

SOUTH CAROLINA ELECTRIC & GAS



LOCATION RESTRICTIONS: SEISMIC IMPACT ZONES

FOR THE

WILLIAMS STATION FGD POND

BERKELEY COUNTY, SOUTH CAROLINA

OCTOBER 2018

PURPOSE

The purpose of this report is to demonstrate that the Williams Station FGD Pond meets the Location Restriction requirements of the CCR Rule...

40 CFR Part 257 – Criteria for Classification of Solid Waste Disposal Facilities and Practices, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments

APPLICABLE REGULATIONS

§ 257.63 Seismic Impact Zones

- (a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located in seismic impact zones unless the owner or operator demonstrates by the dates specified in paragraph (c) of this section that all structural components including liners, leachate collection and removal systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.
- (b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.
- (c) The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this section by the date specified in either paragraph (c)(1) or (2) of this section.
 - (1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.
 - (2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.
 - (3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).
 - (4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (c)(1) of this section is subject to the requirements of § 257.101(b)(1).
 - (5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.
- (d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the Internet requirements specified in § 257.107(e).

FGD POND DESCRIPTION

Williams Station is coal-fired electric generation plant located in Goose Creek, Berkeley County, South Carolina. The FGD Pond is used to manage wastewater generated from the flue gas desulfurization scrubber system. The FGD pond was constructed in accordance with construction permit (permit 19263-IW) issued from the South Carolina Department of Health and Environmental Control (DHEC) on March 9, 2009 and placed into operation in accordance with an operation approval issued by DHEC on October 6, 2009. Effluent discharge for the FGD Pond is regulated under NPDES Permit #SC0003883.

The FGD Pond includes two settling bays, each approximately 1.0 acre.

DEMONSTRATIONS

A Geotechnical Evaluation was performed at Williams Station to demonstrate that the FGD Pond meets the criteria of the regulation. The analysis presents that the FGD Pond is in a Seismic Impact Zone and certain structural components including liners, leachate collection and removal systems, and surface water control systems, are not designed to resist the maximum horizontal acceleration in lithified earth material for the site.

CONCLUSION

The Williams Station FGD Pond does not satisfy the requirements of CCR Rule §257.63 *Seismic Impact Zones*.

SCE&G will explore and identify suitable options for alternative capacity for placement of CCR material to further comply with applicable regulations of the CCR Rule.