

Emergency Action Plan (EAP) for Coal Combustion Residuals (CCR)

April 13, 2023 Update

BACKGROUND / PURPOSE

- CCR Rules require opportunity for annual face-to-face meeting with first responders to discuss Ash Pond Emergency Action Plan
- First met April 2018
- Most recent meeting April 2022

Sherco CCR Ponds

Bottom Ash Pond

Bottom Ash Pond 2

Scrubber Solids Ponds 1&2 (Capped)

Scrubber Solids Pond 3

Mississippi River

Google Earth

2000 ft

N



CCR RULE REQUIREMENTS

- Federal Requirement for all CCR disposal facilities
 - Ponds and Landfills
- EPA updated and by Carlson McCain Engineers and placed in Xcel Energy CCR web-site
 - https://xcelenergy.com/environmental/responsible_operations/coal_ash_management
 - Web-site also contains other reports on the design, operation, permitting and inspections of the CCR facilities.
 - EAP is required for each Pond – not the Landfill
- Other State permits for the Ponds
 - MPCA NPDES – liner requirements and protection of groundwater
 - DNR – dam safety permit

Sherco CCR Ponds

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Mississippi River

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ASH PONDS

Bottom Ash

- Heavier Ash collects in Bottom of Boiler
- Larger sized material – rocky gravel to sand

Scrubber Solids (Fly Ash)

- Lighter Ash collected with SO₂ solids in air scrubber
- Finer, clay sized material

SCRUBBER SOLIDS PONDS 1&2

- Inactive closed ponds
 - 162 acres
 - No free-standing water
 - Barrier over top to keep precipitation out
 - Wells installed to pump out remaining pore water
 - Pond 1 pore water level is already below surrounding grade

SCRUBBER SOLIDS POND 3

- 115 acre, active Pond
- Water level 40' above surrounding grade
- Mostly flowable fine particles
- Also used to store excess process water inventory
 - Construction of Pond 4 will began this year – in service mid 2024
- Ash filling from South to North
- Will be closed in phases
- North end will continue to operate years past 2030
 - Time to treat/discharge remaining water

Sherco CCR Ponds

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Bottom Ash Pond 2

Scrubber Solids Ponds 1&2 (Capped)

Scrubber Solids Pond 3

Mississippi River

Google Earth

2000 ft

N



BOTTOM ASH PONDS 1&2

BAP (BAP 1)

- 18 acre inactive pond – not yet capped
- Stopped receiving ash and water Oct 31, 2020
 - Liner didn't meet current CCR minimum requirements
- Water level is currently at surrounding grade, will be lowered further this year
 - 2024 closure

BAP 2

- 18 acre pond active pond
- Started using Oct 2020
- Water level currently controlled 10 to 15' above surrounding grade
- 2031 closure

DIKE FAILURE SCENARIOS

Water Level Overtopping Dikes

- BAP2 has overflow pipe back to Recycle Basin
- Must keep water levels 3 ft below top of liner

Dike Structural Failure

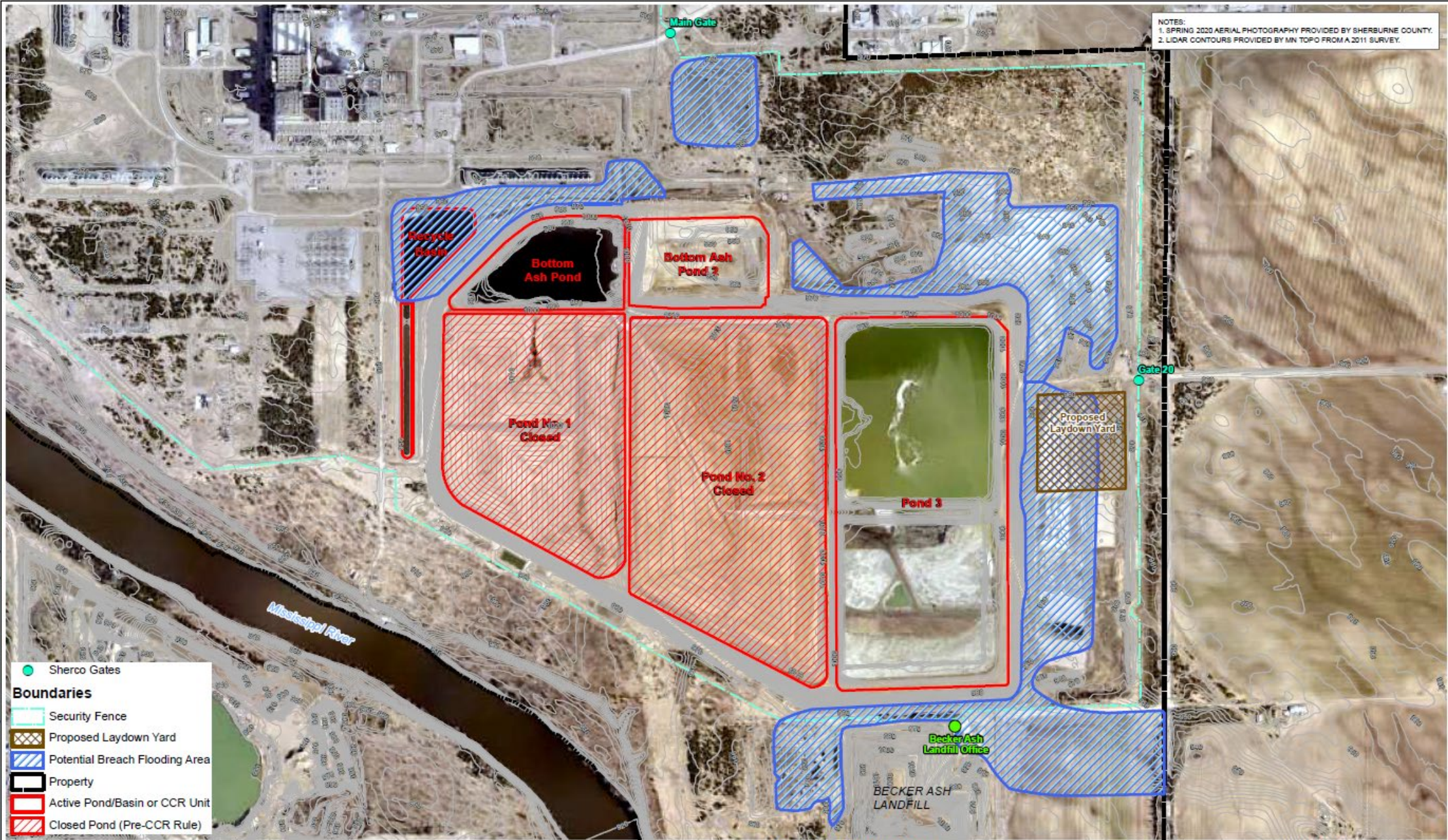
- Dikes designed to meet Professional Engineer and DNR Dam Safety standards
- Interior dikes designed with backup containment by the primary dikes

Inspections conducted weekly with an annual PE inspection report

- 2009 EPA inspection rating – Satisfactory

DIKE FAILURE IMPACTS

- Inundation area map
- Water and ash would be contained on-site within adjacent borrow pits
- Closest neighbor at risk is RDF Ash Landfill
- BAP2 failure could flood Recycle Basin/Holding Basin
 - Xcel Stop discharge to Mississippi by pumping water to Pond 3



NOTIFICATION PROCEDURE

- If it appears that a significant dike breach could occur:
 - Xcel will contact Sherburne County Emergency Response Office via 911
 - 911 will dispatch emergency resources (e.g., Police and Fire) to Sherco
 - Xcel Staff will meet Emergency Responders at Main Gate and escort them to the site of the emergency.
 - Xcel Landfill and Yard crews will initiate repairs.
 - Additional earthwork contractor support called in as needed.
 - Sand and topsoil for patching any leaks, is available from the existing borrow pits and stockpiles at the Pond and also at the Sherco Landfill.

BOTTOM ASH POND



BOTTOM ASH POND 2



SCRUBBER SOLIDS POND 3



Subject: First Responder Meeting
Location: 13999 Industrial Blvd (13999 Industrial Blvd, Becker, Minnesota 55308); RR_MN_ShercoAdminBldg_02_ConfRm_D_Max18_TV

Start: Thu 4/13/2023 11:30 AM
End: Thu 4/13/2023 1:30 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Neal, Michelle M
Required Attendees: Brent Baloun; clindbloom@ci.becker.mn.us; beckerchief22@gmail.com; joel.brott@co.sherburne.mn.us; Kyle.breffe@co.sherburne.mn.us; seth.hansen@co.wright.mn.us; trent.seamans@state.mn.us; Rosvold, Rick A; Keller, Jess R; Kaczmarek, John C; Berrington, Jeff J; Bluhm, Steven L; Wark, Thomas H; Haugen, Kasey A; Potter, David J; Notch, Patrick S; Capra, Randy A; Brixius, Aaron P; Osendorf, Mark F
Optional Attendees: Mike Grimsley (mgrimsley@smmpa.org); Bader, Samuel M

Agenda

- Welcome and Introductions – Michelle Neal
- Sherco Site Changes
- Site Ponds
- Hazardous Materials and Waste at Sherco – John Kaczmarek
- Emergency Action Plan Discussion:
 - o Comments, Questions, Concerns, Experiences/Feedback
- Plant Operating Changes – Tom Wark
- Other Topics
- Plant Tour – Tom Wark/Dave Potter

Michelle Neal

Xcel Energy | Responsible By Nature

Plant Director – Sherburne County Generating Plant

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