sampled on October 15, 2002 prior to disposal. The sample location is depicted on Figure 5.5.25- 1b and the analytical results are summarized in Table 5.5.25-1. RCRA metals were not detected in the sump water sample.

All solid and liquid materials were removed from the concrete pad at the completion of the cleaning operations. No leaks were detected during inspections of the leak detection system. The U.S. EPA and Montana Department of Environmental Quality (MDEQ) reviewed and agreed to the design and plans for the activities conducted on the containment pad. The operations were conducted in accordance with the approved plan. In addition, the U.S. EPA and MDEQ observed some of these operations.

The containment pad was also used during the corrective measures implemented for SWMU 3, 4 and 5. Carbon brick and block suspected of containing elemental phosphorus were placed on the containment pad for sampling and testing of the core samples. The ignitable carbon brick and block were contained in drums that were temporarily stored on the pad before being shipped to the off-site incinerator. The containment pad was also used to temporarily store drums containing elemental phosphorus contaminated soils during the Parcel 26 wastewater pipe removal activities described in Section 5.5.24. All solid and liquid materials were removed from the concrete pad at the completion of the cleaning operations.

The containment pad was also used during the pilot scale distillation system testing. Crude phosphorus was excavated from the clarifier and placed in drums that were moved to the containment pad. The crude phosphorus from various drums was blended to the desired concentrations and transferred to the distillation pot. The distillation pot was transported to the pilot scale system and inserted into the furnace. The products and residues from the pilot test batches were also stored in drums on the containment pad. All solid and liquid materials were removed from the concrete pad at the completion of the pilot scale operations.

5.5.25.1 Conclusions

Presently, there are no drums stored on the containment pad. The Containment Pad Area could be used during implementation of other corrective measures. When the containment pad is no longer needed for site activities, it will be closed in accordance with a closure plan that will include soil sampling around the perimeter of the containment pad and beneath the pad, when demolished.

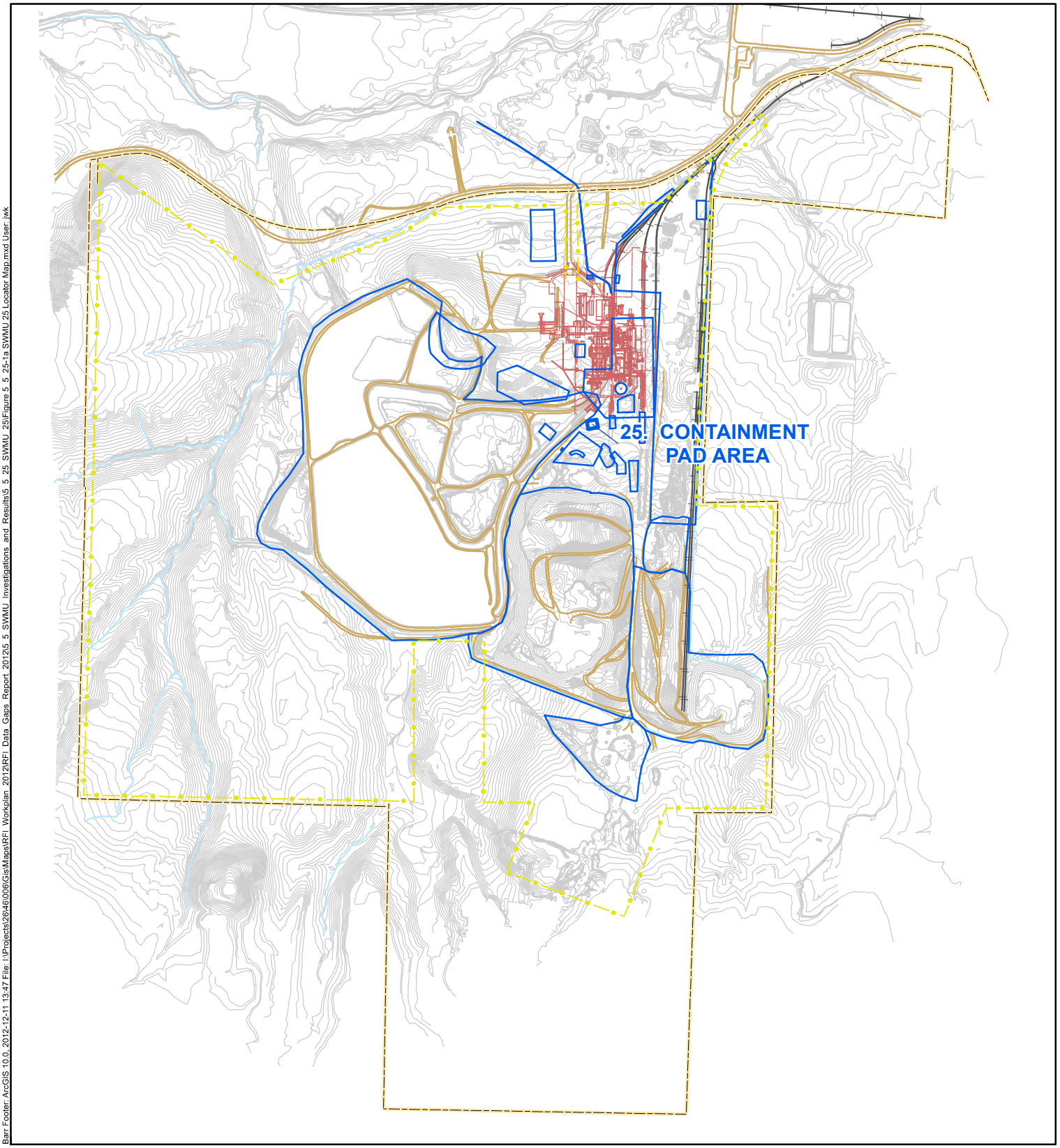
Tables

Table 5.5.25-1
Sump Water Quality Data - TCLP Metals
SWMU 25
Rhodia Silver Bow Plant
[concentrations in mg/l]

Chemical Name / Analysis Location			Arsenic Lab	Barium Lab	Cadmium Lab	Chromium Lab	Lead Lab	Mercury Lab	Selenium Lab	Silver Lab
Location ID	Sample Date	Sample Type								
Sump Water	10/15/2002	N	< 0.5	< 10	< 0.1	< 0.5	< 0.5	< 0.02	< 0.1	< 0.5

12/12/2012
P:\Mpls\26 MT\46\2646006\WorkFiles\RFI\RFI Final Ph I 2012\Section 5.5 SWMU Investigations&Results\Section 5.5.25-SWMU 25\Tables\NEW Table 5.5.25-1 Sump Water TCLP Metals.xlsx

Figures



Barr Footer: ArcGIS 10.0, 2012-12-11 13:47 File: I:\Projects\26946\006\GisMaps\RFI Workplan 2012\RFI Data Gaps Report 2012\5.5 SWMU Investigations and Results\5_5_25 SWMU 25\Figure 5_5_25-1a SWMU 25 Locator Map.mxd User: jwk

SWMU 25

Other SWMUs

Elevation Contour

Drainage

Railroad

Road

Former Plant Structures

Property Boundary

Fence Line

N

Feet

1,000 0 1,000

Figure 5.5.25-1a

SWMU 25 LOCATION
Rhodia Silver Bow Plant
Montana

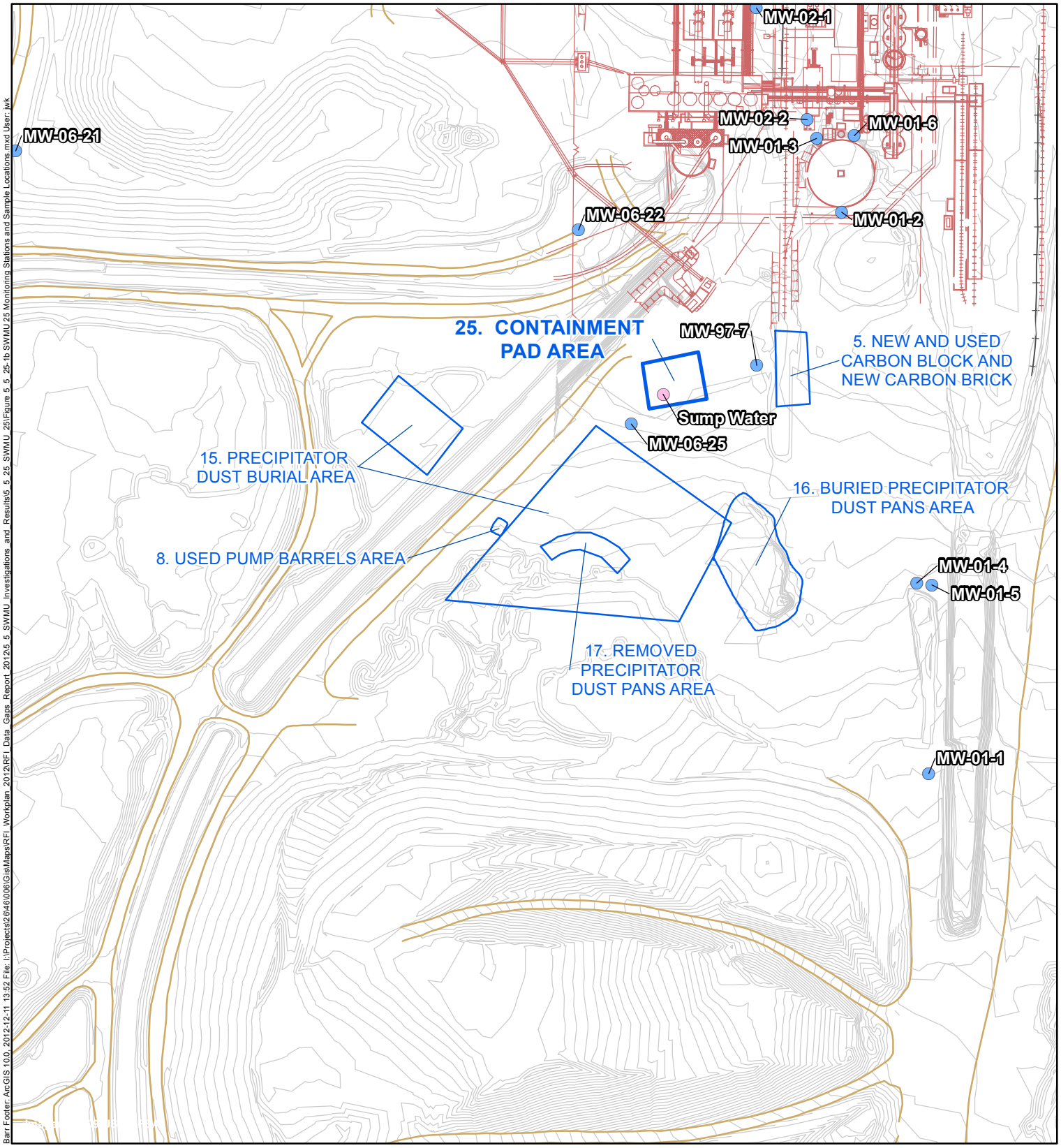


Figure 5.5.25-1b

SWMU 25
MONITORING STATIONS
AND SAMPLE LOCATIONS
Rhodia Silver Bow Plant
Montana