CCR 2016 Inspection Report
AES Puerto Rico

Introduction

Purpose Annual inspection under the Standards for the Disposal of Coal Combustion Residuals From Electric Utilities of April 17, 2015 (CCR Rule)..

Scope Review of available information and perform a visual inspection of the AES Puerto Rico (AES-PR) Agremax™ Stockpile Area.

Facility Location

General AES-PR is located in the south coast of the island of Puerto Rico, about 3.4 miles southwest of downtown Guayama.

Address
AES Puerto Rico
Km 142.0 State Road PR-3
Guayama, Puerto Rico 00784

Facility Description

AES-PR is a bituminous coal power plant that generates and sells electricity to the Puerto Rico Electric Power Authority with a total power generation capacity of 520 Megawatts; this represents approximately 15% of the electricity consumed on the island. AES-PR also produces a manufactured aggregate known as Agremax™, produced by AES-PR. using its own CCRs. Dry ashes that are not delivered to off-site users are mixed in a pug mill that conditions this CCR to produce Agremax™ before feeding a conveyor belt used to transfer the mixture to the Stockpile Area at the facility. A stockpile to store the inventory of Agremax™ is formed by a bulldozer or by dump trucks that are loaded with Agremax™ by an excavator or front end loader, and the trucks then place the Agremax™ onto a stockpile. From the Stockpile Area the Agremax™ is loaded by an excavator or front-end loader into dump trucks, and sent for transport by public highway to off-site users or for disposal. Alternatively, the Agremax™ can be fed by a bulldozer into a crusher located in the Stockpile Area. The crusher feeds a conveyor to transfer the Agremax™ to marine vessels in the AES-PR dock area for shipment overseas.

CCR Unit Description

Location

The Stockpile Area is located at the southeast quadrant of the AES-PR site, south of the power plant and east of the limestone storage dome.

Volume

AES-PR currently maintains two separate Agremax™ stockpiles in its Stockpile Area. One stockpile includes the Agremax™ inventory produced and stored before October 17,2015. The second stockpile has Agremax™ inventory produced on or after October 17, 2015. At the time of the inspection the approximate volume of Agremax™ contained in the stockpile produced on or after October 17,2015 was 120,000 tons.

Components

Equipment and facilities of the Stockpile Area include a front-end loader, a bulldozer, a backhoe, a water truck with rear spray nozzles and front water cannon, a broom sweeper, mobile water sprinkler guns, large water hoses, fixed water spray nozzle systems, a truck wheel cleaning station and a feeder / breaker mill. It also includes a three-layer physical containment system to prevent run-on or migration of sediments and runoff from the stockpile. This triple-containment system is composed of a gabion wall, drainage channels made of reinforced concrete and concrete low wall external to an internal road at the south side of the stockpile.

Review of Available Information

The daily inspection records for the August 2015 to September 2016 were reviewed as part of this scope of work. There were no significant issues identified during said inspections and action items have been addressed.

Visual Inspection

Date

Wednesday September 21, 2016.

Time/Weather

Calm wind and sunny weather conditions prevailed.

Methodology and Limiting Conditions

WRE confirmed the Stockpile Area boundaries and performed a vehicle and walking reconnaissance around its accessible perimeter and terraces but did not look at areas where gaining access may

	have presented health and/or safety hazards. The Stockpile Area was viewed during morning hours for visual evidence of signs of distress or malfunction.
Escort	Eitel Figueroa, AES-PR CCP Engineer, provided escort during the visual inspection.
General Observations	The Stockpile Area was operational at the time of the visual inspection. Its surfaces were still wet from the night-time wet suppression by mobile sprinkler guns and daytime wet suppression by water truck Three separate work terraces with berms on the edges were observed.
Access Road	The access road was observed to be well graded, free of potholes and wetted.
Stockpile Surface / Slopes	No animal burrows were observed. Slopes appeared adequate.
Erosion	Localized rills were observed on the surface of the top and bottom terraces which, appeared to be related to over-watering.
Dust	Dust controls, including the water truck, broom sweeper, mobile water sprinkler guns, large water hoses and fixed water spray nozzle systems were observed to be in good condition and effective as no evidence of fugitive dust was observed at the time of inspection.
Sediment	The gabion wall surrounding the Stockpile Area was observed to be free of sediment and with an adequate and unobstructed setback.
Drainage	The drainage channels surrounding the Stockpile Area were observed to be free of standing water or sediment and unobstructed.
Containment Structures	The low wall appeared to be structurally sound. No gaps or cracks were observed on its concrete surfaces.

Conclusions

Changes in Geometry	Not applicable, as this is the first annual inspection under the CCR Rule.
Potential Structural Weaknesses	Based on the visual inspection, no apparent or potential structural weaknesses were observed.

Other Changes

Not applicable, as this is the first annual inspection under the CCR Rule.

Certification

I hereby certify that I visually inspected and prepared this Report for the Stockpile Area, owned and operated by AES-PR in accordance with the Coal Combustion Residuals Rule 40 CFR 257.84(b). I am a dully-licensed Professional Engineer under the laws of Puerto Rico.

Winston R. Esteves P.E.

9/19/16
Date

8827
License Number

8/31/17
License Renewal Date

P.E. Seal