



Run-on and Run-off Control System Plan

Ash Disposal Facility

Hoot Lake Plant

Introduction

This plan presents the run-on and run-off control system plan for the ash landfill at the Hoot Lake Plant in Fergus Falls, Minnesota. The landfill is an existing coal combustion residual (CCR) landfill. This document addresses the requirements of 40 CFR §257.81.

Run-on and Run-off Control System Plan § 257.81(c)

The landfill is located in a region that has a type II rainfall distribution. According to the National Oceanic and Atmospheric Administration, a 24-hour, 25-year storm event yields 4.57 inches of rainfall for the geographic location of the ADF.

Run-on

The landfill is constructed with perimeter berms along the north, west and south sides, and final cover along the east side. The surrounding topography slopes away from the unit. Closed portions of the landfill utilize stormwater diversion berms, downslope structures, and downslope pipes to capture stormwater and convey it off the final cover to stormwater basins located beyond the waste boundary. The height of the perimeter berms, final cover, and slope of the surrounding area will prevent flow onto the active portion of the unit during the peak discharge from a 24-hour, 25-year storm event.

Run-off

The active portion of the landfill is approximately 3.9 acres. All run-off and direct rainfall from the active portion of the landfill is contained within the lined area. Captured stormwater percolates through the CCR, where it is conveyed to the landfill sump by the leachate collection system, then pumped out and transported to the City of Fergus Falls wastewater treatment plant for disposal.

A of 4.57 inches would result in 1.52 acre-feet of water over the footprint of the open landfill area as detailed in the calculation below:

$$(4.57 \text{ inches}) / (12 \text{ inches per foot}) * (3.9 \text{ acres}) = 1.52 \text{ acre-feet.}$$

There is adequate storage capacity in the active portion of the landfill to contain runoff from a 24-hour, 25-year storm event.

Amendment of Run-off and Run-off Control Plan § 257.81(c)(2) and (4)

If any event or change affects the plan, a modified Run-on Run-off Control Plan will be prepared and included in the facility's operating record and posted on the CCR website. At a minimum, the Run-on Run-off Control Plan will be reviewed and updated every five years beginning with this version of the Closure Plan.

Certification § 257.81(c)(5)

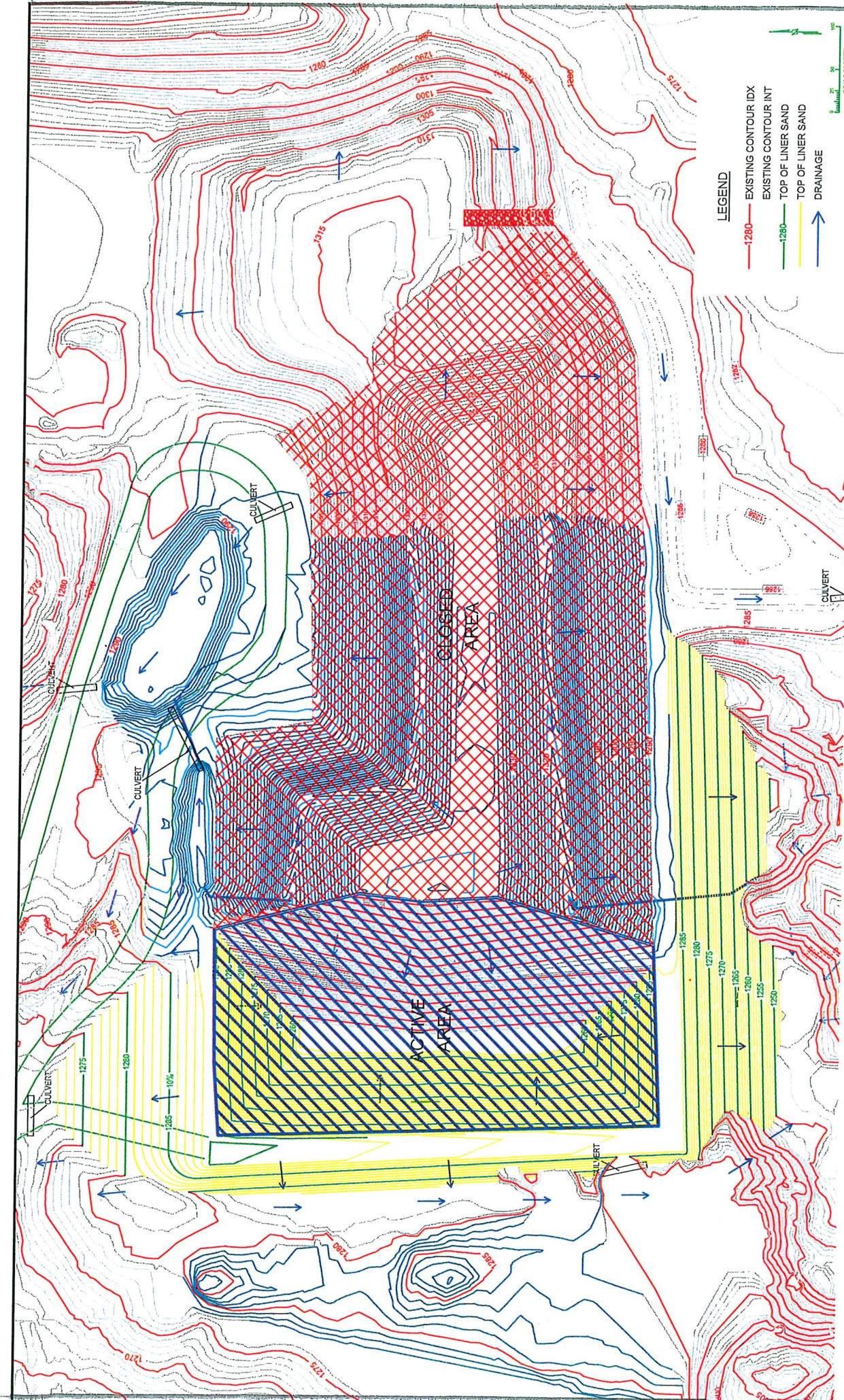
I hereby certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or 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.



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License No. 50857

September 20, 2022

Date



- LEGEND**
- 1280— EXISTING CONTOUR IDX
 - 1280— EXISTING CONTOUR INT
 - 1280— TOP OF LINER SAND
 - 1280— TOP OF LINER SAND
 - 1280— DRAINAGE

SCALE IN FEET
0 10 20 30 40 50

REV	DATE	BY	DESCRIPTION
1	10/20/11	PMW	INITIAL DRAINAGE MAP
2	10/20/11	PMW	UPDATE FOR CITY CULVERT PROJECT



**OTTER TAIL
POWER COMPANY**

**HOOT LAKE LANDFILL
FERGUS FALLS, MN**

**FIGURE 1
RUN-ON RUN-OFF CONTROL PLAN**