Location Restrictions
SCL4A
Sioux Energy Center

Contents

LOCATION RESTRICTIONS - SIOUX ENERGY CENTER

I. Introduction

Ameren Missouri has evaluated the Sioux Energy Center's ("Sioux") CCR landfill SCL4A in accordance with location restriction set forth in 40 CFR §257.64, Unstable Areas.

II. Background

The Sioux UWL landfill cell SCL4A (Landfill Cell 4A) was constructed in 2013 pursuant to approvals from the Missouri Department of Natural Resources (MDNR) and pursuant to State of Missouri Solid Waste Disposal Area Construction Permit Number 0918301. The permitted footprint for disposal of utility waste covers approximately 183.5 acres and will be developed in three phases. Phase II included the development of SCL4A, an existing CCR Landfill which has a disposal area of approximately 14 acres.

III. Location Restrictions

A. Unstable Areas - 40 CFR §257.64

Existing CCR landfills must not be located in an unstable area unless the owner or operator demonstrates 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.

Sioux is located in an alluvial plain between the Mississippi and Missouri Rivers. The subsurface conditions include a heterogeneous deposit of alluvial soils. The uppermost bedrock underlying the thick alluvium, at a depth of about 115 feet, is limestone and dolomite of the Mississippian-age Salem Formation. Outcrops of the Salem Formation exist in the bluffs on the north side of the Mississippi River. The Salem Formation is reported to be 60 feet thick, and is underlain by the Warsaw Formation which principally consists of shale and finely-crystalline dolomitic mudstone.

The CCR unit at Sioux was evaluated to determine if it was located in an unstable area using data from existing geotechnical investigations and relevant information including maps showing regional bedrock geology, karst features, mines and other potential unstable features. There are no known springs, caves, sinkholes or rock outcrops within the alluvial plain. No other potentially significant geologic or geomorphic features have been identified at Sioux. No significant on-site or local human-made features or events, either surface or subsurface are in evidence at Sioux within the footprints of the CCR unit.

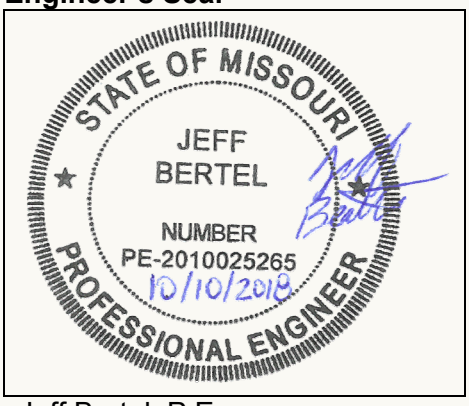
In addition, the global stability and settlement of the solid waste disposal area CCR unit was evaluated during design. Those evaluations reflect that the CCR unit is not susceptible to significant differential settling or mass movement.

1. Engineer's Certification – Unstable Areas

Existing CCR landfills must not be located in an unstable area unless the owner or operator demonstrates 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. An assessment of active CCR landfill SCL4A (Landfill Cell 4A) at the Sioux Energy Center was conducted to prepare a demonstration that the CCR unit meets the requirements of 40 CFR Part 257 §257.64.

CCR Unit	Meets requirements of 40 CFR 257.63
SCL4A (Landfill Cell 4A)	Yes

Engineer's Seal



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