

Date: December 6, 2019

To: D.E. Karn Operating Record

From: Joy R. Hwang, Environmental Services Department

RE: Annual Coal Combustion Residual (CCR) Fugitive Dust Control Report
D.E. Karn and J.C. Weadock Facilities

Introduction

This report serves as the Annual CCR Fugitive Dust Control Report required by the United States Environmental Protection Agency (EPA) CCR Resource Conservation and Recovery Act (RCRA) Rule. It describes the measures implemented at Consumers Energy Company's (CE) D.E. Karn (DEK) and J.C. Weadock (JCW) facilities for minimizing fugitive dust emissions from CCR. The DEK facility is located at 2742 N. Weadock Highway in Essexville, Michigan, and employs two coal-fired boilers, Unit 1 and Unit 2, to generate electricity. The J.C. Weadock (JCW) facility discontinued coal firing operation in Boiler Units 7 and 8 in March 2016. As both of these facilities are located on the same site, this report covers all CCR units on the CE DEK/ JCW site.

This annual report has been developed and placed in the facility Operating Record in accordance with 40 CFR 257.80 and 40 CFR 257.105(g), as well as posted to the public website within 30 days in accordance with 40 CFR 257.107(d). This report is required to include a description of the actions taken by company personnel or contractors to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken.

Fugitive Dust Control Activities

The dry fly ash generated from coal combustion in DEK Units 1 and 2 boilers contains spent and un-spent lime from the Spray Dryer Absorber as well as carbon from the Activated Carbon Injection system. This co-mingled CCR is called "byproduct." The byproduct handling system corresponding point-source particulate matter controls are properly maintained and inspected daily. Prior to placement in the haul trucks for re-use or disposal, the byproduct is conditioned with water through a pin-paddle mixer to achieve the desired moisture content. Vacuum fans are operated during truck loading to capture and transfer any fugitive dust back up into the silo which is controlled by a dust collector. Dust curtains are employed to increase the capture efficiency of the fugitive dust from the loading process.

At the byproduct placement location, a water truck is available for further conditioning during spreading and compacting as necessary. Activities are suspended to prevent excessive dusting (leaving the site boundaries) or when there are sustained wind speeds of over 25 mph. Inactive portions of the open Weadock Landfill have been seeded to mitigate dust, and additionally,

some areas are treated with a dust suppression chemical to prevent dust in areas vegetation does not make sense at the time.

The Karn Bottom Ash Lined Impoundment system is actively accepting sluiced CCR material and the impoundment area remains in a wet and/or vegetative condition that minimizes fugitive dust generation. The Karn Bottom Ash Pond and Weadock Bottom Ash Pond are no longer accepting CCR material. The Karn Bottom Ash Pond is in closure and has had the ash removed. The Weadock Bottom Ash pond has been graded in preparation for closure activities. Any excavating and/or transfer activities are visually monitored for potential dusting.

The roadways surrounding the CCR units are well maintained and the 15-mph speed limit is observed when dusting is an issue. Primary roadways were treated with a dust suppressant to further minimize fugitive dust.

Citizen Complaints

There were no citizen complaints of CCR fugitive dust received at the DEK/JCW facility for the time period December 7, 2018, to December 6, 2019.

Corrective Actions

All potential CCR fugitive dust areas are monitored visually on a daily basis, and corrective as well as preventive measures are properly implemented as warranted. There have been no specific corrective actions warranted from any citizen complaint since the initial posting of the Fugitive Dust Control Plan (FDCP).

Conclusion

An assessment of the FDCP was conducted on November 7, 2019. Applicable aspects of the plan were found to be correctly implemented with no findings to report. During the site visit, the FDCP was reviewed and amended, pursuant to 40 CFR 257.80(b)6, to reflect status of the Weadock Landfill, closure preparation for Weadock Bottom Ash Pond, Closure of the Karn Bottom Ash Pond and updates with regards to Michigan's regulating authority name changing from MDEQ to EGLE. The amended plan has been signed by a professional engineer as required by 40 CFR 257.80(b)7 and posted to the Operating Record as required by 40 CFR 257.105(g).