

SWMU 17 - Removed Precipitator Dust Pans Area

Table of Contents

5.5.17 SWMU 17 – Removed Precipitator Dust Pans Area5.5.17-1

5.5.17.1 References5.5.17-2

List of Figures

Figure 5.5.17-1a SWMU 17 Location

Figure 5.5.17-1b SWMU 17 Monitoring Stations and Sample Locations

5.5.17 SWMU 17 – Removed Precipitator Dust Pans Area

The location of Solid Waste Management Unit (SWMU) 17 is shown on Figure 5.5.17-1a and SWMU 17 monitoring stations and sample locations are provided on Figure 5.5.17-1b. SWMU 17, the Removed Precipitator Dust Pans Area, is located immediately north of the coarse slag pile and lies entirely within SWMU 15 – Buried Precipitator Dust Area.

On April 8, 2002, the Montana Department of Environmental Quality (MDEQ) and Rhodia executed a Tolling and Standstill Agreement to address regulatory issues associated with fourteen pans of phosphorus-bearing material, including eight pans of precipitator dust, that were being stored at Rhodia's Silver Bow Plant at the location shown on Figure 5.5.17-1b. These pans of phosphorus-bearing materials were later defined as SWMU 17 in the Final Phase 1 RFI Work Plan (Barr 2009). The purpose of the Tolling and Standstill Agreement was to allow the continued storage of the material in the fourteen pans in a manner that was lawful, safe and protective while a decision was made on the ultimate disposition of the material in the pans. It was agreed that Rhodia could continue to properly store the pans during the period of the Standstill Agreement, and that such storage beyond 90 days would not be the basis of an MDEQ enforcement action or penalty assessment.

By November 1, 2002, Rhodia had removed the phosphorus-bearing material from the fourteen pans, drummed the material, and shipped the drums to Trade Waste Incineration in Sauget, Illinois. These drums were managed as conditional hazardous wastes and sent offsite with manifests and land disposal restrictions documentation. The cleaned pans were sold as scrap metal for recycling. By a letter dated January 26, 2003, MDEQ agreed that as a result of the removal of the phosphorus material from the pans, the Tolling and Standstill Agreement terminated on November 1, 2002.

The ground surface at SWMU 17 is covered by slag which has been sufficiently characterized for risk assessment purposes. Slag contains naturally occurring radioactive materials (NORM). The radioactivity is almost exclusively due to trace levels of uranium and its decay products (Lloyd, 1983). Typical radionuclide concentrations for the long lasting radionuclides in slag are as follows:

Radionuclide	Typical Concentration
Pb-210	1 pCi/g
Ra-226	28 pCi/g
Th-230	47 pCi/g
U234	24 pCi/g
U238	24 pCi/g

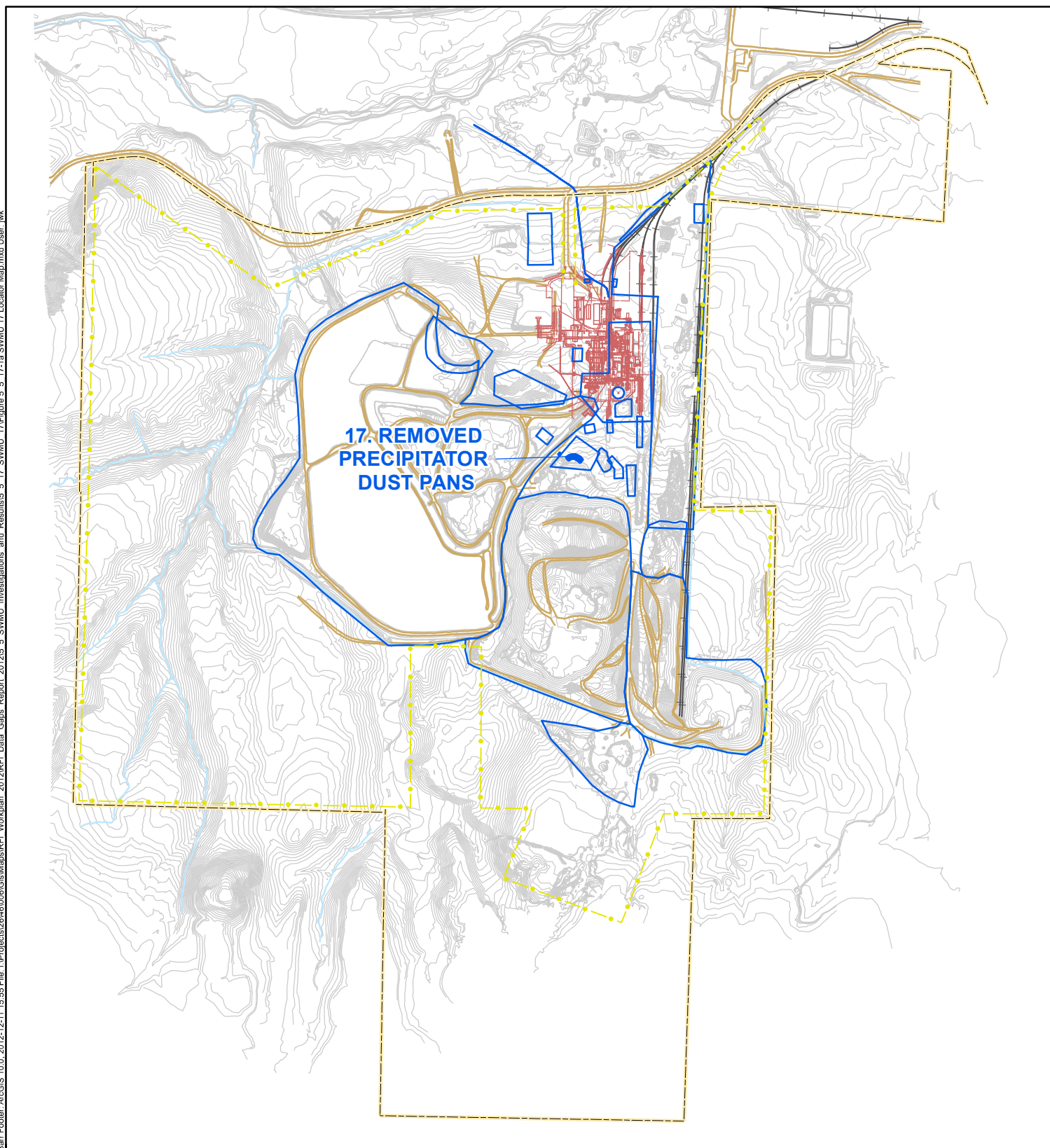
Although certain metals are present in the slag at concentrations above the background/reference area concentrations, the concentrations are not likely to represent a public health hazard (*see* Appendix 5.5.12-A). However, a site-specific risk assessment is needed to evaluate whether the slag at the Silver Bow Plant represents a public health hazard. Additional information regarding slag is presented in Sections 5.5.12 and 5.5.13 of this report. Since the ground surface is covered by slag and slag has been sufficiently characterized for risk assessment purposes, no soil samples have been collected from this SWMU.

Corrective measures have been implemented for SWMU 17. The phosphorus-bearing materials were managed as conditional hazardous waste and incinerated at Trade Waste Incineration in Sauget, Illinois. The metal pans were cleaned and sold as scrap for recycling. Since the pans and phosphorus-bearing materials have been addressed, and SWMU 17 is located within SWMU 15 (Precipitator Dust Burial Area), no further investigation or corrective actions are necessary for SWMU 17.

5.5.17.1 References

- Barr 2009. Final Phase 1 RCRA Facility Investigation Work Plan, Corrective Action Order on Consent, Docket No. RCRA-08-2004-0001 Rhodia Silver Bow Plant Butte, Montana March 25, 2009.
- Lloyd, L.L. June 1983. Evaluation of Radon Sources and Phosphate Slag in Butte, Montana. Occupational Health Bureau, Montana Department of Health and Environmental Sciences.

Figures



- SWMU 17
- Other SWMUs
- Elevation Contour
- Drainage
- Railroad
- Road
- Former Plant Structures
- Property Boundary
- Fence Line

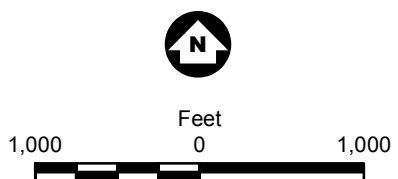


Figure 5.5.17-1a

SWMU 17 LOCATION
Rhodia Silver Bow Plant
Montana

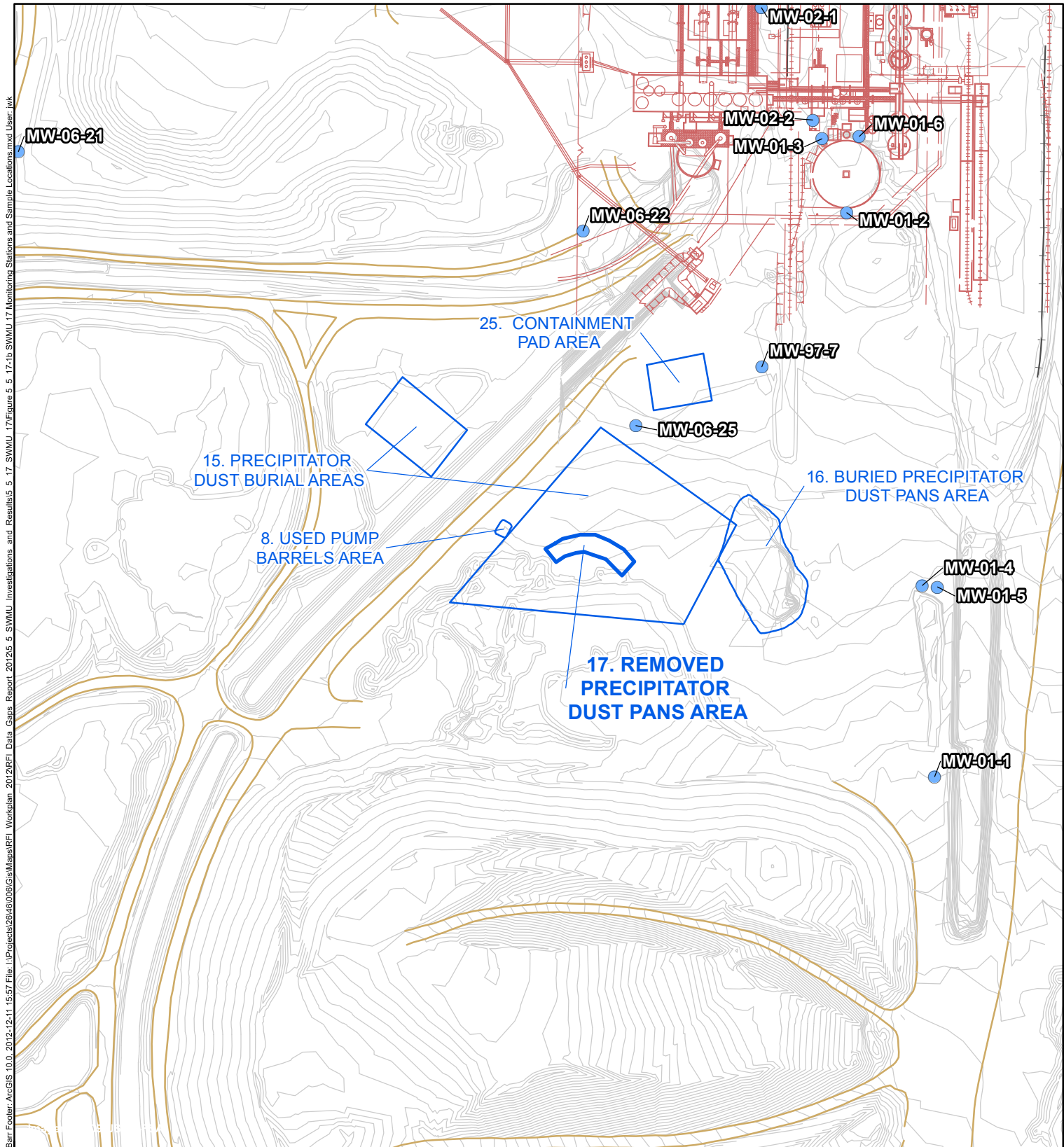


Figure 5.5.17-1b

SWMU 17
MONITORING STATIONS
AND SAMPLE LOCATIONS
Rhodia Silver Bow Plant
Montana