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CCR: CH_Dust_2016Dec12

Cholla – CCR Dust Control Plan

Level 3

Section 1. Introduction:

Arizona Public Service (APS) Cholla Generating Station operates three pulverized coal-fired steam boilers which in total generate approximately 855 megawatts of electricity. The facility is located east of Joseph City on Interstate 40, in Navajo County, Arizona.

The location of the facility is considered semi-arid and at an elevation of approximately 5,000ft, receiving average rainfall of approximately 10 inches of rain annually. Dust control measures outlined in Section 2 of the document are appropriate for site conditions because controls are available for immediate use at the facility and are common controls utilized and determined to be effective to control fugitive dust to meet the plant's air quality regulations.

Coal Combustion Residuals (CCR) generated at the facility and covered by this Dust Control Plan are bottom ash, fly ash and flue gas desulfurization (FGD) materials.

Section 2. CCR Dust Activities and Control Measures:

This section outlines general CCR related activities that may be conducted at Cholla Generating Station and control measures implemented to minimize fugitive dust. A list of specific CCR related activities conducted at Cholla Generating Station can be found in Appendix A of this document.

2.1 CCR Material Stacking, Loading and Unloading: When CCR material stacking, loading and/or unloading occur the operation may be enclosed or the material is either wet or water may be applied.

2.2 Transport of CCR Materials: Most often, CCR material is transported wet, meaning it has been mixed with a liquid or water application has occurred. When work requires the dry handling of CCR material, the following controls may be implemented to control CCR fugitive dust:

- Covering/tarping trucks during transport, and
- Limiting transport speeds.

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2.3 CCR Staging Areas: CCR staging areas within the facility boundary are maintained wet by mixing/sluicing materials with water/liquid or by water application to the area. If the area cannot be maintained wet, the following controls may be implemented to control CCR fugitive dust:

- Application of a dust suppressant agent
- Area surrounded by a suitable wind barrier/enclosure,
- Locate area(s) below ground level (e.g. within a pit),
- Cover with a tarp, and/or
- Maintain suitable crust.

2.4 Unpaved Roads Constructed with CCR Material: The unpaved road used to transport CCR material from the bottom ash pond to bottom ash monofill as well as the haul roads within the bottom ash monofill may be constructed of bottom ash. To prevent CCR fugitive dust emissions, these roads are stabilized by application of water, maintaining a soil crust, or other best management practices.

2.5 Long-term Disposal Areas: The CCR materials located in the bottom ash pond, sedimentation pond, and fly ash pond are maintained stable by either moisture content, development of suitable crust, and/or application of a dust suppressant that will minimize fugitive dust emissions.

The bottom ash monofill is covered with soil after each landfilling operation is complete. The ash remains moist enough during the landfilling activity to prevent visible emissions from CCR before the cover is in place. To prevent free standing liquids in the bottom ash monofill, the CCR material is decanted in the bottom ash pond prior to storage in the bottom ash monofill.

2.6 General Housekeeping: Spilled, leaked, and/or deposited CCR within the facility will be removed and may utilize vacuuming or stabilized by application of water until the area can be appropriately cleaned up.

If visible emissions from CCR leaks are observed coming from plant equipment (e.g. baghouse, ducts, etc.), controls such as continuous water application (e.g. water spray/fogging) or application of temporary patch(es) will occur. If visible emissions cannot be minimized with temporary controls, operation of necessary equipment will cease until the leak can be fixed and visible emissions are minimized .

Section 3. Assessment of Effectiveness:

3.1 Review of Control Measures: In order to ensure that control measures implemented at the facility are meeting the requirements of 40 CFR §257.80, visual inspections of the areas where CCR fugitive dust has the potential to be generated are conducted. Below is a general schedule of visual inspections. Record of visual inspections are maintained at the facility. When deficiencies are noted corrective measures are taken as necessary.

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3.1.1 Bottom Ash Pond: Inspection of areas, including unpaved CCR roadways are conducted monthly.

3.1.2 Fly Ash Pond: Inspection of area, including unpaved CCR roadways are conducted monthly.

3.1.3 Sedimentation (Sedi) Pond: The Sedi pond is inspected weekly.

3.1.4 Plant Walk Down: The electric generating units and surrounding area are inspected for spillage, leaks, and/or deposits of CCR material weekly.

3.2 Review of the CCR Dust Control Plan: The CCR Dust Control Plan will be reviewed by Environmental Operations when changes to the facility occur that could affect the generation of CCR fugitive dust. When amendments are made to the plan, it will be reviewed and certified by a Qualified Professional Engineer. The CCR Dust Control Plan will be placed in the operating record.

Section 4. Citizen Complaints:

APS can accept citizen complaints through their Customer Care Center or the facility directly. Citizen complaints involving CCR fugitive dust events at the facility will be tracked using the Cholla Internal and External Communication Process found in the Site's Environmental Management System and will be reported in the Annual CCR Fugitive Dust Control Report.

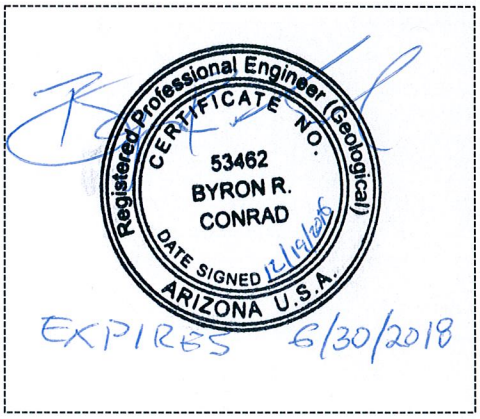
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Section 5. Certification:

Based on information provided by APS, this Dust Control Plan was developed for the Cholla Generating Station. The representations made in this document are true and accurate to the best of my knowledge and meet requirements outlined in 40 CFR §257.80 b(1) through b(7).

Signature

12/19/2016
Date



Professional Engineer Stamp

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Appendix A: List of CCR Related Activities at Cholla Generating Station

Below is a list of CCR related activities conducted at Cholla Generating Station. When other CCR related activities occur at the facility, controls described in Section 2 are implemented to ensure fugitive dust emissions are minimized.

Activity	Control Measure(s)
1. Bottom ash material screening and stacking from Salt River Materials Group (SRMG) screening operation	This is a wet process performed in the boundary of the CCR surface impoundment.
2. Removal of raw bottom ash from pond for sale as beneficial re use.	Bottom ash is removed from pond in small amounts and allowed to dewater prior to loading onto trucks for transport offsite.
3. Loading bottom ash material to haul trucks	Bottom ash shall have sufficient moisture content to minimize emissions.
4. Movement of bottom ash to Bottom Ash Monofill from Bottom Ash Pond	Bottom ash shall have sufficient moisture content to minimize emissions but will not have any free liquids. CCR material is capped with soil prior to CCR material becoming dry..
5. Collecting bottom ash from boilers and transport to ponds via pipeline	This is a wet process and pipelines are enclosed.
6. Removing bottom ash from boilers manually during breakdown of bottom ash removal system	Bottom ash removed from the boiler is saturated. The material is dewatered in a contained environment until no free liquid remains but will have sufficient moisture remaining to minimize emissions and then is transported to the Bottom Ash Pond.
7. Collection and disposal of ash from economizer hoppers	Ash (bottom and/or fly ash) is occasionally collected from economizer hoppers with the use of a commercial vacuum truck equipped with a filter type collection system. After collection, the vacuum truck is emptied into the wet sedimentation pond where water sprays are used during unloading to minimize emissions.
8. Dry collection and transport of fly ash to SRMG or wet disposal system via pipeline	This is an enclosed system vented through fabric filters.
9. Fly ash wet disposal system mixing tank	Dry fly ash is injected into a tank filled with waste

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	lime slurry and / or water to form a wet mixture.
10. Dry fly ash collection system maintenance	Fly ash is either vacuumed out of equipment to facilitate maintenance or water sprays are used to minimize emissions during maintenance of the fly ash collection system.
11. Conditioning and loading fly ash for beneficial reuse by SRMG	Fabric filters are used on equipment that conditions and loads fly ash for beneficial re-use.
12. Replacement of fabric filter bags	Fabric filter bags are either bagged in plastic bags at the point of generation or dropped to ground level using an enclosed tube and placed into a roll off dumpster, covered, and transported offsite for disposal.
13. Removal of solids from Sedimentation Pond	Solids containing CCR are removed wet, allowed to dewater, then transported to either the Bottom Ash Pond or Bottom Ash Monofill for disposal. The material is transported while sufficient moisture remains to minimize emissions.
14. Transport of flue gas desulfurization waste to the Fly Ash Pond for disposal	This flue gas desulfurization waste remains wet through the process.

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