Fugitive Dust Control Plan

For the

Dallman and Lakeside Coal Combustion Residuals Surface Impoundments and Landfill

For

City Water, Light and Power (CWLP)

Springfield, Illinois



Prepared by:

Environmental, Health & Safety, CWLP

January 2023

Introduction

Pursuant to the requirements of IAC Title 35 Part 845.500 this written operating program describes the measures being implemented to control fugitive dust emissions from the roadways and coal combustion residuals (CCR) piles at the Dallman and Lakeside CCR surface impoundments and CCR landfill.

The facility consists of the following;

- Dallman CCR Surface Impoundment
- Lakeside CCR Surface Impoundment
- CCR Landfill
- Corresponding Roadways

Qualified Professional Engineer Certification

This plan meets all the requirements of IAC Title 35 Part 845.500

Schy J. Willmore, P.E.

Name

City, Water, Light & Power

Company

Engineer IV

Title

01/05/23

Date



Professional Engineer Certification

The facility will operate in accordance with the written procedures in this program outlined in the following descriptions.

Fugitive Dust Management Practices

Roadways and CCR piles are a potential source of fugitive dust emissions; the following control measures will be implemented at the facility to control CCR fugitive dust.

Control Measures

- a) The paved roadway entrance to the facility shall be watered and/or swept as often as practicable to remove mud, dirt or similar debris. This is consistent with good engineering practice that consistently delivers satisfactory results and is a key component in the formal fugitive emission and control calculations as published by the EPA and is congruent with requirements found in the facility's Title V federal operating permit.
- b) Fugitive dust emission reduction, roadway conditions, and employee safety concerns will limit vehicle speed to 10 mph on all roadways inside the facility. EPA emissions factors correlate vehicular speed with dispersed particulates. This engineering control is adequate as demonstrated by past experience and is consistent with the approach used to obtain federal air permits at the facility.
- c) CCR storage piles maintain surface moisture sufficient to reduce wind-blown erosion and fugitive dust. Gypsum and ash have a moisture content of 10-20%. Industry-accepted methods for calculating fugitive particulate matter place great emphasis on the percent moisture of the material. With the moisture content so high given the nature of the product generation and transference, this is adequate to control fugitive emissions.
- d) Material handlers operating inside the facility will exercise caution and care in CCR pile manipulation and loading procedures in order to minimize fugitive dust emissions. Good engineering practice to reduce the mechanical movement of CCR material with itself and with machinery demonstrates a commensurate reduction in fugitive dust.
- e) During high wind events, material handlers will reduce or halt operations. Past experience has demonstrated that leaving piles undisturbed minimizes the possibility of entraining particulate material in the wind.
- f) All haul trucks carrying wet CCR material from the Dallman generating station into the facility are not required to be covered due to the natural surface moisture content of the material. However, if the CCR material is handled dry in the future, then all haul trucks will be covered to reduce fugitive dust. Good practice and experience has shown that sheltering the CCR material from airflow generated by the vehicular transference of material greatly reduces the entrainment of particulates in to the atmosphere.
- g) In order to reduce roadway fugitive dust from the facility, a six foot concrete barrier wall has been constructed on the southeast side of the facility as a preventative measure. This barrier dissuades the movement of windborne material to disperse over and collect upon the roadway surface.
- h) In addition to the constructed wall mentioned above, the natural growth of vegetation within and surrounding the facility serves as a further control against roadway fugitive dust. Such an engineering practice is the industry standard for control as the above-ground fibrous vegetation creates a natural wind break while the root system anchors the CCR material in place.

Citizen Complaints

The public shall have the opportunity to register complaints via phone or email. Per 35CFR 845.500(b)(2), such complaints shall be compiled by CWLP personnel into a centralized log and there retained. For each complaint, the following will be recorded in log: Dates of complaint and incident as appropriate, the name and contact information of the complainant, and, if relevant, the actions taken to investigate and resolve the issue. The log shall be included in the quarterly and annual reports mandated by 35CFR 845.500(b)(2), 845.500(c), and 845.550(a)(1). If there are no citizen complaints, the reports shall so state.

Emissions Monitoring

CWLP shall conduct fugitive dust inspections with personnel who are certified by the Illinois Environmental Protection Agency (IEPA) in the evaluation of visible emissions to ensure the adequacy of existing emission controls at the facility. Opacity measurements shall be taken on the paved entrance road using Method 22 or Method 9 on a monthly basis. Measurements will be repeated within 10 days in the event of major changes involving the facility that would act to increase opacity. Opacity measurements shall be taken on the CCR piles using Method 22 or Method 9 on an as needed basis since material already has a surface moisture content between 10-20%. Historical data so collected as well as the aforementioned citizen complaint log shall be periodically evaluated for control efficacy and if current control measures on the roadway or CCR piles are deemed inadequate, they will be modified to improve performance and/or additional controls will be considered. If control measure modification or new measures are deemed necessary, this fugitive dust plan will be so updated.

Recordkeeping, Reporting and Notifications

- a) The CCR fugitive dust control plan will be submitted in the operating record in accordance with IAC Title 35 Part 845.800(d)(7) and notifications will be executed in accordance with IAC Title 35 Part 845.810(g), which states that CWLP will notify IEPA that the CCR fugitive dust control plan is available on CWLP's CCR Rule Compliance Data and Information website.
- b) The quarterly CCR fugitive dust complaint report will be completed in accordance with IAC Title 35 part 845.500(b)(2)(A) and submitted in accordance with IAC Title 35 part 845.500(b)(2)(B).
- c) The annual CCR fugitive dust control report will be completed in accordance with IAC Title 35 part 845.500(c) and reported in accordance with IAC Title 35 part 845.550(a)(1). This report will include the following information for the reporting year:
 - a. Description of actions taken to control CCR fugitive dust
 - b. Four previous quarterly fugitive dust complaint reports
- d) The CCR fugitive dust control plan and annual CCR fugitive dust control report will be available on CWLP's CCR Rule Compliance Data and Information website in accordance with IAC Title 35 part 845.810(a).
- e) All records will be retained in accordance with IAC Title 35 part 845.800(b).