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#### **MEMORANDUM**

17 April 2018 File No. 129778-018

SUBJECT: Updated Notification of Intent to Initiate Closure of an Inactive CCR Surface

Impoundment - Inactive Bottom Ash Pond

Jeffrey Energy Center St. Marys, Kansas

Westar Energy, Inc. (Westar) prepared an initial Notification of Intent to Initiate Closure of an Inactive CCR Surface Impoundment for the Inactive Bottom Ash Pond at the Jeffrey Energy Center (JEC) dated 10 December 2015 in accordance with §257.100(c)(1) of the USEPA CCR Rule, 40 CFR Part 257 (CCR Rule). Based on the USEPA Partial Vacatur (40 CFR Part 257 EPA-HQ-OLEM-2016-0274; FRL-9949-44-OLEM) effective 4 October 2016, the Inactive Bottom Ash Pond is now "subject to all of the requirements of this subpart applicable to existing CCR surface impoundments" [§257.100(a)]. As such, Westar intends to complete the closure of the Inactive Bottom Ash Pond within five years of the commencement of closure consistent with standard closure timeframes by no later January 2021, in accordance with §257.102(f)(1)(ii).

## **Proposed Design Description**

Westar has initiated closure of the Inactive Bottom Ash Pond in January 2016. Westar reserves the right to close the unit in accordance with the alternate closure options. Westar has initiated closure design and has completed pre-construction activities at the site in preparation for closure. Appropriate engineering calculations will be completed to verify stability of the final cover system and settlement calculations to assist in the design of the cover subgrades.

The CCR surface impoundment will be closed by initially unwatering remaining standing water that is impounded within the perimeter dikes. Westar has managed the water level within the impoundment in accordance with applicable site NPDES permit. Trenches are being developed throughout the impoundment to allow for drainage to a sump to support the water removal process (with rainwater and pore water being the source of water in the unit's current condition). Additionally, mass balance of existing CCR materials and fill material will be placed to develop appropriate grading to develop positive drainage to adequately manage surface water runoff of the final cover system. In combination with the final cover system, the drainage crowns and drainage controls will be designed and constructed to manage run-off and minimize post-closure infiltration of water. The cap system will be graded to convey stormwater runoff towards appropriate discharge locations as deemed appropriate based on the final design.

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The final cover system is proposed to be designed and constructed to meet the USEPA's CCR Rule requirement of §257.102(d)(3). The proposed final cover system will have a permeability less than or equal to any bottom liner system or any natural subsoils present, or no greater than  $1 \times 10^{-5}$  cm/s, whichever is less, and a minimum 18-inch infiltration layer will minimize the infiltration of liquids through the CCR unit. An equivalent alternative may also be chosen. Erosion of the final cover system will be minimized by the placement of a minimum 6-inch erosion layer, capable of supporting native plant growth. It is anticipated that soils will be imported from adjacent borrow areas proximate to the unit and plant. Westar will be preparing a closure plan in accordance with the Partial Vacatur for the Inactive Bottom Ash Pond consistent with §257.102(b), providing additional closure detail prior to 17 April 2018.

## **Anticipated Closure Schedule**

Commence Closure	January 2016
Closure Completion	January 2021

#### **Notification of Intent to Close**

On behalf of Westar Energy, this document serves as an updated notification of intent to close the Inactive Bottom Ash Pond at the Jeffrey Energy Center in accordance with the allowable closure completion timeframes meeting the USEPA's CCR Rule requirements of §257.102(f).

# **Professional Engineer Certification**

I certify that the above-referenced proposed final cover system for Westar's closure of the Inactive Bottom Ash Pond at the Jeffrey Energy Center meets the USEPA's CCR Rule requirements of §257.102(d)(3).

Certifying Engineer



