

SUBJECT: Location Restriction Demonstration – Unstable Areas

Zimmer Power Station

CCR Landfill

Moscow, Ohio

Dynegy Zimmer, LLC operates the coal-fired Zimmer Power Station (Plant) located near Moscow, Ohio. The Subject Landfill is an existing coal combustion residuals (CCR) Unit at the Plant. This demonstration addresses the requirements of 40 CFR §257.64 Unstable Area of the US Environmental Protection Agency's (EPA) rule entitled Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities. 80 Fed. Reg. 21,302 (Apr. 17, 2015) (promulgating 40 CFR §257.64); 83 Fed. Reg. 36,435 (July 30, 2018) (amending 40 CFR §257.64).

§257.64(a): An existing or new CCR landfill, existing or new CCR surface impoundment, or any lateral expansion of a CCR unit must not be located in an unstable area unless the owner or operator demonstrates by the dates specified in paragraph (d) of this section that recognized and generally accepted good engineering practices have been incorporated into the design of the CCR unit to ensure that the integrity of the structural components of the CCR unit will not be disrupted.

§257.64(b): The owner or operator must consider all of the following factors, at a minimum, when determining whether an area is unstable:

(1) On-site or local soil conditions that may result in significant differential settling;

(2) On-site or local geologic or geomorphologic features; and

(3) On-site or local human-made features or events (both surface and subsurface).

Determination of compliance with §257.64(b)(1) - The Unit is not located in a seismic zone, and conditions associated with the potential for significant differential settlement were not identified in the area where the Unit is located. A separate report entitled "Unstable Areas Location Restriction Compliance Summary" was completed by Hanson Professional Services Inc. and confirms the integrity of the CCR Landfill and liner system.

Determination of compliance with §257.64(b)(2) - Based on available United States Geological Survey (USGS) and Ohio Department of Natural Resources Division of Geological Survey (ODGS) information, karst topography or physiographic features such as sinkholes, vertical shafts, sinking streams, caves, large springs, or blind valleys do not exist at the Unit. Also, the Unit's development permit indicates that that there are no unstable areas in the vicinity of the Unit.

Determination of compliance with §257.64(b)(3) - Finally, there are no documented surface or subsurface anthropogenic activities that would be indicative of creating unstable foundation conditions.

§257.64(c): The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority stating that the demonstration meets the requirements of paragraph (a) of this section.

I, James P. Knutelski, being a Registered Professional Engineer in good standing in the State of Ohio, do hereby certify, to the best of my knowledge, information, and belief that the information contained in this certification has been prepared in accordance with the accepted practice of engineering. I certify, for the above-referenced CCR Unit, that the demonstration indicating the CCR Unit is not located in an unstable area as included in the CCR Rule Unstable Areas Location Restriction Compliance Summary dated Oct. 15, 2018, meets the requirements of 40 CFR §257.64(a).

James P. Knutelski, P.E.
Geotechnical Engineer
Registration No. E-80623
Hanson Professional Services Inc.

Seal:



Signature: _____

Date: 10/15/2018 Exp. 12/31/2019