

**Interim Contingency Plan**  
**Smurfit Stone Mill Site**

Martin McComb, Federal On-Scene Coordinator  
USEPA Emergency Response Unit  
May 31, 2018

**Contents**

- i. Background
- ii. Interim Monitoring Inspections
- iii. Interim Notifications
- iv. Interim Response Priorities
- v. Interim Sampling Requirements
- vi. Recommendations for a Final Contingency Plan

**i. Background**

The 3,200-acre Smurfit-Stone Mill site is located 11 miles northwest of Missoula, Montana. A pulp mill operated on site from 1957 to 2010. The core industrial footprint of the Site covers approximately 100 acres. Approximately 1,200 acres of the Site was and continues to be used largely for agricultural purposes including grasslands for cattle grazing and cropland irrigated for alfalfa and grain crops. The remaining 1900 acres of the Site consist of a series of unlined ponds used to store treated and untreated wastewater effluent from the mill, as well as primary sludge recovered from untreated wastewater. Some ponds initially used to store wastewater were subsequently drained and used for the landfilling of solid wastes from the mill. The Potential Responsible Parties (PRPs) are currently performing a CERCLA Remedial Investigation under the oversight of USEPA's Remedial Program.

The Site is positioned along the Clark Fork River and the area is currently undergoing a 30-year flood event. USEPA and stakeholders are monitoring the berm that separates the Site from the river for signs of instability.

The PRPs are currently performing a stability analysis of the berm and collecting geotechnical information that could be used to model hydrologic impacts to the Site should a failure of the berm occur. The PRPs are also monitoring conditions along the berm and have recently collected water samples to determine if potentially contaminated water on-site is impacting the river. Furthermore, the PRPs have also brought in fill material to fortify one area along the inside of the berm as a precautionary measure.

USEPA deployed an Emergency Response Team to the Site on May 24, 2018 to provide assistance and develop an Interim Contingency Plan to be used until a more comprehensive final contingency plan can be developed.

## ii. Interim Monitoring Inspections

The PRPs shall perform all required inspections.

### Daily Inspections

Daily Inspections shall be performed each day that the NOAA Gage Station on the Clark Fork River below Missoula, Montana (BELM8) exceeds 11 feet for any part of that day. These inspections shall include careful observation of the entire length and on both sides of the Clark Fork River berm. Careful attention will be paid to all locations where floodwaters are at, have recently been at or are advancing onto the toe of the berm. This effort shall specifically include existing Areas of Interest as well as the identification, photographic documentation and geolocation of any new Areas of Interest. Areas of Interest include:

- Boils or unusual hydraulic dynamics including changes to either the flow of groundwater or surface water on either side of the berm.
- Subsidence including cracks or other visible changes to the topography of the berm.
- Visible erosion including any visual undermining or erosion that visibly impacts any of the material used to construct the berm.
- Berm failure including any sloughing of the material used to construct the berm.
- Visible plumes or changes in color in the river along the berm that appear to be emanating from the Site.
- Any and all other concerns that could impact the stability of the berm including, but not limited to, unusual rodent activity, vehicular activity, trespassing, changes in vegetation, debris in the river, etc.

As of May 26, 2018, the existing Areas of Interest include narrow surface cracks south of Outfall 1 and the repaired boil area on the southern berm, landside of pond 13A near Outfall 3.

### Weekly Inspections

Weekly Inspections shall be performed whenever the NOAA Gage Station on the Clark Fork River below Missoula, Montana (BELM8) exceeds 10.5 feet for any part of that week.

These inspections shall include all the components of a Daily Inspection as well as:

- Record the depths at all accessible staff gauges on the Site and photograph representative gauges. Comment on the water elevation relative to the preceding inspection.
- Record detailed observations and photographic documentation from all pre-established monitoring locations at the Site.

The Weekly Inspection will also include an overview of any trends noted over the course of the previous week, including recommendations for proactive measures for any areas of interest where trends indicate potential failures or concerns.

### iii. Interim Notifications

The PRPs shall perform all required notifications. These notifications shall be organized in three classes: Level 1, Level 2 and Level 3.

Level 1 notifications shall be performed after each Daily and Weekly Inspections during which no new issues or Areas of Interest are identified. Level 1 notifications shall include an emailed report within 12 hours after completion of the inspection.

Level 2 notifications shall be made if there are any changes in conditions at existing Areas of Interest or if any new Areas of Interest are discovered. Level 2 notifications shall include an emailed report within 12 hours after completion of the inspection.

Level 3 Notifications shall be performed if there is an actual or imminent failure of the berm. Level 3 Notifications shall be made immediately by phone first followed by an email.

#### Notification Details

Level 1	Level 2	Level 3	Organization	Contact	Phone Number
X	X	X	USEPA	Sarah Sparks	406-782-7415 Sparks.Sarah@epa.gov
X	X	X	USEPA	Allie Archer	620-755-9388 Archer.Allie@epa.gov
X	X	X	Missoula County	Travis Ross	406-543-3873 tross@missoulacounty.us
X	X	X	Missoula County	Todd Seib	406-552-8800 tseib@missoulacounty.us
X	X	X	Community Advisory Group	Jeri Delys	406-880-4080 jeri@centric.net
X	X	X	Montana DEQ	Keith Large	406-444-6569 klarge@mt.gov
		X	Missoula County EOC	Duty Officer	911 406-830-0974
		X	USEPA EOC	Duty Officer	303-312-6510

### iv. Interim Response Priorities

The primary berm along the Clark Fork River is supplemented by a secondary internal berm that is closer to the industrial core of the Site. The ponds and impoundments inside the secondary internal berm are considered the highest priority areas to protect in a flooding event due to the potentially higher concentration of contaminants in these areas. In the event of a flood that breaches or overtops the Clark Fork River berm, response teams shall assess and address conditions on-Site in the following order of priority:

- Highest Priority: Those waste and water impoundments inside the secondary interior berm that could contain largely untreated materials that could be released into the

Clark Fork River: P3, P4, P5, P17, SWB6, SB19, SB20, SWBA, SWBCa, SWBCb, SWBF, and SWBG.

- Moderate Priority: Those areas inside the secondary interior berm other than those identified above as Highest Priority.
- Lowest Priority: Those areas between the Clark Fork River berm and the secondary interior berm.

#### **v. Interim Sampling Requirements**

In the event of an actual failure of the berm where water is flowing through the Clark Fork River berm and into the former wastewater treatment ponds, samples shall be taken to determine potential impacts to the Clark Fork River. Samples should be immediately collected upstream and downstream of the Site as well as near the location of the failure to the extent that it is both practical and safe. Samples shall be analyzed for Total Metals (EPA Method 6010) and dioxins (EPA Method 8290) with a turn-around of 48-hours or as fast as possible.

#### **vi. Recommendations for a Final Contingency Plan**

1. The likely worst-case scenario is a significant breach in the Clark Fork River berm during high flood stage conditions that might threaten the internal berm. Pre-planning for this scenario should include the identification of non-contaminated on-site and off-site sources of borrow materials, 1-3 cubic yard supersacks, fine aggregate, stone and other materials that could be used in an emergency to slow-down and stop the breach and perform other response actions. Arrangements should be made with local contractors to mobilize and deliver equipment and personnel for anticipated response actions.
2. Visually assess the integrity of the internal secondary berm and perform repairs as necessary.
3. Identify downstream intakes and relevant stakeholders and include these contacts in the notification system as appropriate.
4. Include contingencies to account for the catastrophic failure of upstream ice dams and other flood regimes associated with ice flows in the Clark Fork River.
5. Perform modelling of how water from the Clark Fork River would flow on-site should the berm fail in a variety of flow regimes.
6. Perform modelling to better understand how river dynamics in the Clark Fork River could erode or otherwise impact the berm in a variety of flow regimes.
7. Engage stakeholder and include this input in the development of a Final Contingency Plan.