# COAL COMBUSTION RESIDUAL (CCR) FUGITIVE DUST CONTROL PLAN (Amended)

# Plant Gorgas October 2020

**Professional Engineer Certification:** 

Based upon my knowledge, information, and belief that the content in the attached Fugitive Dust Control Plan is accurate, I hereby certify that this Fugitive Dust Control Plan meets the requirements of 40 CFR § 257.80(b)(1) -(7); ADEM Admin. Code r. 335-13-15-.05(1)(b)1.-7. (Coal Combustion Residuals Rule).

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Date: 10/13/2020

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#### AMENDMENT SUMMARY

Date	Amendment #	Comments / Notes
10/13/2020	1	Amended to address the Bottom Ash Landfill, Ash Pond and Gypsum Pond closure construction activities

# 1.0 PURPOSE

The purpose of this guideline is to demonstrate compliance with the fugitive dust requirements in 40 CFR § 257.80(a) and 257.80 (b)(1) through (7); ADEM Admin. Code r. 335-13-15.05(1)(b)1.-7.

# 2.0 SCOPE

This fugitive dust plan identifies and describes the Coal Combustion Residuals (CCR) fugitive dust control measures that will be used at Plant Gorgas CCR Units to minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities. Coal combustion residuals are generated from the burning of coal to produce electricity and are defined as fly ash, bottom ash, boiler slag, and flue gas desulfurization (FGD) materials.

# 3.0 REFERENCES

40 CFR §§ 257.53, 257.80, 257.105(g)(2); ADEM Admin. Code rr. 335-13-15-.02, 335-13-15-.05(1), 335-13-15-.08(1)(g)2.

# 4.0 GENERAL INFORMATION

EPA and ADEM define "CCR fugitive dust" as "solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than through a stack, or chimney." 40 CFR § 257.53; ADEM Admin. Code r. 335-13-15-.02(11).

## 5.0 PROCESSES

1) Identify the CCR units on plant site that are subject to the requirements in § 257.80; r. 335-13-15-.05(1) to minimize CCR from becoming airborne.

CCR units include:

- Bottom Ash Landfill
- CCR Landfill
- Gypsum Pond
- Gypsum Landfill
- Ash Pond
- 2) Identify and describe the fugitive dust control measures that are applicable and appropriate to minimize CCR from becoming airborne at the units listed in Section 5.0 (1) of this plan.

#### Bottom Ash Landfill

The Bottom Ash Landfill is undergoing closure in place and construction is substantially complete, with a cover system in place. No additional CCR is being placed in the Unit. Fugitive dust control measures include:

- 1. Areas of exposed ash are wetted with a water truck or other methods.
- 2. Vehicle speed through active working areas is reduced.
- 3. Water is applied to the landfill when routine inspections indicate that additional dust control is necessary.

### CCR Landfill

Fugitive dust control measures include:

- 1. Water is applied to ash as needed during placement, spreading and compaction.
- 2. The exposed ash in the cells will be periodically covered with inert material.
- 3. Access to the landfill is restricted.
- 4. Speed of vehicles through active work areas is reduced.
- 5. Water is applied to the landfill when routine inspections indicate that additional dust control is necessary.

#### **Gypsum Pond**

Fugitive dust control measures include:

- 1. The Gypsum Pond is currently undergoing closure by removal. The pond is being dewatered and the ash is being excavated for beneficial use purposes.
- 2. Water is sprayed on areas as needed.
- 3. Trucks used to transport gypsum are covered.
- 4. Vehicle speed of heavy equipment through the Gypsum Pond is reduced.

#### Gypsum Landfill

Fugitive dust control measures include:

- 1. At the present time, CCR is not being disposed of in the Gypsum Landfill.
- 2. Water is to be sprayed on areas as needed.
- 3. Trucks used to transport gypsum are covered.
- 4. Vehicle speed of heavy equipment through the landfill active work areas is reduced.

#### <u>Ash Pond</u>

The Ash Pond is undergoing closure in place and some areas are still maintained in a wet condition that do not require other dust control measures. In areas where ash has been exposed or is dewatered, fugitive dust control measures in the Ash Pond area include the following:

- 1. Spraying dewatered ash with water using a water truck as needed to promote the formation of a surface "crust" and minimize the potential for fugitive dust generation.
- 2. Access to the CCR unit is minimized, allowing only necessary personnel to conduct closure construction activities, groundwater monitoring, and inspections.
- 3. Plant and construction personnel conduct routine inspections for fugitive dust; plant personnel are notified if fugitive dust generation is observed and action is taken.
- 4. Areas with observed fugitive dust are sprayed with water using water truck or other means.
- Vehicle speed is limited. A speed limit sign is posted at each access road entrance to the CCR unit.
- 6. Disturbed areas in the Ash Pond are minimized to the extent possible to control erosion and minimize dust.

The fugitive dust control measures described in this plan were adopted and are implemented based upon an evaluation of site-specific conditions, engineering site visits, and subject matter expert input. Handling CCR wet or moist, applying water as needed, reducing speed limits, and routine inspections were determined to be applicable and appropriate for the listed CCR units. The evaluation included assessing the effectiveness of the fugitive dust control measures for each CCR unit over time, while taking into consideration various factors such as site conditions, weather conditions, moisture content.

3) Explain how the control measures described in Section 5.0 (1) of this plan are applicable and appropriate for site conditions related to each CCR unit. Describe the process to emplace CCR as conditioned CCR for any CCR landfill listed in Section 5.0 (1) of this plan.

CCR is conditioned using water as needed for placement, spreading and compaction at the CCR landfills – CCR Landfill, and Gypsum Landfill. Wetting is also employed as needed to control dust in areas of the landfills or work areas as indicated by routine inspections. Plant personnel may use other approved dust suppression agents to prevent dust generation if needed.

4) Describe the fugitive dust control measures to minimize CCR from becoming airborne on roads and at other CCR management and material handling activities.

CCR material is not allowed to accumulate in CCR management areas. Dust accumulation and generation is prevented by washing down or vacuuming work areas, employing closed systems and covered trucks, wetting areas with vehicle traffic, and reducing speed of vehicles in active work areas.

See discussion of CCR units in Section 5.0 item 2) of this plan.

5) Describe the process to periodically assess the effectiveness of the fugitive dust control measures described in this plan.

Plant personnel will perform periodic CCR fugitive dust inspections. Based on these observations, the frequency, location and amount of dust suppression activities and processes discussed in this Plan will be adjusted to prevent dust emissions. Plant personnel understand the importance of minimizing CCR fugitive dust generation and the requirement that any CCR fugitive dust observations should be promptly addressed.

6) Describe the process to log citizen complaints received involving CCR fugitive dust events at the facility.

When a complaint is received regarding a CCR fugitive dust event at the facility, the complaint is documented and investigated. Appropriate steps are taken including any appropriate action, if needed.