

# Post-Closure Care Plan Ash Disposal Area Otter Tail Power - Big Stone Plant

#### Introduction

This Post-Closure Care Plan (Plan) for the Ash Disposal Facility (ADA, landfill) at the Big Stone Plant has been prepared to comply with the South Dakota Department of Environment and Natural Resources (DENR) -issued permit (Permit No. 12-01A) and 40 CFR 257.104. This Plan outlines the requirements for post-closure care of the landfill.

## **Monitoring & Maintenance Activities** §257.104(d)(1)(i)

## **Groundwater Monitoring** §257.93

Groundwater monitoring will continue in accordance with the DENR-issued permit and  $\S257.90-257.98$ , and 257.104 for 30 years after the landfill receives final closure unless the monitoring program is operating under assessment monitoring at that time ( $\S257.104(c)(1)$ ). If the landfill is in assessment monitoring, groundwater monitoring will continue until the landfill is returned to detection monitoring ( $\S257.104(c)(2)$ ).

At the conclusion of either the 30-year time period (unit in detection monitoring) or after a return to detection monitoring from assessment monitoring after the 30-year period since final closure has concluded, the post-closure care period will end. At that point all groundwater monitoring, inspections, and reporting will cease (§257.104(c)(1)).

Routine groundwater monitoring of CCR-required parameters will occur twice per year – once in the spring, and once again in the fall. The parameters listed in Appendix III to Part 257 will be analyzed at each well in the CCR monitoring network. Appendix IV parameters will be analyzed if assessment monitoring is required.

### **Groundwater Reporting** §257.90(e)

A groundwater monitoring and corrective action report will be prepared no later than January 31 of the year following the calendar year in which groundwater monitoring took place. The annual report will document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. The report will be placed in the facility's operating record.

#### Inspections

Inspections during the post-closure period will follow the DENR-required inspection schedule. The final cover system will be inspected for settling, erosion, subsidence, run-on and run-off control, general security and vegetative cover. The monitoring wells will also be reviewed. Inspections of monitoring wells will coincide with groundwater monitoring sampling events which will occur two times per year.

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## *Maintenance Activities* §257.104(b)(1)

Following closure of the CCR unit, post-closure maintenance for the ADA will occur, which will consist of the following:

- 1. Performing inspections (above)
- 2. Maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover.
- 3. If present, maintaining the integrity and effectiveness of the leachate collection and removal system and operating the leachate collection and removal system in accordance with the requirements of §257.70.
- 4. Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §257.90 through §257.98.
- 5. Cutting vegetative cover as necessary.
- 6. Controlling noxious weed growth as necessary.

## Contact Information §257.104 (d)(1)(ii)

The Otter Tail Power Company contact after the ADA enters the post-closure care period is:

Manager, Environmental Services Otter Tail Power Company 215 South Cascade Street PO Box 496 Fergus Falls, MN 56538-0496 Phone: (218) 739-8200

Email: www.otpco.com

## Post-Closure Care Period Area Use §257.104 (d)(1)(iii)

Post-closure use of the property will be limited and will not disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the monitoring systems. In general the final cover's vegetation will be cut and baled for beneficial uses during the post-closure period. Any other disturbance of the final cover, liner, or other component of the containment system, including any removal of CCR, must demonstrate that it will not increase the potential threat to human health or the environment. The demonstration will be certified by a qualified professional engineer, and notification will be provided to the State Director that the demonstration has been placed in the operating record and on the landfill's publicly accessible Internet site.

# Amendment of Post-Closure Care Plan §257.104(d)(3)

At least 60 days prior to any planned change or no later than 60 days after an unanticipated event that substantially affects the plan, a modified Post-Closure Plan will be prepared and submitted to the DENR, placed in the facility's operating record, and posted on the CCR website. If an event warrants a change to the plan after post-closure activities have commenced, the plan will be amended no later than 30 days after the event. Amendments to the Post-Closure Care Plan will be certified by a qualified professional engineer.

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# **Conclusion of the Post-Closure Care Period** §257.104(e)

At the conclusion of either the 30-year time period or after a return to detection monitoring from assessment monitoring after the 30-year period since final closure has concluded, the post-closure care period will end. At that point all groundwater monitoring, inspections and reporting will cease. No later than 60 days following the completion of the post-closure care period, a notification verifying that post-closure care has been completed will be made. The notification will include certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with this post-closure plan and that the requirements of §257.104 were met. Post-closure care will be considered complete when this notification is made.

# Certification §257.104(d)(4)

I hereby certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

John McCain, PE License No. 8991 October 17, 2016

Date

