

Edwards Public Meeting Summary, May 25, 2022

On April 25, 2022, Illinois Power Resources Generating, LLC (IPRG, LLC) made available to the public its plans to close the Ash Pond (AP) located at the Edwards Power Plant. On Wednesday, May 25, 2022, IPRG, LLC held in-person public meetings at 3:00 pm and 5:30 pm at the Peoria Marriot Pere Marquette to present its decision-making process. A comparison of projected groundwater impacts for the alternatives presented, and an objective comparison of the pros and cons of each alternative were presented at these meetings. During the question-and-answer portion of the meeting, the public asked questions relating to the proposed closure which the company addressed. As required by Section 845.240(g), this document provides a general summary of the issues or comments raised by the public relating to the closure, a summary of the company's responses to those issues or comments, and a summary of any revisions or changes made to the proposed closure action as a result of issues and comments raised by the public. This document also provides as required by 845.240(f)(3), written responses to the questions not addressed during the public meetings.

Issue/Topic	Summary of Response Provided at Meeting	Additional Written Response
<p>1. Ash Pond Closure Alternatives/ Risk Assessment</p>	<p>The following alternatives were considered:</p> <ol style="list-style-type: none"> 1. Closure by removal with onsite disposal 2. Closure by removal with offsite disposal 3. Closure in place <p>Closure of an ash pond means that that ash within the pond is either capped in place (Closed in Place; CIP) or excavated and disposed in an alternative landfill. In Part 845, IEPA allows different closure approaches to be evaluated and sets criteria that must be evaluated for each potential closure approach in the Closure Alternative Analysis (CAA).</p> <p>A risk assessment and groundwater model were completed to provide information needed in selecting an alternative. The groundwater model results show that both CIP and CBR are equally protective to groundwater. The CAA identified CIP as the most appropriate closure approach because it has the least negative impacts overall. The CAA is included in the</p>	<p>The Closure Alternatives Analysis (CAA) provides a detailed evaluation of the different factors that were evaluated for the closure alternatives. These factors include, but are not limited to, reduction of risks, likelihood of future releases, impacts to workers and the community, impacts to scenic, historic, and recreational areas, time until the GWPSs are achieved, and reliability and implementability of the closure approach. The risk assessment and groundwater model provide quantitative data used in the analysis.</p> <p>The Risk Assessment follows USEPA and IEPA recommended guidance using conservative (health-protective) assumptions based on a conceptual site model (CSM). The CSM provides a basis for understanding the site conditions and exposure pathways for receptors that may be exposed to site-related constituents. Exposure pathways refer to the way that people or animals may come in contact with a constituent. They are generally referred to as either complete or</p>

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		<p>Construction Permit Application posted on the Luminant website www.luminant.com/ccr/illinois-ccr/.</p> <p>incomplete. The necessary components for a complete exposure pathway consist of:</p> <ul style="list-style-type: none"> • A source and mechanism of constituent release from the source; • Retention or transport of the constituent through the environmental medium; • A point of contact between the receptor and the environmental medium; and • A route of exposure for the potential receptor at the contact point. <p>US EPA has established acceptable risk metrics. Risks above these US EPA defined metrics are termed potentially "unacceptable risks".</p> <p>This assessment evaluated potential risks to human and ecological receptors that may be exposed to groundwater or surface water near the site. These receptors include recreators on the Illinois River (e.g., boaters and swimmers), anglers on the Illinois River that consume locally caught fish, and ecological receptors in the river and river sediments. No unacceptable risks were identified for any receptor, which means that the calculated risks from the site are likely indistinguishable from normal background risks.</p> <p>The groundwater model shows that both CIP and CBR protect groundwater from future impacts. The model also shows the cleanup time of the groundwater contained within the underlying soils is the same for both CIP and CBR. In other words, CBR is not expected to achieve the groundwater protection standards more quickly than CIP. The</p>

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			groundwater model was developed using site-specific data collected during the site characterization, state and federal geology, hydrogeology (groundwater) and hydrology (river) information, well records, historic aerial photography, mine maps, and other information sources.
2.	Closure-by-Removal with On-Site Disposal	The Edwards Power Plant does not have an onsite landfill; therefore, one would need to be constructed. This alternative was not carried forward as the property is too small to accommodate a landfill and adjacent properties are not suitable for a landfill because they are located within the floodplain.	Purchasing land near, but not adjacent to, the plant would constitute an off-site landfill. To be considered an on-site landfill, the landfill must be contiguous with the power plant. If ash must be hauled over a public road, regardless of distance, then it is considered off-site disposal. Furthermore, we are not aware of any suitable land available for sale adjacent to or near the plant.
3.	Closure-by-Removal with Off-Site Disposal	Landfills within 70 miles that are permitted to handle ash were evaluated for capacity. If closure by removal was the selected remedy, IPRG, LLC would contact potential receiving facilities and IEPA would likely contact the communities that could be affected by truck travel or expansions of existing off-site facilities. However, this is unnecessary at this time since CIP is the preferred and sought-after closure method. Barge and rail transport were considered; however, there are several negative consequences that make trucking to a neighboring landfill the preferred option for CBR.	Evaluation of landfill capacity and permitted use must be taken into consideration for each landfill considered for off-site disposal. For example, a municipal landfill is often designed and permitted to accept waste from the local community at a specific rate. The landfill owner relies on this information to determine the remaining life of a landfill and determine when it will be necessary to expand or close the landfill. Due to the lengthy permitting and construction process, a landfill would need to continue accepting current waste streams and ash for a significant period of time to be a viable option, assuming the landfill owner and state approve. Furthermore, given the volume of ash that would need to be transported, it is important to evaluate impacts to communities

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		<p>that will be affected by the increase in truck traffic to and from the landfill.</p> <p>The nearest operating landfill to meet the above criteria is Indian Creek Landfill No. 2. IPRG, LLC did not contact the owner or state for disposal approval as the risks and impact associated with off-site disposal are significant, as documented in the CAA. During the meeting, concerns were raised regarding truck traffic and impact to the communities of Hopedale and Bartonville.</p> <p>A question was also asked if the residents of Hopedale are being made aware that a landfill in their community has been identified as a potential disposal site. Any public notification requirement would be the responsibility of the receiving facility. If the facility is being expanded, the landfill owner will likely be subject to the Illinois siting process, which is a months-long process requiring public notice, public hearings, and a decision by the local government. If the facility is modifying its existing permit to accept the CCR, the landfill owner is required to notify public officials and other interested parties. If the CCR can be accepted in accordance with the current permit, then no public involvement is required. A question was asked specifically about disposal at the Peoria City/County Landfill, which is approximately 4 miles closer to the Edwards Power Plant than the off-site facility discussed in the CAA. The Peoria City/County Landfill No. 2 is expected to close in 2023 and be replaced by Landfill No. 3, which is currently under</p>

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			<p>development. We will evaluate the disposal of CCR at the Peoria City/County Landfill as a potential option for the CBR scenario. This evaluation will be included in an updated CAA included with the Final Closure Plan.</p> <p>Transportation of CCR using rail or barge was evaluated in the CAA. While there is currently a rail line encircling the ash pond, this rail loop must be demolished in order to complete the closure project. Additionally, there are no rail unloading facilities at any of the off-site disposal sites. Even if it is possible to construct new rail loading and unloading facilities, the design, permitting, and construction of these new rail facilities would likely delay closure of the ash pond by 5 to 7 years. Barge transportation has similar restrictions. There are no barge loading or unloading facilities at the power plant or any of the off-site landfills. Design, permitting, and construction of new facilities would entail extensive project delays (again likely 5 to 7 years). Additionally, the off-site landfills are not located on a river, so trucking will still be required to haul the CCR to the final disposal location.</p>
4.	Closure-in-Place/ Ash Dewatering/ Ash Consolidation	The selected closure approach involves removing liquid waste, consolidating the ash within a smaller portion of the ash pond located above the uppermost aquifer, and covering the consolidated ash with a geomembrane. By removing liquid waste, consolidating the ash, and installing a geomembrane over the ash, infiltration into the ash and releases to groundwater will be minimized. Modeling has demonstrated that	<p>Free liquids will be removed from the ash and discharged in accordance with the NPDES permit. If necessary, to meet permit limits, the liquids will be pre-treated. The methods being considered are:</p> <ol style="list-style-type: none"> 1. Drilled sumps. <ol style="list-style-type: none"> a. These consist of 4-foot to 6-foot diameter drilled holes in the ash greater than 10-feet thick. An HPDE pipe perforated to allow free liquids

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		<p>this closure process will result in groundwater concentrations achieving the groundwater protection standards at the same or similar rate as closure by removal.</p>
		<p>to flow into the pipe is inserted into the drilled hole. The annulus between the ash and the pipe is back filled with clean gravel.</p> <ul style="list-style-type: none"> b. A series of piezometers is installed to determine the drawdown of the phreatic surface around the sump. c. The drawdown will determine the spacing of the sumps. d. The discharged liquid waste will be treated and discharged through the NPDES permitted outfall. <p>2. Engineered Trenches.</p> <ul style="list-style-type: none"> a. Excavated and properly designed sloped trenches may be used for ash depths less than 10-feet. b. Piezometers are installed to determine the drawdown of the phreatic surface around the ditch. c. The trenches are sloped to a low point to be treated and discharged through the NPDES permitted outfall. <p>3. Horizontal wells.</p> <ul style="list-style-type: none"> a. Directionally drilled or excavated and installed horizontal wells may be used in ash zones of low permeability that are not responding to flow of liquid waste to sumps and trenches. b. Piezometers are installed to determine the drawdown of the phreatic surface around the horizontal well.

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		<p data-bbox="1360 289 1894 410">c. The horizontal wells are cleared by submersible pumps and discharged through the NPDES permitted outfall.</p> <p data-bbox="1213 467 1894 781">After removal of free liquids, the ash will be consolidated by moving the ash from the north to the south, reducing the ash pond footprint by 24%. The approximate 210,000 cy of ash from the rail line embankment located outside of the pond will be placed in the area to be capped. Dust control methods, including spreading water on surface of ash, will be used when handling ash. The cap will be constructed in accordance state-of-the-practice methods and materials.</p> <p data-bbox="1213 821 1894 1268">It was asked if moving the ash to one side, then lining the other side and transferring the ash to the lined side was evaluated. Due to constructability issues, this specific CIP option was not included in the CAA; however, groundwater modeling has shown that CIP and CBR are equally protective. Therefore, placement of a liner within the former ash pond will not improve the time to reach the GWPS. The stability, safety, and scheduling challenges that are present due to the amount of ash movement and stockpiling that would be required given the current depth, liquid content, and relatively small area of the ash pond make such a closure option unfeasible.</p>

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5.	Future Use	IPRG, LLC intends to operate a 37 MW energy storage unit (battery) at the Edwards Power Plant. Installing solar panels on the closed pond is under consideration. Panels are commonly placed using above-grade foundation methods which would eliminate the need to penetrate the cap.	Should the company choose to utilize the surface of the impoundment for a solar facility, the design and slope of the cover system will be modified to maximize electricity generation. Installation of solar on the cover system will provide additional tax revenue to the local community, jobs, benefit the grid, and support Illinois' path toward 100 percent clean energy by 2050.
6.	Groundwater Monitoring	For the closure-in-place alternative, groundwater monitoring will continue on the property for at least 30 years. However, if GWPSs have not been achieved in that timeframe, groundwater monitoring will continue as required.	Groundwater impacts at the property boundary indicate that nearby properties may be impacted. IPRG, LLC has informed the IEPA and adjacent landowners of the potential and has sought access to these properties to characterize the extent. Installation of wells will begin following completion of access agreements on the neighboring properties.
7.	River Flooding	The ash pond is above the base flood elevation.	<p>The embankment of the capped pond is designed with a minimum elevation of approximately 462 ft, which is 4.5 feet higher than the base flood elevation (BFE) of 457.5 ft. Furthermore, a review of the nearest river gages shows that the highest recorded flood elevation at the Illinois River at Peoria Lake and Dam, located approximately 9 miles upstream of the ash pond, was 457.75 ft, and the highest flood recorded at the nearest downstream gage, Illinois River near Havana, which is approximately 34 miles downstream, is 452.18 ft. The ash pond is also protected by the Pekin Marsh Levee, a levee system that ranges in elevation from 455.17 feet to 458.17 feet.</p> <p>The embankment will be vegetated and protected to control erosion. Routine inspections and</p>

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			maintenance of the cover system and embankments will be performed throughout the post-closure period. Additionally, structural stability assessments have been performed.
8.	Will Union labor be used during closure activities?	Work will be contracted following standard procedures. Additional information will be provided in written responses.	Union labor will be considered.
9	Beneficial Reuse	Continuing to evaluate options for beneficial reuse.	