



Wetlands Determination

Lewis & Clark Station

Prepared for
Montana-Dakota Utilities Co.

October 2018

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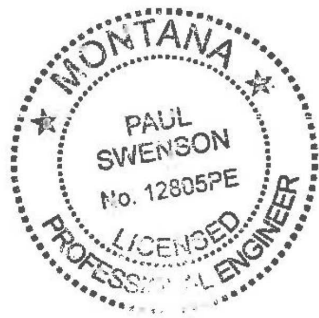
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Figure 1 Wetlands near Facility

Certifications

I hereby certify that this Wetlands Determination report for the Lewis & Clark Station meets the requirements of the Coal Combustion Residuals Rule 40 CFR 257 Subpart D, and the requirements of 40 CFR §257.61.



A handwritten signature in cursive script that reads "Paul T. Swenson".

Paul T. Swenson
Barr Engineering Co.
MT Registration Number 12805PE

Dated this 15th day of October 2018

1.0 Introduction

Montana-Dakota Utilities Co. (MDU) operates the Lewis & Clark Station (Lewis & Clark), a coal-fired steam-electric generating plant, near Sidney, Montana, to produce electrical energy. Coal combustion residuals (CCR) is a by-product of plant operation. Management of CCR produced by electric utilities is subject to the requirements of 40 CFR 257 Subpart D, Disposal of Coal Combustion Residuals From Electric Utilities (CCR Rule).

The Scrubber Ponds, a single, multi-unit CCR unit, at Lewis & Clark, is an existing CCR surface impoundment (40 CFR §257.53) that receives sluiced flue-gas desulfurization sludge and fly ash material. This CCR wetlands determination report has been developed to satisfy the requirements of 40 CFR §257.61 as they apply to the Scrubber Ponds.

2.0 Demonstration

As required by 40 CFR §257.61, existing CCR surface impoundments must not be located in wetlands unless the owner or operator demonstrates that additional criteria has been met as defined in section §257.61 of the Rule.

The term *wetlands* as defined by 40 CFR §232.2 (Clean Water Rule, also known as the 404 program) means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

A desktop review was performed using the U.S. Fish and Wildlife Service National Wetland Inventory (NWI) and available historical aerial photos from years 1949, 1965, 1974, 1992, 1997, 2005, 2009, and 2013 (provided by Historical Informational Gatherers).

Figure 1 shows surface usage at and near the Scrubber Ponds overlain with wetland areas obtained from the NWI. The Yellowstone River and the ditch (Drainage Ditch #12) are mapped as riverine by the NWI. Areas adjacent to Drainage Ditch #12 are freshwater emergent wetland and freshwater pond wetland types. The ditch is used locally for irrigation purposes and the presence of water flows within the ditch are common. The Scrubber Ponds are not located in these wetland or riverine areas, so there is no location restriction that results from these features.

An area north of Drainage Ditch #12 is mapped as freshwater emergent wetland and freshwater pond wetland types. Based on historical aerial imagery, this area was likely mined for aggregate sometime between 1974 and 1992. Mining likely created depressed ground surfaces and impounded water that resulted in the conditions identified by the NWI. The Scrubber Ponds are not located in these wetland areas, so there is no location restriction that results from these features.

Additionally, Figure 1 shows that the East Scrubber Pond and the Sewage Lagoon are mapped by the NWI as freshwater ponds. The NWI uses an "x" to identify excavated or human-made excavated features. The Sewage Lagoon was constructed by MDU to serve Lewis & Clark and is, therefore, a human-made structure that is not subject to 404 program requirements. Since the sewage lagoon is not a CCR unit, it is not subject to §257.61.

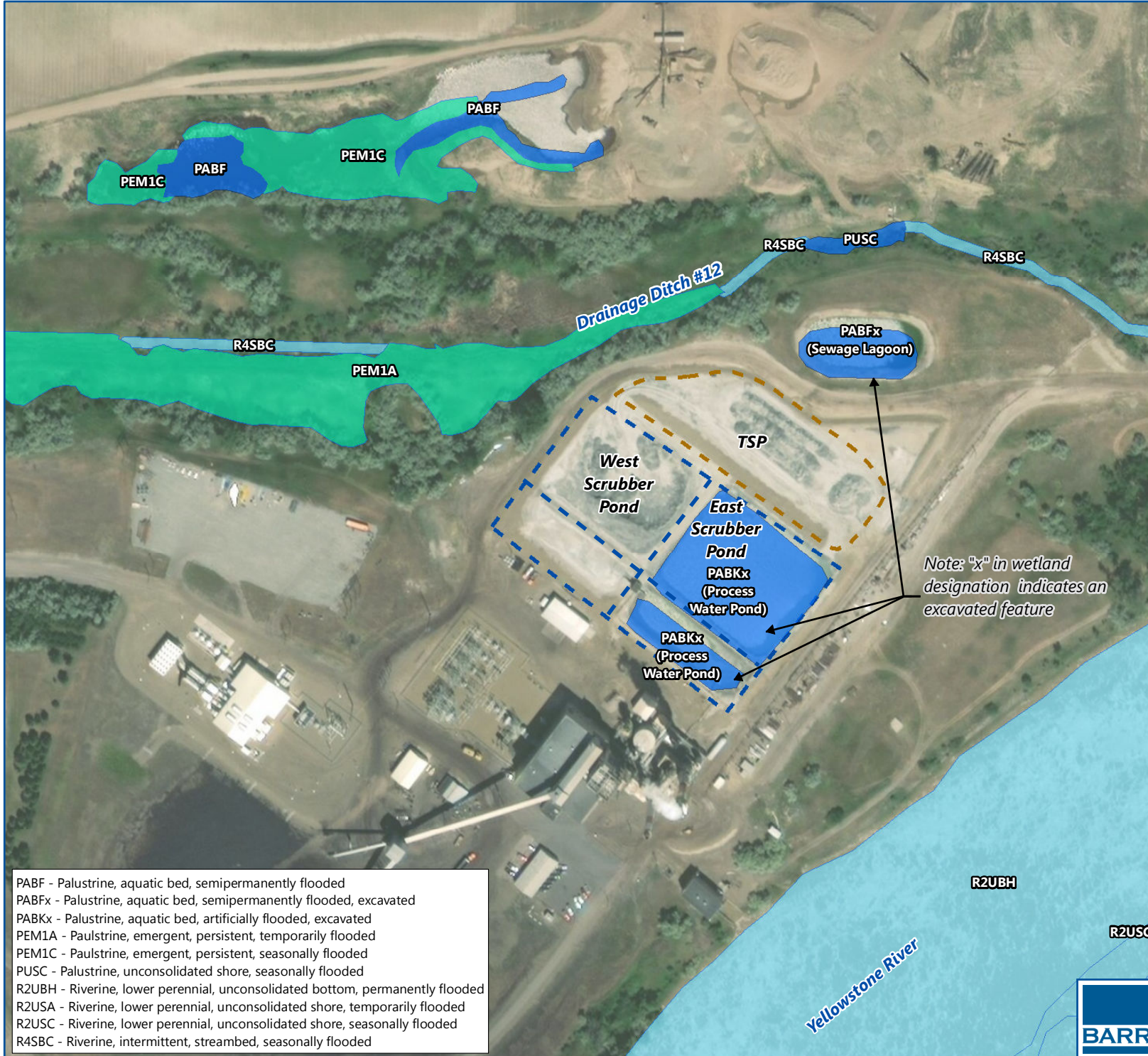
The East Scrubber Pond is an engineered structure constructed by MDU as a process water pond to serve Lewis & Clark, and is therefore a human-made structure that is not subject to 404 program requirements, nor does it fit the definition of a wetland since there is no vegetation in the Scrubber Ponds. Because it is a constructed facility and used for process water, the NWI classification is incorrect and the Scrubber Ponds are not located in wetlands. The provisions of §257.61 do not prohibit locating the Scrubber Ponds as shown on Figure 1.

Based on the results of the desktop review, the location of the Scrubber Ponds conforms to the location restriction of §257.61.

3.0 References

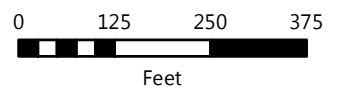
HIG, Historical Informational Gatherers, Historical Aerial Photos taken 1949, 1965, 1974, 1992, 1997, 2005, 2009, and 2013. <http://www.historicalinfo.com/>

NWI, U.S. Fish and Wildlife Service National Wetland Inventory. Accessed September 12, 2018.



-  Scrubber Ponds
-  Temporary Storage Pad (TSP)
- Wetlands (National Wetland Inventory)**
-  Freshwater Emergent Wetland
-  Freshwater Pond
-  Riverine

Note: "x" in wetland designation indicates an excavated feature



Imagery: 2015 NAIP, USDA-FSA

- PABF - Palustrine, aquatic bed, semipermanently flooded
- PABFx - Palustrine, aquatic bed, semipermanently flooded, excavated
- PABKx - Palustrine, aquatic bed, artificially flooded, excavated
- PEM1A - Palustrine, emergent, persistent, temporarily flooded
- PEM1C - Palustrine, emergent, persistent, seasonally flooded
- PUSC - Palustrine, unconsolidated shore, seasonally flooded
- R2UBH - Riverine, lower perennial, unconsolidated bottom, permanently flooded
- R2USA - Riverine, lower perennial, unconsolidated shore, temporarily flooded
- R2USC - Riverine, lower perennial, unconsolidated shore, seasonally flooded
- R4SBC - Riverine, intermittent, streambed, seasonally flooded

WETLANDS NEAR FACILITY
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 Sidney, Montana



FIGURE 1