

2015 Annual Plan and 5-Year Plan

**Administrative Order on Consent
Regarding Impacts Relating to
Wastewater Facilities Comprising the Closed-Loop System**

**Colstrip Steam Electric Station
July 14, 2015**

Background

On August 3, 2012, PPL Montana and Montana Department of Environmental Quality (MDEQ) entered into an Administrative Order on Consent to address ground water seepage from wastewater facilities at the Colstrip Steam Electric Station. Under Section X of this Order, PPL Montana, now Talen Montana is obligated to submit for MDEQ review and approval annually an Annual and 5-Year Plan. The following document provides the Draft 2015 Annual and 5-Year Plan under this Order.

AOC Related to Wastewater Facilities at Colstrip

2015 Annual Plan – provide a status of activities underway and detailed schedule for scope of work for projects in current year, including a schedule of completion of Site Reports.

Activities specifically identified in the AOC:

- Submit proposed 2015 Annual Plan and 5-Year Plan to MDEQ for review. Target 5/27/15.
- Conduct 2015 Annual Meeting with MDEQ, finalize Annual & 5-year plans. Target 7/27/15.
- Address MDEQ's final Plantsite Site Report comments by 7/12/15.
- Submit Plantsite Cleanup Criteria and Risk Assessment work plans to MDEQ by 10/1/15.
- Submit revised 1&2 SOEP/STEP Site Report to MDEQ by 11/18/15, including an updated 1&2 SOEP/STEP groundwater model report.
- Submit Plantsite Remedy Evaluation work plan to MDEQ by 11/30/15.
- Submit revised 3&4 EHP Site Report to MDEQ by 3/31/16, including an updated 3&4 groundwater model report.

The following activities are activities not specifically identified in the AOC or interim response actions for the 2015 annual plan period. While the AOC provides for work to be done as an interim response action, the examples provided in the AOC are not exhaustive, and the prompt action described below is to respond to circumstances that will be identified in the respective work plans and not because of an acute threat to human health or a recent spill.

- Submit 2015 Armells Creek Synoptic Run Report to MDEQ by 7/1/15.
- Update the Colstrip Water Resources Monitoring Plan by 7/15/15.
- Investigate the integrity of the 551D well seal by 8/1/2015.
- Develop a 2037D area work plan by 8/31/2015.
- Submit report on D4 soil removal by 8/31/15.
- Submit final report for the work plan to investigate the area near wells 657M & 1049M by August 2015.
- Complete 6M area groundwater evaluation by 9/1/15.
- Conduct a BSL data set review meeting with MDEQ by 9/4/15.
- Complete updated BSL report by 9/15/15.
- Conduct further investigation of the 368D area by 9/30/2015.
- Install collection at the 552D area and instrumentation of the 3&4 EHP main dam toe drain collection by 10/1/15.
- Complete clean closure of 3&4 EHP Pipeline Drain Pond #2 by 10/19/15.
- Complete clean closure of 3&4 Wash Tray Pond by 10/19/15.
- Complete clean closure of 3&4 Scrubber Drain Collection Pond by 10/19/15.
- Cease placing CCR material, dewater, and ensure no impoundment of water in the 1&2 A Pond by 10/19/15.
- Cease placing CCR material, dewater, and ensure no impoundment of water in the 1&2 STEP A cell by 10/19/15.
- Prepare the Fugitive Dust Control Plan for all CCR ponds by 10/19/15.
- Conduct a Fall Synoptic Run for East Fork Armells Creek by 10/31/15
- Conduct investigation of the 944A area in 10/15/2015.

- Establish a CCR Rule website for Colstrip by 10/19/15.
- Complete installation of 1123A area interception trench by 11/1/15.
- Evaluate 1120C area for potential capture by 12/1/15.
- Complete evaluation of capture at 1121D & 1167D by 12/31/15.
- Evaluate the effectiveness of capture in the 1116/1117 area in 2015.
- Complete preparation of the 3&4 EHP J cell in 2015 for lining in 2016.
- Conduct annual vegetation study for SOEP/STEP/EHP areas and submit report by 4/1/16.
- Conduct 2016 annual Armells Creek synoptic run by 4/30/16.

2015 5-Year Plan – provide a projection of long-term schedules for actions related to Article VI Investigation and Remediation

- Submit Annual Plan & 5-Year Plans to MDEQ by 5/1 of each year.
- Conduct Annual Meeting with MDEQ by 7/15 of each year.
- Submit 1&2 STEP Cleanup Criteria and Risk Assessment work plans to MDEQ by 3/1/16.
- Submit 1&2 STEP Remedy Evaluation work plan to MDEQ by 3/1/16.
- Submit Plantsite Cleanup Criteria (CC) & Risk Assessment (RA) Report and Remedy Evaluation Report to MDEQ by 5/31/16.
 - o Final approval of the Plantsite Characterization Report is a threshold for this work.
 - o Timely approval of work plan helps maintain this schedule.
 - o Submit the Remedy Evaluation Report in conjunction with the CC & RA Report as per Section C of Article VI of the AOC.
- Submit 1&2 STEP Cleanup Criteria (CC) & Risk Assessment (RA) Report and Remedy Evaluation Report to MDEQ by 8/1/16.
 - o Final approval of the 1&2 STEP Site Report is a threshold for this work.
 - o Timely approval of work plan helps maintain this schedule.
 - o Submit the Remedy Evaluation Report in conjunction with the CC & RA Report as per Section C of Article VI of the AOC.
- Submit 3&4 EHP Cleanup Criteria and Risk Assessment work plans to MDEQ by 8/1/16.
- Submit 3&4 EHP Remedy Evaluation work plan to MDEQ by 8/1/16.
- Submit 3&4 EHP Cleanup Criteria (CC) & Risk Assessment (RA) Report and Remedy Evaluation Report to MDEQ by 12/31/16.
 - o Final approval of the 3&4 EHP Site Report is a threshold for this work.
 - o Timely approval of work plan helps maintain this schedule.
 - o Submit the Remedy Evaluation Report in conjunction with the CC & RA Report as per Section C of Article VI of the AOC.
- Submit Facility Closure Plan for each area to MDEQ by 8/1/17.
 - o This date is necessary, because both the Site Reports and Cleanup Criteria & Risk Assessment Reports for each area need to be completed prior to drafting the Facility Closure Plan, including the time frames for public participation, as required in Section V of the AOC.
- Submit with each Annual Plan a proposed revision, as needed, to the Financial Assurance that has been established for ongoing obligations under the AOC including monitoring. This is the Second Phase of the Financial Assurance as provided in Article VIII.
- Provide financial assurance for Facility Closure for each area to MDEQ by 8/1/17.

- Other subsequent plans identified in the AOC will likely occur in the 2016 – 2017 time frame but are dependent upon approval of the plans identified above and will be included in future annual 5-year plans as they become better defined.
 - o These dates cannot yet be identified, given the thresholds of a Site Report, followed by a Cleanup Criteria & Risk Assessment Report and Remedy Evaluation Report, including the public participation phase for both. It is likely that these plans will relate to the necessary Cleanup Criteria, the details of which are not known until the two Reports are complete.

Other activities that are planned for the 5-year period but not specifically identified in the AOC are identified below. Note that proposed schedules are based on current conditions and subject to change because of unanticipated changes in pond conditions, CCR regulations, or approved budgets.

- Submit Annual Water Monitoring Reports by 4/15 of each year.
 - o This time frame allows adequate time for testing and analysis, which cannot reasonably be completed sooner than this date each year. When weather and other variables allow for a consolidation of this schedule without compromising the report's integrity, Talen Montana will submit this report earlier than the date above.
- Conduct annual pond embankment inspections by a qualified professional engineer starting 1/18/16.
- Conduct independent Dam Safety Inspection (structural stability and safety factor assessments) by a qualified professional engineer by 10/17/16 and every 5 years thereafter.
- Conduct dam hazard potential assessment by a qualified professional engineer by 10/17/16 and update Emergency Action Plan by 4/17/17.
- Continue with yearly dewatering efforts at the ash impoundments including forced evaporation.
- Install a new 1&2 B Pond with composite liner in 2016.
- Install a composite liner in the 3&4 EHP J cell in 2016.
- Install a new 3&4 Bottom Ash Dewatering System and lined clearwell in 2016.
- Install a new 1&2 Bottom Ash Dewatering System and lined clearwell in 2017.
- Install a new 3&4 EHP Clearwell with composite liner in 2017.
- Install a composite liner in the 3&4 EHP H cell in 2018.
- Install a cap and close the current 1&2 B Pond in 2019.
- Install a cap and close the current 3&4 EHP C cell in 2019.
- Install a cap and close the current 1&2 A Pond in 2019.

Financial Assurance Plan – provides for the first and second phase (addressing obligations for current and continuing remedial actions including monitoring).

- Common Groundwater Monitoring activities, \$100,000
- 1&2 General Groundwater Monitoring activities, \$200,000
- 3&4 Groundwater Monitoring activities, \$200,000
- Plantsite Groundwater Collection System maintenance, \$100,000
- 1&2 STEP Groundwater Collection System maintenance, \$100,000
- 3&4 EHP Groundwater Collection System maintenance, \$100,000
- 3&4 EHP Stipulation Monitoring activities, \$150,000
- Pond-related Vegetation Studies, \$50,000
- Forced Evaporation System O&M, \$200,00
- Collection System Water Treatment O&M, \$300,000

These phases of financial assurance cover 5 years of current and continuing remedial actions including monitoring. The third phase will provide financial assurance to address the Facility Closure Plan which is to be completed within five years (by August 1, 2017).

Talen Montana has provided DEQ with a Liberty Mutual Insurance Company Surety Bond for \$7.5 million to cover current obligations as identified.