July 2, 2025

Re: IPL – Ottumwa Generating Station
20775 Power Plant Road
Ottumwa, Iowa 52501
Iowa NPDES Permit No. 9000101

Sierra Club, Iowa Environmental Council, and the Environmental Law & Policy Center (collectively "Environmental Organizations") submit the following comments on the Iowa Department of Natural Resources' ("IDNR") draft National Pollutant Discharge Elimination System ("NPDES") permit for Interstate Power and Light Company's ("IPL") Ottumwa Generating Station, 20775 Power Plant Road, Ottumwa, Iowa 52501, Iowa NPDES Permit No. 9000101 (the "Draft Permit").

Sierra Club is one of the oldest and largest national nonprofit environmental organizations in the country, with more than 618,000 members, including more than 5,200 in Iowa, dedicated to exploring, enjoying, and protecting the wild places and resources of the earth; practicing and promoting the responsible use of the earth's ecosystems and resources; educating and enlisting humanity to protect and restore the quality of the natural and human environment; and using all lawful means to carry out these objectives. To further those goals, Sierra Club submits these comments to help ensure that the final wastewater permit issued to the Ottumwa power plant ensures protection of designated uses in the Des Moines River below the power plant.

Iowa Environmental Council ("IEC") is an alliance of more than 100 organizations, over 500 individual members, and an at-large board of farmers, business owners, and conservationists. IEC works to build a safe, healthy environment and sustainable future for Iowa. Our members care about air and water quality across the state, and they hike, recreate, and enjoy the outdoors in Iowa and beyond.

Environmental Law and Policy Center ("ELPC") is a Midwest-based not-for-profit public interest environmental legal and economic development advocacy organization focused on improving environmental quality, including clean water and healthy clean air, and protecting the Midwest's natural resources. ELPC has members who reside in the State of Iowa and an office in Des Moines.

The Environmental Organizations have a significant interest in ensuring that the Ottumwa NPDES permit complies with all applicable statutory and regulatory requirements, which are created to protect human health and the environment. To that end, we reserve the right to rely on all public comments submitted, request a written response to our comments, and request written notification when any action is taken on this Draft Permit. If the permit is amended or altered in response to comments, we request an opportunity to review and comment on any amended permit. Additionally, the Environmental Commenters respectfully requests an

opportunity for members of the public to attend a hearing on this Draft Permit and submit further comment. The public at large and many members of the Environmental Commenters' organizations who live near, recreate on, and obtain municipal drinking water downstream from the Ottumwa power plant have an urgent interest in protecting the Des Moines River from toxic and heavy metal discharges from the facility.

As discussed in more detail below, the Draft Permit unlawfully fails to address compliance with the federal effluent limitation guidelines ("ELGs" or "ELG Rule") for coal combustion leachate discharges. Because the ELGs for steam electric generating units are final and effective, the final permit for Ottumwa must reflect these new regulatory requirements. In particular, you must make findings regarding the date by which each of these facilities must fully comply with the new ELG rule. *See generally* 40 C.F.R. § 423.13. In addition, IDNR must require that IPL create and post compliance information related to this permit on a publicly-accessible website. Compliance is not optional.

I. Background: EPA's Effluent Limitation Guidelines

Each day across the United States, coal-fired electric generating units ("EGUs") like Ottumwa discharge millions of gallons of industrial wastewater contaminated with toxic pollutants like arsenic, boron, cadmium, chromium, lead, mercury, copper, nickel, and selenium into the rivers, lakes, and streams of the United States. This pollution is discharged directly from power plants; flows from old, unlined surface impoundments that many facilities use to store toxic slurries of coal ash and sludge; and seeps from unlined ponds and landfills into ground and surface waters.

"Once in the environment, many of these toxic pollutants can remain there for years and continue to cause adverse impacts."[1] People exposed to coal plant pollution—including the estimated 30 million people who depend on public water systems negatively affected by this pollution—are at heightened risk of cancer, damage to the kidneys, liver, and nervous system, and reproductive and fetal development effects, among other human health impacts.[2] Coal plant water pollution, particularly selenium, is also toxic to fish and other aquatic life.[3] The U.S. Environmental Protection Agency ("EPA") estimates that this pollution negatively affects the habitats for over 100 high-vulnerability threatened and endangered species.[4]

The Clean Water Act sets a national goal of eliminating pollution discharged into our nation's waterways from industrial sources such as coal plants.[5] To achieve this goal, EPA must establish increasingly stringent, technology-based limits on wastewater discharges that are designed to spur industry to adopt new technologies for reducing, and ultimately eliminating them.[6] The Act's technology-based limits include "best available technology economically

[1] 89 Fed. Reg. 40,198, 40,203 (May 9, 2024).
[2] *Id.* at 40,273, 40,276.
[3] *Id.*
[4] *Id*.
[5] 33 U.S.C. § 1251(a)(1).
[6] *Id.* § 1311; *see also Sw. Elec. Power Co. v. EPA*, 920 F.3d 999, 1005 (5th Cir. 2019) (describing this aspect of the Clean Water Act as "'technology-forcing,' meaning it seeks to 'press development of new,

achievable" ("BAT") limits, which must "require the elimination of discharges of all pollutants if ... technologically and economically achievable,"[7] and are the "gold standard for controlling water pollution from existing sources."[8] The Clean Water Act requires EPA to review BAT limits at least every five years and revise them as appropriate. 33 U.S.C. § 1311(d).

On May 9, 2024, EPA published a supplemental Clean Water Act rule updating the agency's effluent limitation guidelines for steam electric generating units, with an effective date of July 8, 2024. *See* 89 Fed. Reg. 40,198 (May 9, 2024) ("2024 ELG Rule"). That rule sets new, more stringent "best available technology," or BAT, limits on the three largest toxic waste streams from coal-burning power plants: flue gas desulfurization ("FGD") wastewater, bottom ash transport water, and managed and unmanaged combustion residual leachate ("CRL" or "leachate").

Relevant here, the 2024 ELG Rule sets new BAT limits on leachate, including what EPA calls "managed" and "unmanaged" leachate. Leachate is liquid that percolates through, and drains out of, a landfill or surface impoundment containing coal ash or other coal plant wastes.[9] "Managed" leachate is leachate that is collected in a leachate collection and management system, typically at the bottom of, or within, a coal ash landfill or impoundment unit, and then discharged to a waterway. "Unmanaged" leachate is leachate that has leaked out of a coal ash waste management unit and contaminated groundwater and then subsequently discharged to a waterway.[10] Leachate (whether "managed" or "unmanaged") contains the same heavy metals and other pollutants, like lead, mercury, selenium, boron, and arsenic, that are found in coal ash and flue gas desulfurization wastewater.[11]

The 2024 ELG Rule requires coal plants to meet numeric limits on arsenic and mercury for "unmanaged" leachate discharges, and to eliminate "managed" leachate discharges entirely.[12] Specifically, for unmanaged leachate, the ELG Rule's numeric limitations for arsenic and mercury are based on the installation and operation of chemical precipitation technology; for managed leachate, the rule is based on the installation of membrane filtration or other zero-

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more efficient and effective [pollution-control] technologies'") (quoting *Nat. Res. Def. Council v. EPA*, 808 F.3d 556, 563–64 (2nd Cir. 2015)) (alterations in original).

[7] 33 U.S.C. § 1311(b)(2)(A).

[8] *Sw. Elec. Power Co.*, 920 F.3d at 1003. Technology-based effluent limitations set a federal floor for environmental protection from industry wastewater. *See Nat. Res. Def. Council, Inc. v. Train*, 510 F.2d 692, 709–10 (D.C. Cir. 1974). Industrial sources are prohibited from "discharg[ing] ... any pollutant" into waterways except in compliance with effluent limitations and other provisions of the Act. 33 U.S.C. § 1311(a). Effluent limitations apply once a state or federal agency incorporates them into facility-specific Clean Water Act discharge permits. *See id.* § 1342.

[9] 89 Fed. Reg. at 40,292.

[10] *Id.* at 40,247; 40 C.F.R. § 423.11(ff)(2).

[11] *See, e.g.*, EPA, Technical Development Document for Final Supplement Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, at 73 (Tbl. 20) (Apr. 2024) ("2024 ELG TDD"), https://www.epa.gov/system/files/documents/2024-04/se11757_steam-electric-elg-tdd_508.pdf.

[12] 40 C.F.R. §§ 423.13(*l*)(1)(i)(A), (*l*)(2)(i)(A), (*l*)(2)(ii).

discharge technology.[13] For direct dischargers (i.e., coal-burning EGUs that discharge directly to waters of the United States), the rule requires state permitting authorities to incorporate those BAT limitations into the facility's NPDES permit "as soon as possible on or after July 8, 2024, but no later than December 31, 2029."[14] For indirect discharges (*i.e.,* coal-burning EGUs that discharge to publicly owned treatment works ("POTWs"), the rule requires coal plants to meet the pretreatment BAT standards set out in 40 C.F.R. § 423.16 no later than May 9, 2027.

II. IDNR Must Revise the Draft Permit to Include the ELG Rule's Technology-Based Effluent Limits on Ottumwa's Managed and Unmanaged Leachate Discharges.

The permitting record makes clear that the Ottumwa power plant and its associated landfill discharge managed and unmanaged leachate. IDNR must therefore revise the permit to eliminate managed leachate discharges, and must also impose numeric effluent limitations for arsenic and mercury. As discussed in more detail below, Ottumwa cannot avoid those numeric discharge limits simply by transporting unmanaged or managed leachate to the City of Ottumwa's public treatment works. Nor does any purported regulatory uncertainty justify delaying the imposition of technology-based effluent limits for leachate. In fact, site-specific considerations underscore the need for, and availability of, technologies for the treatment of leachate from Ottumwa and its interrelated landfill.

A. The Ottumwa Generating Station and IPL's interrelated Ottumwa Midland Landfill discharge managed and unmanaged combustion residual leachate.

The ELG Rule defines "combustion residuals" as:

> Solid wastes associated with combustion-related steam electric power plant processes, including fly ash and BA from coal-, petroleum coke-, or oil-fired units; FGD solids; FGMC wastes; and other wastewater treatment solids associated with steam electric power plant wastewater. In addition to the residuals associated with coal combustion, this also includes residuals associated with the combustion of other fossil fuels.[15]

The rule further defines "combustion residual leachate" as:

> Leachate from landfills or surface impoundments that contains combustion residuals. Leachate is composed of liquid, including any suspended or dissolved constituents in the liquid, that has percolated through waste or other materials emplaced in a landfill, or that passes through the surface impoundment's containment structure (e.g., bottom, dikes, berms). Combustion residual leachate includes seepage and/or leakage from a combustion residual landfill or impoundment unit.[16]

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[13] 89 Fed. Reg. at 40,200, 40,214. For direct discharges of unmanaged leachate, a facility must meet the numeric limits set out in 40 C.F.R. § 423.13(*l*)(2)(A).
[14] 89 Fed. Reg. at 40,200; *see generally* 40 C.F.R. § 423.13.
[15] 89 Fed. Reg. at 40,292.
[16] *Id.*; 40 C.F.R. § 423.11(r).

Notably, combustion residual leachate also "*includes* wastewater from landfills and surface impoundments located on *non-adjoining property when under the operational control of the permitted facility*."[17]

As noted, the 2024 ELG Rule sets different BAT limits for "managed" and "unmanaged" leachate. "Managed" leachate is leachate that is collected in a leachate collection, management, or piping system, and then discharged to a waterway. "Unmanaged" leachate is leachate that has leached from a waste management unit and contaminates groundwater prior to being captured and pumped to the surface and discharged directly to a waterway.[18]

Although the Draft Permit does not mention combustion residual leachate, the Ottumwa Generating Station and the interrelated Ottumwa Midland Landfill—a coal ash landfill IPL operates and uses for the disposal of coal ash waste—discharge managed or unmanaged leachate, in at least three ways. First, IDNR's permit package makes clear that Ottumwa Generating Station directly discharges managed leachate through Outfall 008.[19] Indeed, "new outfall 008" was constructed specifically for the "combined discharge of sanitary effluent, low-volume wastewater treatment pond, Ottumwa Midland Landfill leachate, and cooling tower blowdown" to the Des Moines River.[20] IDNR's April 4, 2024 Permit Rationale authorizing the construction of the low-volume wastewater treatment pond confirms that the treatment pond "may also receive leachate from the Ottumwa Midland Landfill," which "eventually discharges via outfall 008 to the Des Moines River."[21] It appears that at least some of the leachate discharged from the Ottumwa Generating Station Outfall 008 is collected in a managed leachate collection system at the Midland Ottumwa Landfill—a nearby coal ash landfill owned and operated by IPL—and then trucked back to the generating facility, where it is combined into the low volume wastewater treatment pond, and discharged through Outfall 008.[22] Because IPL plainly maintains operational control over both the Ottumwa Generating Station and the nearby Ottumwa Midland Landfill, any leachate wastewater collected at the Ottumwa Midland Landfill and discharged from Outfall 008 fits within EPA's definition of combustion residual leachate, and must be

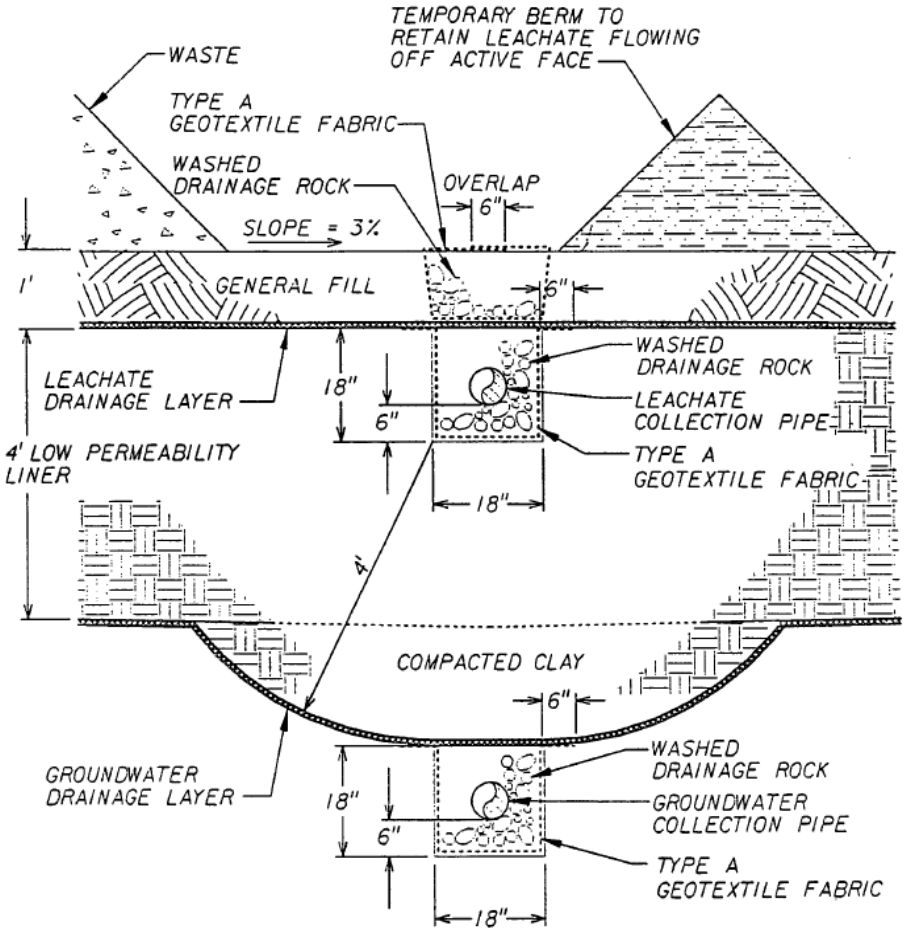
[17] *Id*. (emphasis added).
[18] 89 Fed. Reg. at 40,247; 40 C.F.R. § 423.11(ff)(2).
[19] Ex. 1, May 29, 2025 Amendment Rationale for NPDES Permit at pdf page 1 ("Rationale").
[20] Rationale at 1; *see also id*. at pdf page 27 ("Ottumwa Midland Landfill leachate, and low volume wastewater pond effluent into the Des Moines River (at 41° 6' 14" N, 92° 32' 58" W) at Outfall 008.").
[21] Ex. 2, Apr. 4, 2024 Rationale for NPDES Permit at 2.
[22] *See* Ex. 3, May 1, 2022 IPL Ottumwa Permit Application Package and Antidegradation Analysis at pdf page 193 (describing "Construction of new Low Volume Wastewater Treatment Pond (LVWTP) in footprint of existing ZLD Pond and addition of Ottumwa Midland Landfill (OML) leachate to LVWTP system"); *id*. at 205 (Antidegradation analysis evaluating "Construction of new Low Volume Wastewater Treatment Pond (LVWTP) in footprint of existing ZLD Pond and addition of Ottumwa Midland Landfill (OML) leachate to LVWTP system."); see also Ex. 4, Dec. 16, 2024 Ottumwa-Midland Landfill Underdrain Outfall Relocation, Antidegradation Alternatives Analysis at pdf page 5 ("The landfill underdrain system consists of perforated piping encased in coarse aggregate and geotextile fabric. A clay layer separates the underdrain piping from the leachate collection pipe above. Leachate is collected and diverted into a lined pond, where it is hauled off-site on a regular basis.") ("2024 Antidegradation Alternatives Analysis").

regulated as such.[23] 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."[24]

Second, IDNR must revise the Draft Permit to address IPL's discharge of *managed* combustion residual leachate from the Ottumwa Midland Landfill. As noted, IPL owns and operates the Ottumwa Midland Landfill for the disposal of coal ash combustion residual waste. As part of the design, the landfill uses a "leachate collection" system, where leachate is "collected and diverted into a lined pond," and eventually hauled off-site.[25]

[23] 40 C.F.R. § 423.11(r) (combustion residual leachate "includes wastewater from landfills and surface impoundments located on *non-adjoining property when under the operational control of the permitted facility*.") (emphasis added).
[24] 40 C.F.R. § 423.13(*l*)(i)(A).
[25] 2024 Antidegradation Alternatives Analysis at pdf page 5.

Figure 1. Cross-Section of Ottumwa Midland Landfill Leachate and Underdrain Collection System.[26]



According to IPL, "CCR Leachate originating within the Ottumwa Midland Landfill" is discharged through the Landfill's Outfall 001.[27] Because IPL maintains "operational control" over both the Ottumwa Generating Station and the Ottumwa Midland Landfill, however, any managed leachate wastewater collected at the Landfill plainly falls within EPA's definition combustion residual leachate and must be regulated as such.[28] Again, the 2024 ELG Rule requires IPL to eliminate all managed leachate discharges "as soon as possible."[29]

[26] Solid Waste Permit 90-SDP-8-92P, Construction Certification Report filed July 11, 1995, at Appendix A (Montgomery Watson, Apr. 4, 1995), *available at* https://programs.iowadnr.gov/solidwaste/OpenText/DownloadDocument/59283.

[27] Ex. 5, May 8, 2025 Response Re: March 12, 2025 Notice of Intent to Sue at pdf page 4 ("May 8, 2025 Response").

[28] 40 C.F.R. § 423.11(r) (combustion residual leachate "includes wastewater from landfills and surface impoundments located on *non-adjoining property when under the operational control of the permitted facility*.") (emphasis added).

[29] 89 Fed. Reg. at 40,200; *see generally* 40 C.F.R. § 423.13.

Finally, IDNR must also revise the Draft Permit to address IPL's apparent discharge of *unmanaged* combustion residual leachate from the Ottumwa Midland Landfill. As reflected in Figure 1 above, in addition to the use of a managed leachate collection system, IPL also installed a groundwater collection system below the coal ash landfill's clay liner. The piping is called an "underdrain" because it removes groundwater below the liner, which, in theory, should have no contact with the leachate above the liner. Historically, IPL has used this underdrain system to collect and pump as much as 84,000 gallons of groundwater per day[30] and discharge it through a point source to an area IPL characterizes as a wetland,[31] which flows to an unnamed creek that enters the Des Moines River north of Ottumwa. For many years, IPL collected and discharged this underdrain groundwater under Stormwater General Permit No. 1, which allows for the discharge of solely "uncontaminated groundwater."[32] IPL's own groundwater monitoring data, however, 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. [33] Although IPL may dispute the presence of combustion residual leachate in Ottumwa Midland Landfill's underdrain groundwater, the Company does not dispute that the groundwater is contaminated and no longer eligible for discharge under Stormwater General Permit No. 1. Moreover, IPL now collects wastewater from the leachate system (which is discharged through the Landfill Outfall 001) together with the underdrain collection system (which is discharged through Outfalls 002 and 003) for transport offsite by truck.[34] As noted, because IPL maintains "operational control" over both the Ottumwa Generating Station and the Ottumwa Midland Landfill, IDNR must evaluate whether the wastewater collected at the Landfill includes managed or unmanaged leachate.

As noted above, there is no dispute that the Ottumwa Midland Landfill uses a managed leachate system. Under the 2024 ELG Rule, IPL must eliminate all managed leachate discharges "as soon as possible beginning July 8, 2024, but no later than December 31, 2029."[35] 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.[36]

[30] 2024 Antidegradation Alternatives Analysis at pdf page 6.
[31] Ottumwa's underdrain and pump system is "a discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, . . . from which pollutants are or may be discharged." 33 U.S.C. 1362(14); 40 C.F.R. § 122.2.
[32] IDNR, General Permit No. 1, Part III(A), *available at* https://www.iowadnr.gov/media/7289/download?inline.
[33] *See* Ex. 6, Mar. 12, 2025 Notice of Violation and Intent to Sue at 2-7 ("60-Day Notice of Intent to Sue"); Alliant Energy, 2024 Annual Water Quality Report, at pdf pages 43 and 437, *available at* https://programs.iowadnr.gov/solidwaste/OpenText/DownloadDocument/111409.
[34] May 8, 2025 Response at pdf page 4.
[35] 40 C.F.R. § 423.13(*l*)(i)(A).
[36] 40 C.F.R. § 423.13(*l*)(ii) & Tbl. 11.

B. IPL cannot circumvent the ELG Rule's requirements by transporting untreated leachate to a publicly owned treatment works facility.

On March 12, 2025, the undersigned commenters served IPL with a notice of intent to file a citizen suit for violations of the Clean Water Act.[37] Briefly, the notice of intent alleged that IPL's continued, unpermitted discharge of contaminated underdrain groundwater from the Ottumwa Midland Landfill violated the Clean Water Act. Although IPL has historically discharged underdrain groundwater from the Ottumwa Midland Landfill to the Des Moines River under Stormwater General Permit No. 1, the Company's own groundwater monitoring data demonstrates that the underdrain groundwater discharges contain the same kinds of heavy metals and toxic pollutants that are commonly found in combustion residual leachate. Because the Ottumwa Midland Landfill's underdrain groundwater discharges contain contaminants, IPL cannot rely on the general stormwater permit and must instead obtain a site-specific permit for discharge.

In response to that notice of intent, and effective on May 1, 2025, IPL obtained a "Significant Industrial User" permit from the City of Ottumwa, ostensibly allowing the Company to discharge untreated, "transported coal combustion residual (CCR) leachate wastewater and underlining groundwater from the [Ottumwa Midland Landfill] into the Ottumwa Water Pollution Control Facility."[38] That permit purports to allow IPL to collect untreated CCR leachate and groundwater from the Ottumwa Midland Landfill underdrain from Outfalls 001, 002, and 003, and transport that waste to the Ottumwa POTW.

IDNR cannot circumvent the ELG Rule's requirements by allowing IPL to transport untreated leachate to a publicly owned treatment works, for several reasons. As an initial matter, the OML POTW Permit makes clear that "compliance with this permit does not relieve the permittee of its obligation to comply with any or all applicable pretreatment regulations, standards or requirements . . . under federal law[]."[39] And as discussed above, IPL's discharge of leachate from the Ottumwa Midland Landfill is subject to EPA's ELG Rule because the non-adjoining Landfill is indisputably (1) under IPL's operational control and (2) discharging coal combustion residual leachate.[40] Consequently, discharges from the Landfill must comply with the ELG Rule.

Although the OML POTW Permit includes numeric discharge limits for several pollutants typically found in leachate wastewater discharges, the permit limits are woefully inadequate to ensure compliance with EPA's ELG Rule. For discharges of managed leachate from Outfall 001, for example, the Ottumwa OML POTW Permit allows continued, indefinite discharges of a number of heavy metals and toxic pollutants while the ELG Rule requires the elimination of all such discharges. For Ottumwa's (likely) unmanaged leachate discharges from Outfalls 002 and 003, the Permit purports to establish numeric arsenic and mercury limits that

[37] *See generally* Ex. 6, 60-Day Notice of Intent to Sue.
[38] Ex. 5, May 8, 2025 Response, City of Ottumwa - Significant Industrial User Permit No. 36, Ottumwa Midland Landfill (effective May 1, 2025) at pdf page 3 (hereinafter, "Ottumwa OML POTW Permit").
[39] Ottumwa OML POTW Permit at 1.
[40] *Id*. (emphasis added).

are many orders of magnitude greater than allowed under the ELG Rule.[41] The OMPL POTW Permit's numeric limits are not a lawful substitute for ELG compliance.

Finally, EPA's ELG Rule makes clear that leachate dischargers cannot circumvent the rule's treatment requirements simply by transporting leachate to a POTW. Indeed, "in response to comments requesting clarity" on the treatment of leachate hauled to a POTW, EPA stated that the rule's:

> pretreatment standards, . . . would apply to the hauling of [leachate] via truck to a POTW. [Pretreatment standards] are nationally applicable, uniform, technology-based standards that apply to indirect dischargers. The General Pretreatment Regulations (40 CFR Part 403) define indirect discharges as the introduction of pollutants into a POTW from any non-domestic source regulated under section 307(b), (c) or (d) of the Clean Water Act. The method of introducing the pollutant into the POTW is irrelevant.[42]

Thus, in the final ELG Rule, EPA specifically addressed the precise issue presented here: whether a regulated entity may avoid compliance with the Clean Water Act's effluent limitations simply by collecting and transporting untreated coal ash wastewater to a public treatment facility. EPA's response was unequivocal: A discharger may not circumvent Clean Water Act or the ELG Rule treatment requirements by transporting and dumping leachate into a POTW. As EPA explained in the 2024 ELG Rule itself, the Clean Water Act authorizes the agency to promulgate nationally applicable pretreatment standards that restrict pollutant discharges from facilities to waters of the United States "indirectly through sewers flowing to POTWs."[43] Those "[p]retreatment standards are designed to ensure that wastewaters from direct and indirect industrial dischargers are subject to similar levels of treatment."[44] Allowing coal-plant operators to avoid compliance with the ELG Rule simply by diverting discharges to a POTW would allow them to circumvent the requirements of the rule, resulting in the disparate treatment of direct dischargers, unfairly shifting the financial and public health burden of compliance to municipalities, interfering with the operation of POTWs, and undermining the Clean Water Act's goal of eliminating pollution discharges.[45] To the extent IPL wishes to continue discharging leachate to the City of Ottumwa's POTW, IDNR must first ensure that the power plant and interrelated landfill meet the ELG Rule's pretreatment standards, 40 C.F.R. § 423.16, no later

[41] *Compare, e.g., id*. at pdf pages 6-10 (allowing Outfalls 002 and 003 to each discharge up to 0.02 and 0.01 pounds per day of arsenic, respectively; and allowing each outfall to discharge up to 0.0015 pounds per day of mercury) *with* 40 C.F.R. § 423.13(*l*)(ii) & Tbl. 11 (for unmanaged leachate, limiting arsenic and mercury discharges to a maximum of 11 micrograms per liter per day, and 788 nanograms per per liter per day, maximum).
[42] EPA, Response to Public Comments for Supplemental Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category at pdf page 1248 (Apr. 2024), *available at* https://www.regulations.gov/document/EPA-HQ-OW-2009-0819-10584.
[43] 89 Fed. Reg. at 40,201.
[44] *Id*.
[45] *Id*.

than May 9, 2027, because Ottumwa now qualifies as an indirect discharger subject to the pretreatment requirements of the rule.[46]

C. Potential revisions to the ELG Rule do not provide a lawful basis for delaying compliance.

On June 30, 2025, EPA issued a press release indicating that the agency plans to reevaluate aspects of the ELG Rule, including potential revisions to the agency's best available technology determinations for managed and unmanaged leachate.[47] Notably, although regulated entities have petitioned EPA to administratively stay the 2024 ELG Rule's compliance deadlines pending reconsideration,[48] EPA has conspicuously *not* stayed any of the rule's requirements and the compliance deadlines remain in effect. Moreover, consistent with EPA's obligation not to predetermine the outcome of any future rulemaking, it is not possible to conclusively demonstrate that any of the rule's requirements will change. Thus, the mere fact that EPA has announced an intention to reconsider the ELG Rule does *not* provide a basis for delaying or deferring IDNR's obligation to impose technology-based effluent limitations for Ottumwa.

In short, EPA always retains the authority to revise a rule; and neither the state nor any regulated entity can avoid compliance simply because EPA might someday change its mind. EPA's announced reconsideration of the 2024 ELG Rule provides no basis for IDNR to excuse Ottumwa from compliance with the regulation's leachate provisions "as soon as possible."

D. Even if Ottumwa were not subject to the ELG Rule, IDNR must still revise the Draft Permit to include technology-based effluent limits on Ottumwa's leachate discharges.

Because the Ottumwa Generating Station and its interrelated Ottumwa Midland Landfill are discharging leachate, IDNR must revise the Draft Permit to require IPL to comply with the 2024 ELG Rule's leachate limitations as soon as possible. Even if IDNR somehow determines that IPL's leachate discharges are not subject to the 2024 ELG Rule, IDNR *must* still set technology-based effluent limitations on Ottumwa's leachate discharges using its best professional judgment ("BPJ").[49] EPA further explains that for sources that are not subject to specific BAT determinations under the ELG Rule, BAT limitations are:

> to be determined on a case-by-case basis by the … permitting authority's BPJ …. [A] permitting authority may not default to any technology (for example, surface

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[46] Indirect dischargers are entities that "discharge to POTWs" and "are subject to pretreatment standards that are directly implemented and enforceable." 89 Fed. Reg. at 40,230 (citing 33 U.S.C. § 1317 and 40 C.F.R. part 403).

[47] EPA Press Release, EPA Will Revise Wastewater Rules to Support Electric Energy Reliability and Unleash American Energy (June 30, 2025), https://www.epa.gov/newsreleases/epa-will-revise-wastewater-rules-support-electric-energy-reliability-and-unleash.

[48] *See, e.g., City of Springfield v. EPA*, Case No. 24-3009 (8th Cir. filed Apr. 29, 2024), ECF Doc. 00815250652 (opposing EPA's request to stay the resolution of City's challenge to the 2024 ELG Rule's pretreatment standards without staying the underlying rule).

[49] 89 Fed. Reg. at 40,234-35.

> impoundments) in selecting BAT, nor may a permitting authority fail to develop technology-based effluent limitations and instead simply calculate water quality-based effluent limitations. Instead, a permitting authority is required to determine limitations based on the BAT.[50]

EPA's position implements the Clean Water Act's requirement that BAT limits be established by permitting authorities using BPJ. Under Section 301's implementing regulations, "[t]echnology-based treatment requirements under section 301(b) of the Act represent the minimum level of control that must be imposed in a[n NPDES] permit."[51] Thus, "[w]here EPA-promulgated effluent guidelines are not applicable . . . or where such EPA-promulgated guidelines have been vacated by a court, such treatment requirements are established on a case-by-case basis using the permit writer's BPJ."[52]

Accordingly, if IDNR concludes that the 2024 ELG Rule does not apply to Ottumwa (it does), the agency must still comply with the Clean Water Act's mandate that BAT limits "result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants."[53] As noted above, BAT is the "gold standard for controlling water pollution from existing sources."[54] In general, "BAT represents the best available, economically achievable performance of facilities in the industrial subcategory or category."[55]

When setting BAT using its BPJ, DNR must consider the same factors that EPA considers when establishing industry-wide BAT limits.[56] Those factors are the age of equipment and facilities involved; the process employed; the engineering aspects of the application of various types of control techniques; process changes; the cost of achieving such effluent reduction; and non-water quality environmental impact (including energy requirements).[57] In addition to these factors, IDNR "shall consider [] [t]he appropriate technology for the category or class of point sources of which the applicant is a member, based upon all available information."[58]

Here, that means IDNR must evaluate the same treatment technologies for IPL's leachate discharges that EPA evaluated when setting industry-wide BAT for the steam electric category in the 2024 ELG Rule, and must make site-specific findings as to which of these technologies constitutes BAT for controlling Ottumwa's leachate (whether managed or unmanaged leachate from both the Ottumwa Generating Station and the Ottumwa Midland Landfill). IDNR has not met these requirements in its Draft Permit. Indeed, the permit contains no effluent limitations for leachate whatsoever—let alone BAT limits. This clearly falls short of the requirement to set

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[50] *Id*. at 40,224, 40,283.
[51] 40 C.F.R. § 125.3(a); *see also* 89 Fed. Reg. at 40,203 (repeating this requirement).
[52] 89 Fed. Reg. at 40,203.
[53] 33 U.S.C. § 1311.
[54] *Sw. Elec. Power Co.*, 920 F.3d at 1003; *see also Kennecott v. EPA*, 780 F.2d 445, 448 (4th Cir. 1985) ("The BAT standard reflects the intention of Congress to use the latest scientific research and technology in setting effluent limits, pushing industries toward the goal of zero discharge as quickly as possible.").
[55] 89 Fed. Reg. at 40,202.
[56] *See, e.g., id.* at 40,203, 40,283.
[57] 40 C.F.R. § 125.3(c)(2), (d)(3).
[58] *Id.* § 125.3(c)(2)(i).

BAT limits based on the best available technology that is technologically and economically achievable for Ottumwa,[59] or to "achieve the greatest reductions in pollution" possible from Ottumwa's leachate discharges,[60] especially given that EPA's 2024 ELG Rule makes clear that treatment technologies for managed and unmanaged leachate are readily available.

E. Site-specific considerations underscore the need for strong BAT limits on Ottumwa's managed and unmanaged leachate discharges.

In evaluating technology-based effluent limitations for Ottumwa's leachate discharges (whether from the Ottumwa Generating Station or the Landfill), site-specific considerations make it especially important that IDNR set strong limits on Ottumwa's leachate discharges.

As an initial matter, and as explained in more detail in the attached notice of intent, the Ottumwa Midland Landfill has a long history of dumping significant amounts of heavy metals and toxic pollutants in the Des Moines River, often in excess of water quality standards. In fact, based on IPL's own water quality monitoring data, the Ottumwa Midland Landfill has potentially discharged, without a proper permit, over 573,000 pounds of untreated pollutants annually, including four pollutants (Cobalt, Lithium, Manganese, and Molybdenum) above groundwater protection standards.[61] Moreover, the concentrations of pollutants in the Ottumwa Midland Landfill discharge has exceeded water quality standards for drinking water. The Des Moines River downstream of the discharge is designated Class C, which means the water is a drinking water source protected for human health uses.[62] The maximum arsenic concentration in the underdrain discharge, according to IPL's water quality monitoring report, is 2.2 ug/L.[63] The water quality standard for arsenic in a drinking water source to protect human health is 0.18 ug/L.[64] Thus, the underdrain water has exceeded the downstream water quality standard by more than ten times. This track record compels strong leachate limits in Ottumwa's NPDES permit.

Moreover, IPL and IDNR already have significant site-specific information about technologies that are available for treating leachate at the Ottumwa Generating Station and the interrelated Ottumwa Midland Landfill. Indeed, in a 2021 Antidegradation Alternatives Analysis submitted with its last NPDES permit renewal application, IPL conducted an analysis of chemical and biological treatment options, including zero discharge options, for leachate discharges, among others, from the Ottumwa Generating Station.[65] And IPL's 2024

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[59] 33 U.S.C. § 1311(b)(2)(A).
[60] *Nat. Res. Def. Council*, 808 F.3d at 563–64.
[61] Alliant Energy, 2024 Annual Water Quality Report, at pdf page 43. The groundwater protection standards are based on statewide standards for groundwater or maximum contaminant levels under the Safe Drinking Water Act.
[62] 2024 Antidegradation Alternatives Analysis at Appendix A, p. 3. *See* Iowa DNR, Des Moines River IA 04-LDM-1011, ADBNet, *available at* https://programs.iowadnr.gov/adbnet/Segments/1011 (identifying the segment of the Des Moines River at the point of the potential discharge as Class C with human health designated uses).
[63] Alliant Energy, 2024 Annual Water Quality Report, at pages 43 and 437.
[64] Iowa Admin. Code r. 567-61.3 Table 1.
[65] *See* Ex. 3, Oct. 15, 2021 Antidegradation Alternatives Analysis, Interstate Power and Light Ottumwa Generating Station – Plant Discharge Modifications, at pdf page 219 (The new treatment plant would

Antidegradation Alternatives Analysis for the Ottumwa Midland Landfill evaluated the installation of biological and chemical treatment technologies to address contaminated underdrain groundwater discharges from the Landfill.[66] Those analyses indicate that site-specific treatment options for Ottumwa's leachate discharges is technologically feasible, and EPA advises permitting authorities to consider this information when establishing BAT limits using BPJ.[67] Moreover, information in the 2024 ELG Rule docket also indicates that treatment options for Ottumwa's leachate discharges are available and cost effective.[68] Thus, IDNR should, at a minimum, evaluate whether membrane filtration technology would be economically achievable for controlling managed leachate discharges from the Ottumwa Generating Station or the Landfill, and the availability of options for treating unmanaged leachate that may be present in the Landfill's underdrain groundwater.[69]

III. IDNR Must Require Alliant to Create an ELG Reporting Website for Ottumwa.

In addition to setting BAT limits for Ottumwa's managed and unmanaged leachate discharges, IDNR must require Alliant to create an ELG reporting website. Under the 2024 ELG Rule, "each facility subject to one or more of the [steam electric ELG] reporting requirements … must maintain a publicly accessible internet site." This requirement, and others about what information facilities must post and when, are now codified at 40 C.F.R. § 423.19(c)(1). IDNR must require Ottumwa to comply with these requirements.

IV. Conclusion

IDNR's NPDES permit renewal for the Ottumwa Generating Station is facially deficient. Most significantly, the Draft Permit fails to evaluate compliance with EPA's final and effective ELG rule for steam electric EGUs. Even if that were permissible, it fails to meaningfully evaluate technology based effluent limits that are readily achievable. As a result, on this record, IDNR cannot rationally evaluate and issue a final permit. Sierra Club urges the agency to require IPL to supplement its Application with information sufficient to meet the requirements of the Clean Water Act, and to take public comment for no less than 30 days on the revised Application.

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include oxidation, coagulation, ultrafiltration, and reverse osmosis to remove metals from the waste stream).

[66] *See* Ex. 4, 2024 Antidegradation Alternatives Analysis.

[67] 89 Fed. Reg. at 40,283 n.224 ("[P]ermitting authorities may consider relevant information such [as] pollution treatment technologies already in operation at the facility" when setting BAT limits based on BPJ).

[68] Ex. 7, EPA, "Generating Unit-level Costs and Loadings Estimates by Regulatory Option for the 2024 Final Rule - DCN SE11756," Docket No. EPA-HQ-OW-2009-0819-10336 (filed May 9, 2024) (identifying costs for zero-discharge options).

[69] As part of this evaluation, IDNR should consider both purchasing and leasing the technology. 89 Fed. Reg. at 40,283–84 ("Leasing is an option offered by commercial vendors . . . [W]here the record precluded the EPA from establishing a nationwide BAT, it is possible that site-specific considerations may make leased equipment economically achievable for a given facility, and thus a relevant consideration in a BPJ analysis.").

If you have any questions or would like further input on this matter, please contact the undersigned commenters at any time.

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V. Exhibit List

Exhibit No.	Description
1	May 29, 2025 Amendment Rationale for NPDES Permit
2	Apr. 4, 2024 Rationale for NPDES Permit
3	May 1, 2022 IPL Ottumwa Permit Application Package and Antidegradation Analysis; *and* Oct. 15, 2021 Antidegradation Alternatives Analysis, Interstate Power and Light Ottumwa Generating Station – Plant Discharge Modifications
4	Dec. 16, 2024 Ottumwa-Midland Landfill Underdrain Outfall Relocation, Antidegradation Alternatives Analysis ("2024 Antidegradation Alternatives Analysis")
5	May 8, 2025 Response Re: March 12, 2025 Notice of Intent to Sue ("May 8, 2025 Response"); *and* City of Ottumwa - Significant Industrial User Permit No. 36, Ottumwa Midland Landfill (effective May 1, 2025) ("Ottumwa OML POTW Permit")
6	Mar. 12, 2025 Notice of Violation and Intent to Sue ("60-Day Notice of Intent to Sue")
7	EPA, "Generating Unit-level Costs and Loadings Estimates by Regulatory Option for the 2024 Final Rule - DCN SE11756," Docket No. EPA-HQ-OW-2009-0819-10336 (filed May 9, 2024)