1.0 Purpose

The purpose of this Coal Combustion Residuals (CCR) Fugitive Dust Plan (the “plan”) is to establish measures to minimize CCR from becoming airborne at the facility as outlined in 40CFR257.80.

2.0 Scope

The plan applies to measures to control CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities.

3.0 Site Description

Monroe Power Plant is located in the City of Monroe and Frenchtown Township, Michigan. The plant is located at the confluence of the River Raisin and Lake Erie, south of the River Raisin and west of Lake Erie. Monroe Power Plant is an ISO14001 certified facility. There are two surface impoundments and one dry ash landfill at the site: the fly ash basin and the inactive bottom ash basin, and the vertical extension dry ash landfill.

The fly ash basin is located southwest of the power plant across Plum Creek. It is bounded on the west by U.S. Interstate Highway I-75 and on the north by Dunbar Road and Plum Creek. The southeast corner of the fly ash basin borders Lake Erie. The basin has an approximate 3.5-mile perimeter and covers approximately 400 acres. The fly ash basin accepts fly ash from the plant which is transported currently via long distance piping by sluicing (wet transport).

The inactive bottom ash basin is located south of the power plant on the plant property. It is adjacent to the plant discharge channel on the west. The inactive bottom ash basin accepted bottom ash from the plant until 2015, but now only accepts non-CCR process water.

The Vertical Extension dry ash landfill covers approximately 79-acres and is located on top of the northwest corner of the existing fly ash basin. This area is used for placement of dry CCR which is hauled by truck from the plant.

4.0 Dust Control Measures

The following dust control measures provide site specific mechanisms to manage and minimize fugitive dust created from CCR management operations and were developed in accordance with good engineering practices. Many measures for dust control are used at the fly ash basin, the inactive bottom ash basin, the vertical extension landfill, and throughout the power plant. These include limiting speed, water sprays, dust suppressant application, conditioning, training, and others. All control measures can be used where appropriate except when freezing conditions exist or as otherwise specified. Additional dust control measures will be taken as appropriate.
The speed limit on all paved and unpaved travel surfaces is 15 miles per hour (mph) or less, as posted. This speed limit applies to all traffic.

Paved and unpaved surfaces are regularly water-flushed. Paved surfaces may also be vacuum-swept or wet broom swept. Water-flushing is done using wash down hoses or one of the plant’s water wagons using copious amounts of water. During periods where there is no precipitation, water is applied to paved and unpaved surfaces multiple times per day. Unpaved roads and lots are also treated with dust suppressant (Dustabate) several times per year.

Roadways around exposed storage areas such as the bottom ash and FGD WWTP sludge storage area at the fly ash basin and vertical extension landfill are controlled by water sprays. This can be done by hoses, “rain bird” sprinklers, sprays from the water wagon or a combination. The storage areas will also be maintained in such a manner not to create peaks which promote fugitive dust. Any bottom ash or sludge brought to the onsite will be conditioned with water to a moisture content that will prevent wind dispersal but will not result in free liquids.

The filled areas and other open areas of the fly ash basin other than those areas covered by the vertical extension landfill will be controlled by vegetation once deemed safe to access. This includes vegetation planted on the fly ash-filled areas of the basin. As with all other areas of the facility, driving surfaces at the onsite and other surfaces at the plant traveled while transporting bottom ash and FGD WWTP sludge will be treated with water and/or dust suppressant as outlined above.

All vehicles transporting bulk loads off site shall comply with Section 324.5524(3)(d) of the Michigan Natural Resources & Environmental Protection Act which requires covers over solid loads that may generate dust and that leaks of liquid be prevented. This includes trucks hauling bottom ash and/or FGD WWTP sludge between the plant and the vertical extension landfill.

Personnel responsible for the implementation of this fugitive dust plan are appropriately trained to proactively manage fugitive dust; and identify and correct any deficiencies in the dust control measures.

5.0 Effectiveness Assessment & Monitoring

The effectiveness of this plan will be assessed through several avenues. First and foremost, plant personnel (Plant Operations and Fuel Supply Operations) perform routine inspections throughout the facility daily. Any instances of fugitive dust observed anywhere on the property are addressed in a timely manner. Inspections are logged on the National Pollutant Discharge Elimination System (NPDES) round sheet.

In addition, Monroe Power Plant operates two PM 10 particulate matter monitors. These monitors sample and are quality assured per EPA protocol. The monitor filters are changed every six days per the EPA schedule. Any TSP excursions are investigated including analysis of the material on the filter, activity in the area and weather conditions. Any instance of fugitive dust resulting in a monitored excursion would result in further corrective action being taken.

Agency inspections are also done on a regular basis at the onsite. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) performs inspections quarterly and the Monroe County Health Department performs inspections as needed. These inspections are in addition
to site environmental personnel being at the facility for water discharge sampling, weekly CCR inspections, visual inspections or other activities. The entire plant property, including the fly ash basin, is included in the periodic facility environmental audit plan coordinated by the corporate environmental organization as well.

Any complaints filed by citizens regarding fugitive dust or other environmental issues at the onsite or any other part of the facility are logged and tracked via procedures set forth by the plant’s ISO14001 environmental management system.

6.0 Amendment of Plan

This plan will be reviewed periodically by the DTE Electric Company Environmental Management and Resources organization. Reviews and revisions will be documented in the Revision History section of this plan. Any construction of a new CCR unit or change in the operation or construction of an existing CCR unit will be assessed for necessary changes to this plan.

7.0 Reporting & Recordkeeping

An annual CCR fugitive dust control report will be completed as required under 40CFR257.80(b)(7)(c). The report will document that the fugitive dust control measures identified in this plan are applicable and appropriate for site conditions, by including a description of actions taken to control CCR fugitive dust, a record of citizen complaints, and a summary of any corrective measures taken. The first report will be completed by April 2016 and subsequent reports will be completed within one year of the previous report.

All files and information will be maintained in a written operating record as required by 40CFR257.105(g). Notifications will be made as required by 40CFR257.106(g). Website postings will be made as required by 40CFR257.107(g).

8.0 Revision History

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<th>Revision No.</th>
<th>Reviewed by:</th>
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<td>Provided additional details in sections 4.0 and 7.0.</td>
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PROFESSIONAL ENGINEER CERTIFICATION
40 CFR 257.80(b)(7)

CERTIFICATION: By means of this certification, I attest that I am familiar with the requirements of provisions of 40 CFR Part 257.80, that I or my designated agent have visited and examined the facility, that this plan has been prepared in accordance with good engineering practices, and with the requirements of this Part, that the plan is adequate for the facility.

Signature: 

Engineer: Sharon G. Pfeufer

Registration No.: 57381 State: MI

Date: 7/17/2019

SEAL:

[Seal Image]