

October 7, 2020

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**Petersburg Station Restricted Waste Site Landfill** 

Solid Waste Facility Permit Number FP 63-02 Pike County, Petersburg, Indiana

Dear Mr. Harter,

Re:

In accordance with your request, this letter is submitted to document the status of the Restricted Waste Site Landfill at the Petersburg Generating Station located near Petersburg, IN.

## BACKGROUND

IPL's Petersburg Generating Station received its initial permit to operate an 80.1 acre Type III Restricted Waste Disposal Facility in 1983. A permit modification was then obtained in 1994 to expand the solid waste boundary to include an additional 43 acres. To date, IPL has only operated within the limits of the original landfill solid waste boundary and has obtained partial closure certification of approximately 31.9 acres on the west side of the original landfill footprint. CCR waste materials are currently being used for on-site beneficial use purposes (structural fill) supporting ongoing closure activities of the ash pond system, sent off-site for mine placement, beneficial use purposes and/or disposal. However, there is no guarantee that the current off-site disposal option will remain in operation. Due to the uncertainity of off-site disposal options and the potential use of the permitted landfill to accommodate CCR waste materials currently being used beneficially for on-site ash pond closure activities it is necessary for the facility to be prepared to utilize the permitted landfill to ensure continued operation of the generating station.

Due to requirements contained in the CCR Rule, IPL obtained approval of a minor permit modification from the Indiana Department of Environmental Management (IDEM) to revise the design of the landfill to utilize a composite liner, leachate collection system and composite final cover in all undeveloped portions of the permitted landfill. The remaining disposal capacity of the currently permitted landfill (which includes the expansion area) is approximately 7,700,000 cubic yards.

Following receipt of IDEM's approval of the minor permit modification, IPL initiated additional subsurface investigations of the approved expansion area to help develop the final construction drawings. In addition, IPL has performed an initial environmental permit applicability and risk assessment and is evaluating potential wastewater treatment needs of the projected leachate. These investigative efforts are still ongoing.

## **CCR Rule Closure Requirements**

As noted in 40 CFR § 257.102(e), the CCR Rule contains requirements regarding the initiation of closure activities as well as provisions that must be met to postpone the initiation of closure activities. The following paragraphs list these CCR Rule requirements in bold italics followed by brief narratives that address the requirements.

- (e) <u>Initiation of closure activities.</u> Except as provided for in paragraph(e)(4) of this section and § 257.103, the owner or operator of a CCR unit must commence closure of the CCR unit no later than the applicable timeframes specified in either paragraph (e)(1) or (2)of this section.
  - (1) The owner or operator must commence closure of the CCR unit no later than 30 days after the date on which the CCR unit either:
    - (i) Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or
    - (ii) Removes the known final volume of CCR from the CCR unit for the purpose of beneficial use of CCR.

Based on current plans, the Petersburg Station Restricted Waste Site Landfill has not yet received its final deposition of waste.

(2)

(i) Except as provided by paragraph (e)(2)(ii) of this section, the owner or operator must commence closure of a CCR unit that has not received CCR or any non-CCR waste stream or is no longer removing CCR for the purpose of beneficial use within two years of the last receipt of waste or within two years of the last removal of CCR material for the purpose of beneficial use.

An interim soil cover was placed over the active portions of the Petersburg Station Type III Restricted Waste Site Landfill in 2017. IPL intends to continue operation of the landfill in the future and has taken the steps necessary to obtain IDEM's approval of plans to include a base liner, leachate collection system and composite final cover in the currently undeveloped portions of the landfill. With these modifications, the landfill will operate as a Type I Restricted Waste Disposal Facility.

(ii) Notwithstanding paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit may secure an additional two years to initiate closure of the idle unit provided the owner or operator provides written documentation that the CCR unit will continue to accept wastes or will start removing CCR for the purpose of beneficial use. The documentation must be supported by, at a minimum, the information specified in paragraphs (e)(2)(ii)(A) and (B) of this section. The owner or operator may obtain two-year extensions provided the owner or operator continues to be able to demonstrate that there is reasonable likelihood that the CCR unit will accept wastes in the foreseeable future or will remove CCR from the unit for the purpose of beneficial use. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by § 257.105(i)(5) prior to the end of any two-year period.

IPL documented its initial demonstration supporting a two-year extension in a letter report dated October 12, 2017. Due to an administrative oversight, the demonstration supporting an additional two-year extension was not submitted in 2019. However, the future need for the operation of the landfill has not changed. Therefore, this letter will serve to document support for a second two-year extension (from October 12, 2019 to October 12, 2021) regarding the initiation of closure activities at the Petersburg Station Restricted Waste Site Landfill

(A) Information documenting that the CCR unit has remaining storage or disposal capacity or that the CCR unit can have CCR removed for the purpose of beneficial use; and

The remaining permitted disposal capacity of the landfill is approximately 7,700,000 cubic yards.

- (B) Information demonstrating that that there is a reasonable likelihood that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future or that CCR can be removed for the purpose of beneficial use. The narrative must include a best estimate as to when the CCR unit will resume receiving CCR or non-CCR waste streams. The situations listed in paragraphs (e)(2)(ii)(B)(1) through (4) of this section are examples of situations that would support a determination that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future.
  - (1) Normal plant operations include periods during which the CCR unit does not receive CCR or non-CCR waste streams, such as the alternating use of two or more CCR units whereby at any point in time one CCR unit is receiving

- CCR while CCR is being removed from a second CCR unit after its dewatering.
- (2) The CCR unit is dedicated to a coal-fired boiler unit that is temporarily idled (e.g., CCR is not being generated) and there is a reasonable likelihood that the coal-fired boiler will resume operations in the future.
- (3) The CCR unit is dedicated to an operating coal-fired boiler (i.e., CCR is being generated); however, no CCR are being placed in the CCR unit because the CCR are being entirely diverted to beneficial uses, but there is a reasonable likelihood that the CCR unit will again be used in the foreseeable future.
- (4) The CCR unit currently receives only non-CCR waste streams and those non-CCR waste streams are not generated for an extended period of time, but there is a reasonable likelihood that the CCR unit will again receive non-CCR waste streams in the future.

A majority of the CCR materials generated at the Petersburg Generating Station are currently being used for beneficial purposes, as structural fill to support the closure of the ash pond system. It is currently anticipated that this beneficial use will end in late 2021 or 2022. CCR materials which are not used to support the closure of the ash ponds are transported off-site either for mine backfilling, beneficial use, or disposal. Since the onsite beneficial use program will be ending soon, and there is no guarantee that the current off-site disposal option will remain in operation, it is necessary for the facility to be prepared to utilize the permitted landfill to ensure continued operation of the generating station.

(iii) In order to obtain additional time extension(s) to initiate closure of a CCR unit beyond the two years provided by paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (e)(2)(ii) of this section the following statement signed by the owner or operator or an authorized representative:

As required, the following statement is provided by the undersigned as an authorized representative of IPL's Petersburg Generating Station.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions concerning information contained in this report, please do not hesitate to call either of the undersigned at 317.849.4990.

Sincerely,

**ATC Group Services LLC** 

William Paraskevas, P.E. Principal Engineer

Copies: (1) Jeff Harter (IPL)

(1) Nysa Hogue (IPL)

(1) David Heger (IPL)

Donald L. Bryenton, P.E. Principal Engineer