

RESPONSIVENESS SUMMARY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DRAFT PERMIT
IPL – OTTUMWA MIDLAND LANDFILL (OML) #9000107

On December 17, 2025, the Iowa DNR of Natural Resources (DNR) opened public notice of its tentative decision to issue an NPDES permit to IPL – Ottumwa Midland Landfill (hereinafter referred to as “OML”) located in Ottumwa, Iowa. The notice was transmitted to persons as listed in the *Iowa Administrative Code* (IAC) at 567 IAC 60.5(2)“a”(1). The notice, draft permit, and permit rationale were also published on the DNR’s website in accordance with 567 IAC 60.5(2)“b”.

The DNR received one comment letter on January 16, 2026 signed by the Sierra Club, the Iowa Environmental Council and the Environmental Law & Policy Center. The letter requested a public hearing, which the DNR approved. Notice of the hearing was transmitted to persons as listed in the *Iowa Administrative Code* (IAC) at 567 IAC 60.5(2)“a”(1) on January 20, 2026. The hearing notice was published on the DNR’s website in accordance with 567 IAC 60.5(2) “b”. The DNR received comments via email on January 15, 2025, from Matthew Bizjack who is the Senior Environmental Specialist at Interstate Power and Light (IPL). The following briefly summarizes all pertinent written and oral comments received during the written comment period and the public hearing and provides the DNR’s responses.

Comment: IPL must perform a new Antidegradation Alternatives Analysis (AAA) to address cobalt, lithium, manganese, and molybdenum as pollutants of concern in the underdrain water and to evaluate additional alternatives based on chemical precipitation consistent with the 2024 ELG. In addition, the AAA must analyze the social/economic importance and provide a justification for degrading water quality in the Des Moines River. In conducting its evaluation, IPL needs to address the ancillary benefits to water quality and environmental justice issues. In short, IPL needs to address deficiencies in the AAA before an NPDES permit and construction can proceed.

Response: The AAA addresses cobalt, lithium, manganese and molybdenum (tables 2 and 11 in the AAA). As shown in Table 2 of the AAA, the underdrain wastewater stream meets applicable wasteload allocation limits without the need for treatment. To date, the groundwater drains have not shown they are impacted by leachate.

Sections 5 and 6 of the AAA address justification of degradation and social and economic importance. The relative degradation of evaluated alternatives is discussed in Section 4 of the AAA. Inclusion of an environmental justice component in the AAA is not required by the Iowa Antidegradation Implementation Procedure (AIP).

Comment: Because IPL plainly maintains operational control over both the Ottumwa Generating Station (OGS) and the nearby Ottumwa Midland Landfill, any leachate wastewater collected at the Ottumwa Midland Landfill fits within EPA’s definition of combustion residual leachate, and must be regulated as such. As noted, the 2024 ELG Rule requires IPL to eliminate all managed leachate discharges “as soon as possible beginning July 8, 2024, but no later than December 31, 2029.” Notably, combustion residual leachate also “*includes wastewater from landfills and surface impoundments located on non-adjointing property when under the operational control of the permitted facility.*”

Ensuring compliance with the zero-discharge limit requires IDNR to make it a requirement in the NPDES permit and, if necessary, set a compliance schedule. At present, no draft or issued NPDES permit contains the zero-discharge requirement for the facility. IPL trucks the wastewater to the City of Ottumwa Sewage Treatment Plant.

Response: The DNR concurs that compliance with 40 CFR Part 423 is mandatory if any combustion residual leachate from OML is discharged into a U.S. water body, regardless of the discharge location. However, the law does not state that the requirements must be included in the generating station's NPDES permit when the generating station does not discharge leachate at the site.

The only OML leachate allowed to be discharged to a water of the United States is via the POTW's NPDES permit (NPDES # 9083001). Therefore, the City of Ottumwa is responsible for including any effluent guideline pretreatment limits or deadlines in their pretreatment agreements, and they have done so.

The POTW has a pretreatment program approved by the DNR, thus they are delegated the permitting authority for all of their industrial contributors, including leachate, and are not required to seek DNR review/approval prior to issuing a pre-treatment agreement. However, the agreements are subject to review by DNR and/or EPA during pretreatment program inspections. DNR staff recently worked with pretreatment staff at Ottumwa to revise the permit between the City and IPL to ensure that all applicable pretreatment federal effluent guidelines are included. The pretreatment permit was revised on September 8, 2025 to include the following statement... "In accordance with 40 CFR423.16(j)(1)(i) there shall be no discharge of coal combustion residual leachate generated on and after May 9, 2027." IPL has been informed of the 2027 ELG deadline to stop sending leachate to the POTW.

Comment:

IDNR must also address IPL's apparent discharge of *unmanaged* combustion residual leachate from the Ottumwa Midland Landfill. Although IPL continues to claim the underdrain water consists solely of background groundwater that does not contact any landfilled waste, IPL's own groundwater monitoring data demonstrates that the Ottumwa Midland Landfill underdrain groundwater discharges contain heavy metals and toxic pollutants commonly found in combustion residual leachate, including arsenic, barium, boron, calcium, cobalt, iron, lithium, magnesium, manganese, molybdenum, and zinc.

Response: Arsenic, barium, boron, calcium, cobalt, iron, lithium, magnesium, manganese, molybdenum and zinc are all naturally occurring elements commonly found in groundwater. The presence of these elements alone does not mean that the underdrain water is contaminated by leachate.

The groundwater discharges are sampled and monitored as part of a landfill's environmental monitoring program that includes upgradient and downgradient monitoring wells. The program includes statistical analysis and comparison of downgradient and underdrain groundwater to upgradient groundwater. If it is determined that the groundwater in an underdrain has been impacted by the landfill, the discharge must be collected and then treated as if it is leachate.

To date, the groundwater underdrains have not shown they are impacted by the landfill. Instead, they exhibit characteristics similar to the upgradient groundwater, so the underdrain groundwater is considered naturally occurring. Therefore, there is no discharge of unmanaged combustion residual leachate at OML through the groundwater underdrain system or otherwise based on current information, and the DNR continues to require monitoring and reporting of the groundwater underdrain systems to the Solid Waste and Contaminated Sites Section on an annual basis.

Comment: Without further demonstration, the contaminated groundwater at OML background monitoring well MW-122M is not naturally occurring, but rather is unmanaged combustion residual leachate from the Midwest Flyash Landfill. If the Ottumwa Landfill's underdrain water is actually unmanaged leachate from the Midwest Flyash Landfill, IDNR must impose numeric arsenic and mercury limits on any such discharges as a part of the NPDES permit for the underdrain based on the installation and operation of chemical precipitation technology.

Based on the hydrogeological reports from both landfills, it is entirely plausible that the two landfills are hydraulically connected.

Response: The two landfills are more than 4.5 miles apart and are hydraulically separated.

Comment: The underdrain water is just as likely unmanaged leachate without further demonstration. IPL may dispute the presence of combustion residual leachate in Ottumwa Midland Landfill's underdrain groundwater. The AAA claims the "underdrain water does not contact waste, and data is regularly submitted to IDNR to show that the liner remains intact." However, the regularly submitted data is based on visual inspections, and as such is clearly insufficient to demonstrate an intact liner. If unmanaged leachate from the Landfill has leaked into the Ottumwa Landfill's underdrain system, IDNR must impose numeric arsenic and mercury limits on any such discharges, as soon as possible.

Response: The regularly submitted data is not based on only visual inspections. It also includes monitoring data from wells and surface water points that are used to assess landfill liner integrity.

Further, although visual inspections are conducted at landfills, it is the sampling, monitoring, and reporting as part of a landfill's environmental monitoring program that evaluates the integrity of a landfill's liner system. As previously noted, this includes statistical analysis and comparison of downgradient and underdrain groundwater to upgradient groundwater. To date, the groundwater underdrains have not shown they are impacted by the landfill. Instead, they exhibit characteristics similar to the upgradient groundwater, so the underdrain groundwater is considered naturally occurring.

Comment: EPA's extension of the final ELG compliance deadline does not excuse IDNR from addressing IPL's leachate discharges. In issuing the Extension Rule, however, EPA emphasized that the underlying effluent limitations remain in effect, and therefore state permitting authorities are still required to establish compliance deadlines "as soon as possible," subject to the consideration of the four regulatory factors set out in 40 C.F.R. § 423.11(t).

Response: The DNR is not aware that IPL has requested any extension of the final ELG compliance deadline for leachate.

Comment: On May 1, 2025, IPL started hauling the underdrain water to the Ottumwa Water Pollution Control Facility (WPCF). The Industrial User Permit (Permit Number 36) for Ottumwa Midland Landfill accepts the coal combustion residue leachate from Ottumwa Midland Landfill, and was amended to accept the underdrain water from GU-EX and GU-1 effective May 1, 2025. Consistent with the Iowa Antidegradation Implementation procedure, *all new or expanded regulated activities are subject to antidegradation review requirements*. The creation of a discharge of the underdrain water to the Des Moines River will clearly result in the addition of pollution, including numerous pollutants found in the underdrain water that will degrade water quality. Thus, the proposed change in process required an antidegradation analysis.

Response: Antidegradation requirements under 40 CFR §131.12 and the Iowa Antidegradation Implementation Procedure apply specifically to direct discharges to "waters of the United States" (WOTUS).

The Ottumwa Midland Landfill permit (permit number 36) is a pretreatment permit governed by 40 CFR Part 403, 567 IAC 62.3, and local city ordinances.

The Ottumwa WPCF is permitted to discharge to the Des Moines River under NPDES permit #9083001 and has an approved pretreatment program. The acceptance of wastewater from an industrial user is managed through Local Limits and Pretreatment Standards to ensure the WPCF prevents "pass-through" or "interference." As long

as the WPCF remains within its existing NPDES permitted mass and concentration limits, and has not requested an increase in the authorized pollutant loading from the WPCF outfall to the Des Moines River, an antidegradation analysis is not required.

Comment: The current AAA selected Alternative 3 is to remove particulate iron via bag filters and discharging to the nearby Wetland Complex. However, given that the proposed discharge traverses over and through the soils between the landfill and the river, it is highly improbable that the entire underdrain water discharge reaches the river. By discharging to a wetland, some of the water infiltrates or evaporates on its path from the existing discharge point and the Des Moines River. The evaporation and infiltration that occurs before reaching the Des Moines River, as proposed by Alternative 3, increases the concentrations of the pollutants of concern. As a result, Alternative 3 not only further contaminates the ground water, but would clearly increase the polluted discharge to the river.

Response: Applicable water quality based effluent requirements for Alternative 3 (discharge to the wetland) are shown in Table 1 of the AAA. Evaporation and infiltration of water certainly occurs in wetlands. These processes are not subject to regulation or control by IDNR in a natural wetland. Wetlands are known to reduce metals through substrate absorption, plant uptake, sedimentation and microbial processes.

Comment: The AIP requires that the DNR “assure the highest statutory and regulatory requirements for existing point sources must be met before allowing any lowering of water quality.” The alternative selected in the AAA is inconsistent with both the state’s antidegradation requirements and the statutory intent of the Clean Water Act. Discharging the underdrain water to the Des Moines River via the wetland and unnamed streams neither prevents nor lessens the degradation. Before an NPDES permit can be issued, the AAA needs to include alternatives based on chemical precipitation. Because the 2024 ELG Rule rule sets new, more stringent “best available technology,” or BAT for “unmanaged” leachate discharges, the current AAA cannot rely merely on calculating waste load allocations/Permit Limits for IPL Ottumwa Midland Landfill’s Wastewater Discharge. Because the AAA did not identify any legitimate social or economic benefits from the degradation, no degradation is allowed by law.

Response: As previously noted the groundwater discharges have not shown they are impacted by the landfill and therefore are not considered unmanaged leachate. The selected alternative in the AAA is the least degrading reasonable alternative as required by the AIP. The social and economic importance of the activity are described in Sections 5 and 6 of the AAA.

Comment: We recommend that Interstate Power and Light consider the environmental justice (EJ) issues associated with Ottumwa as a part of a new antidegradation analysis.

Response: Iowa’s Antidegradation Implementation Procedure rule-cited document is silent on environmental justice. DNR does not have authority to deny an alternative based on EJ.

Comment: The AAA notes that the underdrain system is required to continue to discharge to maintain landfill stability and comply with the disposal permit issued by the IDNR, regardless of whether the generating station or landfill were to cease operations. It then makes a giant leap in logic that because the landfill is required to maintain a separation between the groundwater table and liner, degradation is justified. Antidegradation regulations prohibit degradation of water unless the lower water quality is “necessary to accommodate important economic or social development in the area in which the waters are located.” Not only has the AAA failed to identify any legitimate social or economic benefits from the degradation, it failed to identify any alternatives to minimize the degradation under the guise that the landfill is required to maintain a separation between the groundwater table and liner.

Response: Both state and federal regulations require a separation between the groundwater and the waste. When the separation does not naturally exist, the landfill is designed with a groundwater underdrain to create the required separation, which is the case at OML. Therefore, there are no alternatives to a groundwater underdrain and the associated discharge.

The approved alternatives analysis selects the least degrading reasonable alternative identified consistent with the Iowa Antidegradation Implementation Procedure. The social and economic importance of the project is described in Sections 5.0 and 6.0 of the approved analysis.

Comment: The sulfate “limit type” lists a “Daily Maximum” and “Daily Minimum,” however, the limits should likely be “30 Day Average” and “Daily Maximum” limits.

Response: The Sulfate “limit type” has been corrected to accurately reflect the average and maximum concentration and mass sulfate limits from the WLA dated July 31, 2025, which are equal to 1,514 mg/L and 1,060 lbs/day, respectively. These changes are reflected in the final permit.

Comment: The location latitude and longitude listed in the rationale does not match the location submitted on Form 1 or on the Waste Load Allocation.

Response: The DNR verified with the facility the facility location and outfall location as listed below:

Facility location - 41° 4' 30.9"N 92° 27' 5.7"W

Outfall 001 location - 41° 4' 30.4" N, 92° 27' 1.1" W

The December 9, 2025, rationale did not correctly list the facility location latitude and longitude but the rationale is not being revised in response to IPL’s comment since the document serves as a record of the DNR’s rationale at the time the permit was proposed. The responsiveness summary is maintained as part of the record for the final permit and information here can be incorporated into the rationale at the next renewal.

Comment: In the “chloride” section of the rationale, the narrative describes the permit application as the “renewal application.” This is the first individual permit application, not a renewal.

Response: The DNR acknowledges this is the first issuance of an individual NPDES permit for this facility and thus the application provided was the first individual permit application, not a renewal application. The December 9, 2025, rationale is not being revised in response to IPL’s comment since the document serves as a record of the DNR’s rationale at the time the permit was proposed. The responsiveness summary is maintained as part of the record for the final permit. No changes are being made to the final permit as a result of this comment.

Comment: Multiple citizens at the hearing commented that they wanted a more stringent permit to lower limits on metals, due to potential toxic effects that could cause cancer and are too dangerous. They expressed that the owners of the facility were getting extra allowances in the permit.

Response: The permit complies with federal and state laws regarding both technology-based limits from the federal effluent guidelines and water quality based limits from state water quality standards. State law prevents the DNR from enacting technology based limits that are more stringent than the federal effluent guidelines. Water quality based effluent limits must be calculated as described in state law. These limits are set to protect aquatic life (fish and plankton), human recreational uses, and drinking water sources at the point of discharge and all the way down the route of flow. Proposed permit limits were set so that the drinking water intake at the city of Ottumwa receives river water below all drinking water standards, even during the worst possible condition (peak flow from OML vs the critical low flow of the river). The effects of metals on humans are well researched, and drinking water standards for metals are well established. OML is not a site with emerging pollutants with little toxicity research and no sample methods. Thus, the DNR is confident that compliance with

this permit will protect the public from toxic effects. This permit follows the same laws and procedures as any other NPDES permit. These laws and procedures hold facilities to the same standards. Thus, no extra allowances were granted to the owners of OML.