

Pond C Location Restriction Compliance: Placement Above the Uppermost Aquifer

Prepared by

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S&L Project No. 10572-117

Rev. 0 Issue Date: October 17, 2018 Issue Purpose: Use



1 DEMONSTRATION

Federal CCR Rule References: 40 CFR 257.53 and 257.60(a)

Indianapolis Power & Light Company (IPL) owns the Eagle Valley Generating Station (EVS), which is a retired coal-fired power plant. Pond C, an existing coal combustion residual (CCR) surface impoundment at the site, presently does not accept CCR and is planned to be closed in the future. This document addresses the demonstration required for the CCR unit to satisfy 40 CFR 257.60(a):

"New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must be constructed with a base that is located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer."

Pursuant to 40 CFR 257.53:

"*Uppermost aquifer* means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary. Upper limit is measured at a point nearest to the natural ground surface to which the aquifer rises during the wet season."

Based on a review of data collected throughout IPL's groundwater monitoring program for the CCR units at EVS, the uppermost aquifer underlying Pond C is primarily composed of a layer of sand or intermixed sand and gravel. Per historical boring logs and data, this sand and gravel, water-bearing unit is separated from the CCR stored within Pond C's boundary by a clay/silt layer that is at least five feet thick.

Thus, Pond C meets the performance standard promulgated by 40 CFR 257.60(a).

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2 CERTIFICATION

Federal CCR Rule Reference: 40 CFR 257.60(b)

The demonstration presented herein meets the requirements of 40 CFR 257.60(a).

I certify that this document was prepared by me or under my direct supervision, and that I am a registered professional engineer under the laws of the State of Indiana.

Certified By: David E. Nielson

Date: October 17, 2018

Seal:

