

**MEMORANDUM****To: Ryan Weiss, Deputy Trust Lands Administrator, Forestry and Trust Lands Division, MT-DNRC****From: Teresa Kinley, Geologist/Hydrologist, Minerals Management Bureau, FTLD, MT-DNRC, and  
Andrea Stanley, Hydrologist/Soil Scientist, SWLO, MT-DNRC****RE: Updates on Outfall Pipes in/near Clark Fork at Former Smurfit-Stone/Frenchtown Mill Superfund Site, Location: Sections 14, 23, (24, and 11) of T14N, R21W, Missoula County, Montana****Summary**

This memo was brought on by an inquiry from Missoula County on State of Montana Department of Natural Resources & Conservation (MT-DNRC, or Department) interest/purview in the reclamation planning at the Smurfit-Stone/Frenchtown Mill Superfund Site, specifically, the outfall infrastructure and berms located near the right bank of the Clark Fork. DNRC Trust Lands Staff have made two visits to the site (November 2019 and November 2023) to observe the location of infrastructure (primarily outfall pipes) between the low-water marks of the Clark Fork. Some outfall infrastructure is located below the low-water mark as is the bank of the river which may or may not be part of the constructed berm. Outfalls 2 and 3, and possibly Outfall 1 are sites of interest. Communication with parties about potential options to fund and contract the removal and reclamation of outfalls/pipe and related material on State Trust Land and involvement with the EPA superfund process will be important in moving forward.

**Introduction**

Based on historic evidence of use in commerce, the State of Montana considers this segment of the Clark Fork of the Columbia River to be a navigable waterway. The State of Montana holds ownership of the land and minerals below navigable rivers, streams, and related acreage as established in the Equal Footing Doctrine, Montana statutes, and case law. The MT-DNRC, Forestry and Trust Lands Division administers these lands on behalf of the State.

Montana Code Annotated (MCA) 70-16-201 provides for State ownership from low water mark to the low water mark on navigable water bodies." MCA 70-1-202 provides for State ownership of all land below the water of navigable lakes or streams." According to Administrative Rules of Montana [ARM 36.25.1101(1)]. "Bed" means an area on or above state-owned land between the low-water marks of a navigable river channel. "Low-water mark" means the location of the water line of a navigable river at the lowest tenth percentile of historic annual flow as measured by the nearest upstream hydrograph station [ARM 36.25.1101(12)].

The Department considers navigable waterways to be those (waterways or segments of waterways) for which it has historical evidence of use in commerce. The Department believes that based on available evidence and case law, these waterways would be judicially determined as navigable for title purposes. MT-DNRC has not located any leases or licenses or similar documents from MT-Dept of State Lands, or MT-DNRC, (as landowner) that provided for emplacement of pipe below the low water flow discharge in the above noted areas that also contain active channel of the Clark Fork of the Columbia.

**November 13, 2019 Site Visit**

In the afternoon on November 13, 2019, MT-DNRC staff met with Allie Archer, EPA Remedial Project Manager for the Smurfit-Stone/Frenchtown Mill Superfund Site to field-verify and assess the footprint existing outfalls have with State Trust Lands. MT-DNRC staff present included: Andrea Stanley, Hydrologist, SWLO and Larry Schock, Civil Engineering Specialist, WRD MRO. Brian Bartkowiak, Environmental Science Specialist, Natural Resource Damage Program, DOJ, also attended.

To estimate the location of the low-water mark relative to infrastructure observed November 13<sup>th</sup>, we calculated the lowest tenth percentile of historic annual flow ( $Q_{LOW}$ ) to be 2,197 cubic-feet per second (cfs) at USGS 12353000 "Clark Fork below Missoula MT," which is located approximately 8.5 miles upstream of the Smurfit-Stone/Frenchtown Mill Superfund Site. In the afternoon on November 13<sup>th</sup>, the provisional river discharge at the USGS gage is 2,970 cfs, or approximately 770 cfs greater than the  $Q_{LOW}$ . At the USGS gage station location this change in discharge results in a 0.47-foot change in river stage. This change in stage may not be equivalent at the river geometries at the Smurfit-Stone /Frenchtown Mill Superfund Site, but are likely similar; therefore, we assumed the "low-water mark" at the observed outfall locations listed below is 0.5 feet below the water surface elevation observed on November 13<sup>th</sup>.

1. No outfall infrastructure located below the low-water mark was visually observed [as defined in ARM 36.25.1101(12)] at or near the structures located at "Outfall 1" (46.9582, -114.2193; Section 23, T14N R21W). Other structures are located beyond (and upslope) of the low-water mark, including riprap armoring of a constructed berm. The photo below shows the condition of the river bank at the Outfall 1 location.



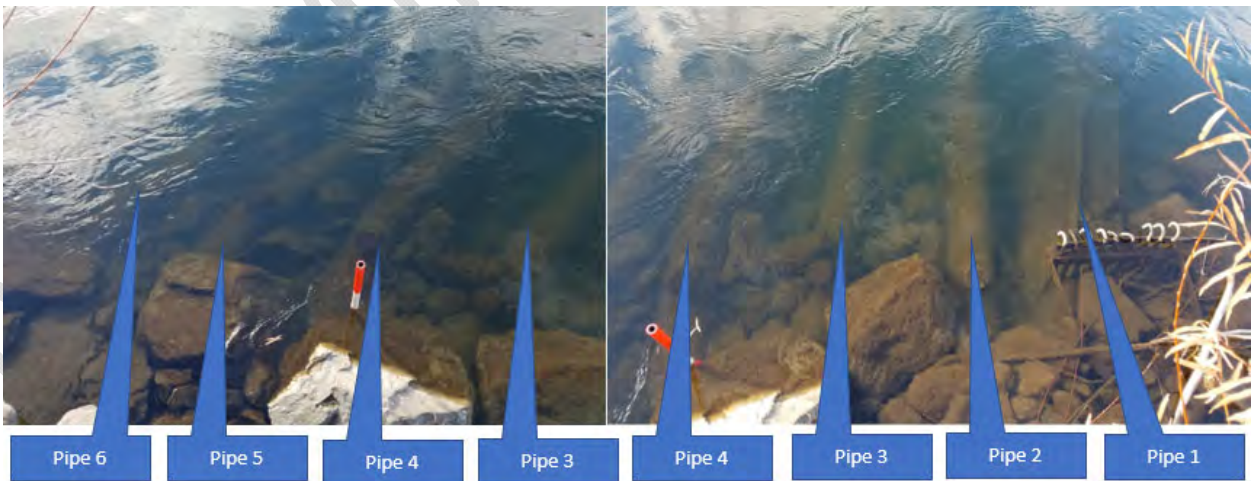
2. At "Outfall 2" (46.9602, -114.2199; Section 23, T14N, R21W) a single three-foot diameter steel pipe extends beyond a berm located on the right bank of the Clark Fork and below the low-water mark. On November 13, we observed the pipe to extend at least 30 feet onto the river bed below the water surface elevation.

Aerial imagery of the site from July 22, 2013 (see below), indicates the pipe extending approximately 40 feet beyond the wetted perimeter of the river. The river discharge at the upstream USGS on that day of the aerial image varied between 1,980 and 2,050 cfs, well below the  $Q_{LOW}$ . Therefore, based on this imagery and the correlated river discharge for July 22, 2013,

we assume the pipe extends at least 40 feet onto the river bed beyond the low-water mark.



- At “Outfall 3” (46.9771, -114.2271, Section 14, T14N, R21W), see below, six pipes extend beyond a berm located on the right bank of the Clark Fork and extend onto the riverbed beyond the low-water mark. Five of the pipes are approximately 1-foot diameter and the sixth pipe has a three-foot approximate diameter; all six extend at least five feet (likely farther) beyond the low-water mark. Two photos taken November 13, 2019, below, show the view of the pipes from the right bank of the Clark Fork.



- A fourth outfall, “Outfall 4” (46.9900, -114.2250, Section 11, T14N, R21W) is located off a slough adjacent to the Clark Fork and would not encroach on the riverbed.

During the November 2019 field meeting, Allie Archer explained more of the current status of the Superfund Site and Brian Bartkowiak discussed the Natural Resource Damage Program (NRDP) damage assessment of the site. Here are some of the key points:

- In 2019, the Smurfit-Stone/Frenchtown Mill Superfund Site was involved in the Remedial Investigation and Risk Assessment phase of the Superfund remedial process. This process consisted mainly of understanding the contamination and its migration within the beyond the site and understanding the risks. This information would be used in subsequent phases which would include addressing the identified risks through remediation. The Remedial Investigation and Risk Assessment phase was not anticipated for completion until 2021, but is now ongoing. In 2019, a cleanup plan was not likely until at least 2023, and now has been extended for several more years. Updated info is posted by the EPA here: <https://cumulis.epa.gov/supercpad/cursites/csinfo.cfm?id=0802850>  
This site now notes that EPA will begin a Climate Vulnerability Assessment in September, 2023
- Staff at the NRDP are conducting a natural resource damage assessment (NRDA) at the Site where damages for injuries to natural resources. A Preassessment Screen was completed in April 2018 and an Assessment Plan was completed in 2021. Neither report mentions the outfalls beyond their use for discharge during mill operations. Based on the conversation with Brian and a forwarded Memorandum from Alicia Stickney (attached), the NRDP is aware that the DNRC Trust Lands may have purview and interest to provide authorization to the responsible party to remove the outfall pipes that are located on the riverbed between the low water marks.

## ATTACHMENT – Memorandum from NRDP to DNRC

MEMORANDUM

TO: John Tuobbs

CC: Harley Harris  
Doug Martin

FROM: Alicia Stickney

DATE: March 1, 2018

SUBJECT: Smurfit-Stone MPDES Permit Outfalls  
Locations, Descriptions, Photos

As we discussed on the phone this morning, attached is a brief summary description including lat/longs, Google Earth maps, and photographs of the three Montana Pollution Discharge Elimination System Permit MT-0000035 outfalls on the Clark Fork River by the Smurfit-Stone Mill Site in Missoula County. Please let me know if I can help track down additional information to further the discussion on these outfalls.

Note that Outfall 4 flows into a slough adjacent to the Clark Fork River, but not directly into the river.

Sources of information:

Montana Department of Health and Environmental Sciences. 1995. Authorization to Discharge Under the Montana Pollutant Discharge Elimination System Permit MT-0000035, Stone Container Corporation.

Montana Department of Environmental Quality. 2014. Authorization to Discharge Under the Montana Pollutant Discharge Elimination System Permit MT0000035, M2Green Redevelopment, LLC.

URS Operating Services, Inc. 2011. Preliminary Assessment Smurfit-Stone Mill, Missoula, Missoula County, Montana. TDD No. 1105-6. Report prepared for U.S. Environmental Protection Agency Contract No. EP-W-05-050. 36 p.

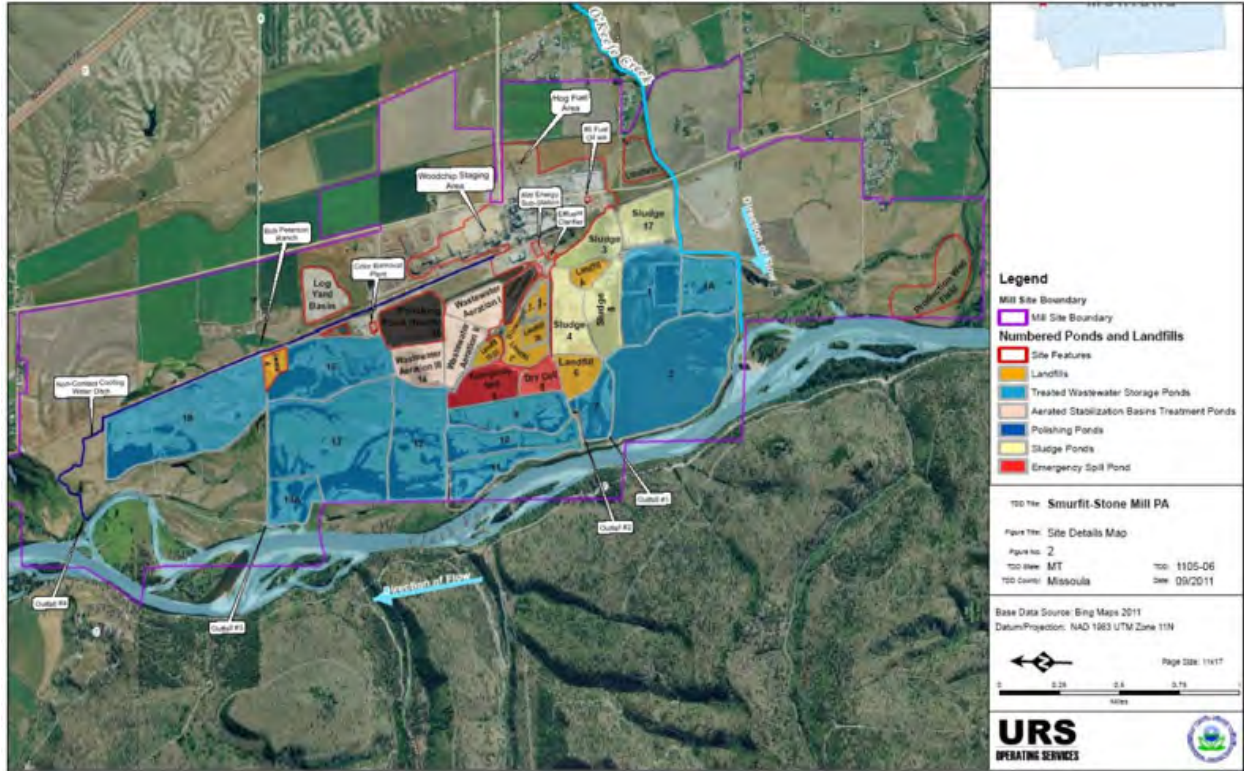


Figure 1. Generalized map of Smurfit-Stone site facilities; river flow direction is right to left (URS).

PRELIMINARY

Permit No.: MT0000035

From the 2014 Permit Renewal:

Outfall 001 -

Location: At the end of the pipe, discharging into the Clark Fork River, located at 46.95819 N latitude and 114.21928 W longitude.



Photo courtesy of Missoula County.

From the 2014 MPDES Permit Renewal:

Outfall 002 -

Location: At the end of the pipe, discharging into the Clark Fork River, located at 46.96022 N latitude and 114.21992 W longitude.

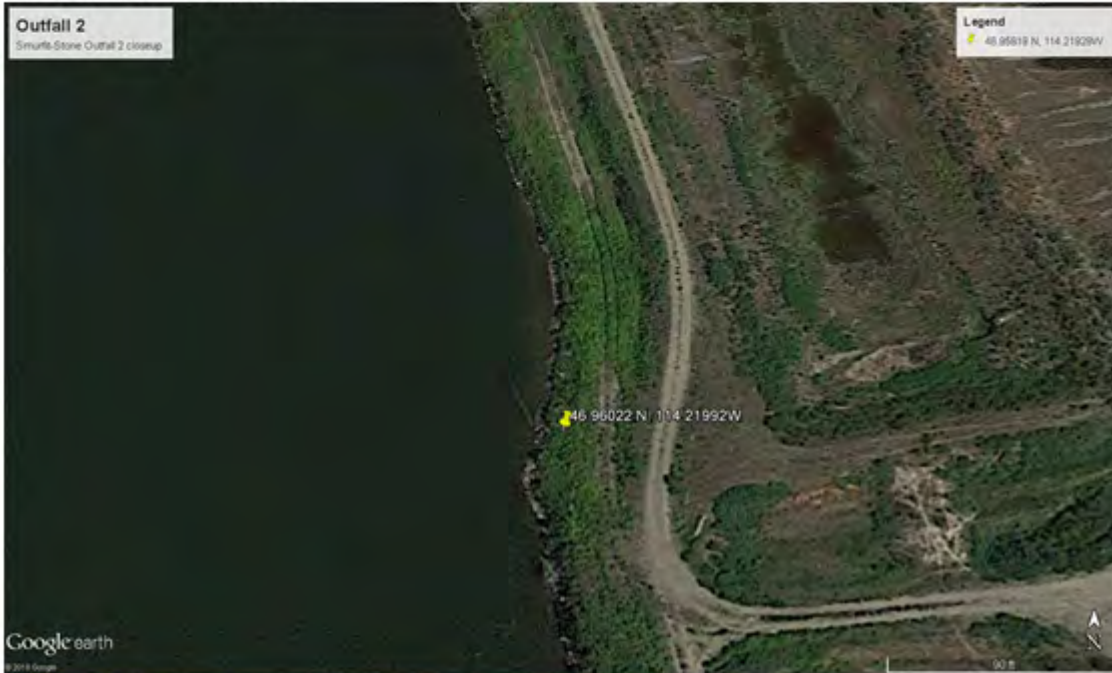


Photo courtesy of Missoula County.



From the 2014 MPDES Permit Renewal:

Outfall 003 -

Location: At the end of the pipe, discharging into the Clark Fork River, located at 46.97717 N latitude and 114.22708 W longitude.



Photo Courtesy of Missoula County

Note: This pipe is a diffuser. From the 1995 Permit:

“Point 003 is a diffuser to assure effluent mixing at lower river flows.”

**Smurfit-Stone Site Visit on November 2, 2023**

MT-DNRC conducted a site visit to gather information on the current site status with regard to outfalls that may encroach on State ownership areas.

*Attendees:*

Trevor Taylor, (Chief, Minerals Management Bureau (MMB), Forestry & Trust Lands Div., MT-DNRC)  
Teresa Kinley (Geologist/Hydrologist, MMB., Forestry and Trust Lands Div., MT-DNRC)  
Sierra Farmer (Trust Lands Program Mgr., Southwestern Land Office (SWLO), MT-DNRC)  
Amy Helena (Missoula Unit Manager, SWLO, MT-DNRC)  
Andrea Stanley (Hydrologist/Soil Scientist SWLO, MT-DNRC)  
Allie Archer, Remedial Project Manager, US EPA  
Emma Rott, Project Manager, Helena (MT) Superfund Section, US EPA  
David Tooke, Geochemist, Newfields Consulting, Consultant to the Potential Responsible Parties (PRPS)

T. Kinley checked discharge at the USGS gage below Missoula, MT prior to leaving Helena to travel to Missoula on November 2, 2023. Preliminary data indicated the discharge was 2,240 cfs, just slightly above the low-water discharge computed by Andrea Stanley in 2019.

We met a little after 3 pm at the Smurfit Stone entrance at 14377 Pulp Mill Road off of Mullan Road. Allie and David indicated that they remain in the Remedial Investigation and Risk Assessment phase. Additional soil and groundwater sampling has started. Their berm monitoring program is continuing. Allie, David, and Emma took the group on site to see the outfall areas of interest: 1, 2, 3, and 4.

At Outfall 1, no surface pipe was visible. Confirmation of presence or absence of outfall pipe is needed and determination of what constituted the outfall. Part of a berm with consistent slope goes into the water at this site. Features looked similar to those seen in the Outfall 1 photo on page 2.

At Outfall 2 we found the ~ 3 ft. diameter pipe, see below. Amy Helena takes a closer look.



We continued to Outfall 3 where we saw the hook apparatus associated with the “diffuser” see photo below. The conditions at this point did not provide a clear view of all the pipes extending into the river. Photos on page 3 provide a clearer view.



After this stop we proceeded farther north to reach Outfall 4. This outfall empties into a slough area on the west side of the two-track trail (see left photo below). The adjacent photo shows David Tooke at the outfall of the former pond area on the east side of the trail.



From a navigable-waters ownership standpoint, MT-DNRC would not own this area.

Per previous e-mail from Elena Evans, Missoula County, on Nov. 9, 2022, Outfall 5 is in a pond area in Section 24, T14N, R21W, not at river’s edge. According to this e-mail, it discharges to groundwater. We did not see Outfall 5.

## Conclusions

This memo results from an inquiry from Missoula County on MT-DNRC Trust Land's interest/purview in the reclamation planning at the Smurfit-Stone/Frenchtown Mill Superfund Site, specifically, the outfall infrastructure and berms located near the right bank of the Clark Fork.

This Superfund project continues in the Remedial Investigation and Risk Assessment phase due to additional sampling and other information gathering. This created timeline shifts for Superfund activities at this site.

MT-DNRC (WRD and/or FTLD) has no knowledge of any studies/evaluations by MT-DNRC of the Smurfit-Stone berms. Some outfall infrastructure is located below the low-water mark, as is the bank of the river, which may or may not be part of the constructed berm. MT-DNRC legal input is needed on case law decisions, particularly regarding man-made changes along the banks of navigable/non-navigable rivers.

Relic outfall structure could be buried below the shoreline and streambed at Outfall 1. Confirmation of presence or absence of outfall structure at Outfall 1 is needed.

Removal of the outfalls encroaching on State ownership is necessary. The November 2, 2023 field visit confirmed that Outfalls 2 and 3 occur in part or whole on the bed of the Clark Fork of Columbia River at/below the low-water discharge.

Communicating with parties willing to fund and contract the removal and reclamation of outfalls/pipe and related material on State land will be important in moving forward. This involves Outfalls 2 and 3, and possibly Outfall 1. Per Allie Archer on Nov. 30, 2023, any work/plans would have to be coordinated with the EPA superfund team up front. This would help avoid incurring any potential liability or possibly unintended contamination release. Allie also indicated that Remedial Activity is currently scheduled to begin in 2029.

## References

Abt Associates Inc., 2021, Assessment Plan: Smurfit-Stone/Frenchtown Mill Site  
Frenchtown, Montana, *Prepared for:* Montana Natural Resource Damage Program

Montana Natural Resources Damage Program, Smurfit-Stone/ Frenchtown Mill Site, at <https://dojmt.gov/lands/sites/smurfit-stone/> accessed 2023Nov29.