



CCR Fugitive Dust Control Plan

Morrow Hydroelectric Project Morrow CCR Impoundment STS Hydropower, LLC

40 CFR 257.80 (b)

November 8, 2024

Version: 1.0



Revision Log

DATE	REVISION LEVEL	REVISION NOTES	APPROVER'S INITIALS
11/08/2024	1.0	Initial Plan	QVK

Background and Site Description

STS Hydropower, LLC (STS) owns and operates the 800 KW Morrow Hydroelectric Project, located on the Kalamazoo River in Comstock Township, Michigan (the “Site”). An inactive coal combustion residuals (CCR) surface impoundment containing historical CCRs generated by the former Morrow Power Plant coal-fired, electrical generating station is located adjacent to the operating hydroelectric facility on property partially owned by STS. STS currently estimates the surface area of the impoundment is approximately 61 acres with approximately 56 acres of that owned by STS. Available historic publications and conversations with STS indicate that the Morrow Power Plant was constructed in the late 1930s and operated until the early 1980s by Consumers Power, historically sluicing CCR materials to the nearby impoundment. From initial research, it appears that the impoundment was formed on the west side by the Morrow Dam extension, on the north side by a jetty into Morrow Lake, on the east side with a separation dike, and on the south side by an earthen berm. Approximately the southeastern third of the impoundment is open water/marsh with the balance of the impoundment forested with mature shrubs and trees (see **Figure 1**).



Figure 1 – Site Dust Control Area



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The 2015 CCR Rule and 2024 Legacy CCR Rule (40 CFR 257.80) require owners and operators of CCR units to prepare a fugitive dust control plan to document the measures appropriate to site conditions that are used to minimize CCR from becoming airborne. Due to the stabilized condition and operational inactivity of the CCR impoundment and surrounding areas, it is not likely that significant dust will be generated. Therefore, the measures described below are selected to match the particular conditions at the Site.

§257.80(b) The owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust control plan as specified in paragraphs (b)(1) through (7) of this section. This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act.

This document outlines the plan that is used to control dust at the CCR Unit (Morrow CCR Impoundment) at the Morrow Hydroelectric Project. This plan identifies the measures that will be used at the unit to ensure compliance with Section 257.80(b) of the CCR Rules, which require the implementation of a dust control plan to minimize the potential for CCR to become airborne. As discussed in the Background and Site Description above, STS owns approximately 55 of the 61-acre impoundment and this plan applies only to the areas of STS ownership.

§257.80(b)(1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions.

The impoundment consists primarily of areas with open water, marshy vegetation, or heavy woodland cover and there is no active CCR production or handling occurring or planned as of the date of this report. As such, minimal dust control activities are anticipated.

A gravel/dirt perimeter road encircles the impoundment with potential for fugitive dust generation. The speed limit on these unpaved travel surfaces is 10 miles per hour (mph) or less, as posted. This speed limit applies to all traffic.

If material dusting is observed in limited areas of the impoundment where ash is exposed, dusting may be controlled by operating a water spray or fogging system; using wind barriers, compaction, or vegetative covers; or through the use of a commercial dust control product (e.g., lignin-based materials, Soil-Sement, Eco-Flex, Eco Green Barrier, EcoBlend, Gorilla-Snot, TackDown, Mincryl X50, Steadfast, Pennz Suppress, Coconut Mats, etc.). If other methods or products are found to be effective, STS will modify this dust control plan accordingly.

Additionally, if fugitive dust is observed, and/or when predicted weather conditions indicate that fugitive dust is likely, STS will take special precautions to increase or modify implementation of dust control measures at the CCR unit to the extent practicable.

If inspections and/or operational observances indicate additional dust control measures are warranted, these revised or additional control measures will be incorporated into an amended fugitive dust plan, as needed.

257.80(b)(2) If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.

Not applicable; the Site does not have a CCR landfill.

257.80(b)(3) The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.

In the event citizen complaints regarding fugitive dust are received, those complaints will be logged, investigated, and responded to as appropriate. Complaints can be submitted by sending an email to info@eaglecreekre.com.

257.80(b)(4) The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.

In addition to using the dust control measures outlined in 257.80(b)(1), observations regarding fugitive dust are made by the Morrow Hydroelectric Plant Operator while conducting any work around the CCR impoundment. This fugitive dust control plan will also be reviewed on at least an annual basis by STS.

257.80(b)(5) The owner or operator of a CCR unit must prepare an initial CCR fugitive dust control plan for the facility no later than October 19, 2015, or by initial receipt of CCR in any CCR unit at the facility if the owner or operator becomes subject to this subpart after October 19, 2015. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by 257.105(g)(1).

This initial plan was prepared and placed into the operating record no later than November 8, 2024, as required per the applicable Legacy CCR Rule extended deadline (40 CFR 257.100(f)(3)(i)).

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257.80(b)(6) Amendment of the plan. The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by 257.105(g)(1). The owner or operator must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect.

This plan will be updated based on the results of reviews of the plan's effectiveness, when operational procedures warrant an update, or when another change in conditions warrant an update.

257.80(b)(7) The owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this section.

I certify that this CCR Fugitive Dust Control Plan meets the requirements of 40 CFR §257.80(b).

Signature: *Andrew N. Rodzianko*

Name: Andrew N. Rodzianko

Title: Senior Civil Engineer

Certification Date: 11/6/24

