Agenda

• Background/AOC Overview
• AOC Status Update:
  • Completed Reports
  • Under Revision
• Plant Site Remedy Evaluation Overview
• Cleanup Criteria & Risk Assessment Overview
• Closure Plans Update
• Financial Assurance Update
• What’s Next?
What is coal ash?

- Coal Combustion Residual (CCR); byproduct of burned coal
- May contain traces of metals naturally present in the coal
- Regulated by Federal CCR Rule

Fly ash (magnified 2000x)

Bottom ash (magnified 6000x)
Administrative Order on Consent (AOC)

- Addresses groundwater contamination from coal ash disposal ponds
- Divides site into 3 areas:
  - Plant Site
  - Units 1&2 Evaporation Ponds
  - Units 3&4 Effluent Holding Ponds
AOC Process

Site Characterization Report (describes the current condition of each area)

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Cleanup Criteria & Risk Assessment Report (identifies constituents of interest, risk for exposure to contaminants, and cleanup criteria for contaminants)

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Remedy Evaluation Report (evaluates remediation alternatives)

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DEQ selects remedy
AOC Process (continued)

1. DEQ selects remedy
   
   Remedial Design/Remedial Action Work Plan (implementing selected remedy)
   
   Final Remedial Action Report (describes completed remedy)
   
   Facility Closure Plan (long-term maintenance and monitoring)
DEQ-Approved Completed Reports

- All Site Characterization Reports
- Background Screening Level Report
- Revised Plant Site Remedy Evaluation Report has preliminary conditional approval
  - Public comment period from August 13th – September 12th
Drafts Currently Being Revised

- Plant Site Cleanup Criteria & Risk Assessment Report
- Units 1&2 Cleanup Criteria & Risk Assessment Report
- Units 1&2 Remedy Evaluation Report
- Closure Plans (all areas)
Cleanup Criteria & Risk Assessment Report Overview

- Plant Site and Units 1&2 Areas Reports nearing completion
- Data gap for radium
- Determine source
- Cleanup criteria for other constituents are approved
Constituents of Interest

- Boron
- Sulfate
- Cobalt
- Lithium
- Molybdenum
- Selenium
- Manganese
- Radium (more studies needed)
Plant Site Remedy Evaluation Report Overview

• Preliminary conditional approval
• Alternative consists of:
  – Additional groundwater capture
  – Clean water injection wells
  – Ash dewatering
  – Contingency plans
• Addresses groundwater impacts by 2049
• Mass of boron and sulfate decrease by 97% and 100% respectively
Arrows represent groundwater flow for Alternative 4 based on the fate and transport model (NewFields, 2017)

Cross Section Showing Conceptual Injection and Capture Systems Beneath Former Units 1 & 2 A Pond
Talen Montana
Colstrip, Montana

Geosyntec consultants

Columbia, Maryland
June 2018
• First draft submitted May 4, 2018
• Alternative consists of:
  – Additional groundwater capture
  – Clean water injection wells
  – Contingency plans
• DEQ did not approve the report
• Selected alternative did not achieve cleanup criteria by target date (2049)
Closure Plans Overview

- Plans required additional details
- Talen responded to comments on August 13th
- Draft final plans will be submitted by August 31st
Financial Assurance Status

• Three phases of financial assurance
• Talen has submitted Phase I
• Phase II is required upon DEQ approval of Remedy Evaluation Reports
• Phase III is required upon DEQ approval of Closure Plans
What’s Next?

- Revised Closure Plans will be submitted by August 31, 2018
- Units 3&4 Cleanup Criteria & Risk Assessment will be submitted by September 21, 2018
- Units 3&4 Remedy Evaluation Report will be submitted in November 2018
Questions?

Public comments can be submitted to:

Sara Edinberg
PO Box 200901
Helena, MT 59620-0901

or

DEQColstrip@mt.gov

Contact Info:

Sara Edinberg
Project Manager
sedinberg@mt.gov
(406) 444-6797

http://deq.mt.gov/DEQAdmin/mfs/ColstripSteamElectricStation