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VIA U.S. MAIL AND ELECTRONIC MAIL

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RE: **Health Risks from Unplanned-for Continued Operations of
Merom Generating Station, Sullivan County, Indiana
Hallador Power Co., LLC
Ongoing Air, Water, and Solid Waste Violations**

Dear Chief Letterman, Chief Rohr, and Chief Freeman:

The undersigned organizations – Citizens Action Coalition of Indiana, Sierra Club, Earthjustice, and Hoosier Environmental Council – write to request a renewal of oversight vigor on the Merom Generating Station, which has been consistently violating legal limits on

pollutants that threaten the health of Indiana residents and the surrounding environment. The Merom station requires your urgent attention to call out and stop its ongoing violations because it is no longer closing this year as was planned since 2020, but instead will continue operating indefinitely as a merchant power plant. Additionally, a large new energy demand at the plant from a cryptomining operation built there in 2022 by an out-of-state company could keep the plant operating around the clock to meet the cryptomining facility’s usage. As reported in the press last year: “Asked about critics’ assertions that the deal could keep a polluting coal plant open, [the same cryptomining company’s co-founder] replied, ‘It’s 100 percent correct.’”¹

Based on its own admission, the plant has repeatedly dumped wastewater into the Turtle Creek Reservoir – which connects to the Wabash River a couple miles away² – with illegal levels of ammonia and iron, which can harm aquatic life,³ not to mention harm drinking water infrastructure.⁴ The plant’s testing found groundwater on the property exceeded health limits for lead, barium, chromium, cadmium, lead, sulfate, and fluoride. On top of that, the plant violated air pollution rules by producing an unacceptably high level of dense smoke (opacity), threatening the health of nearby residents who breathe that air..

* * * * *

The Merom Generating Station is a coal-fired, two-unit electric generating power plant that became fully operational in 1983 and has a total capacity of 1,080 MW.⁵

Until the early part of last year, the Merom coal plant, then owned by Hoosier Energy Rural Electric Cooperative (“Hoosier Energy”), was scheduled to retire in May 2023. Hoosier Energy’s 2020 Integrated Resource Plan, filed at the Indiana Utility Regulatory Commission in November 2020, stated: “Early retirement of Merom in 2023 provides substantial savings versus retaining the current portfolio through the study period.” and “[b]y retiring Merom and replacing it with a number of smaller geographically diverse resources, all replacement portfolios improve Hoosier’s single unit exposure relative to the current portfolio.”⁶ Indeed, *prior to* that announcement, IDEM had regularly issued Notices of Violation and enforcement orders to Hoosier Energy for violations at the Merom site,⁷ but these enforcement actions had slowed following the 2020 retirement announcement.

¹ Benjamin Storrow, *Cryptocurrency’s climate conundrum*, E&E News (May 18, 2022), <https://www.eenews.net/articles/cryptocurrencys-climate-conundrum>.

² See <https://www.in.gov/idem/nps/resources/watershed-management-plans/turtle-creek-wmp-4-151> (last accessed June 29, 2023).

³ See <https://www.epa.gov/wqc/aquatic-life-criteria-ammonia> (last accessed June 29, 2023).

⁴ Sarkar and Shekhar, *Iron contamination in the waters of Upper Yamuna Basin*, Groundwater for Sustainable Development, Vol. 7, Sep. 2018, <https://www.sciencedirect.com/science/article/abs/pii/S2352801X17300887>.

⁵ See <https://halladorenergy.com/our-businesses/hallador-power-company/> (last accessed June 8, 2023).

⁶ Hoosier Energy, *2020 Integrated Resource Plan – Public Version Vol. I: Main Report*, Nov. 2, 2020, at 89, 98, https://www.in.gov/iurc/files/HoosierEnergy_IntegratedResourcePlan_Volume1_110220.pdf.

⁷ See, e.g., Notice and Order of the Commissioner of the Department of Environmental Management, Aug. 14, 2020 (citing Notices of Violation dated March 26, 2020 and Sep. 12, 2019), IDEM VFC Doc No. 83033451; *aff’d* by Order, Office of Env’tl. Adjudication Cause No. 20-S-E-5121, June 16, 2022.

In a surprising development, in February 2022, Hoosier Energy announced plans to sell the plant to Hallador Power Company (a subsidiary of a coal-mining company, Hallador Energy Company) and purchase a portion of the plant's energy and capacity from the new owner.⁸ According to Hallador, a new 3.5-year power purchase agreement ("PPA") between Hallador as seller of Merom's power and Hoosier Energy as buyer would last through the end of 2025.⁹ Hoosier Energy will purchase 100% of the Merom plant's power through May 2023, and then 22% of energy output and 32% of capacity for another two and a half years.¹⁰ Although the agreement ends in 2025, Hallador has not indicated any plans to retire the plant at that time. Hallador intends to run the non-contracted portion of the plant as a merchant generator subject to MISO's economic dispatch tariff.¹¹

Three months after the reversal on the plant's retirement was announced, an out-of-state company named AboutBit, LLC announced a new, large cryptocurrency mining operation at the Merom site. Despite that the new energy demand is supporting the continued operation of a dirty power plant previously determined to be uneconomic and slated for retirement, AboutBit asserted that there would be "little to no impact on the environment."¹² AboutBit touted its plans to use the Merom facility to host other crypto mining companies "from both the U.S. and around the world," and it also puzzlingly indicated plans to resell power "wholesale" to the out-of-state companies, despite having no Federal Energy Regulatory Commission authorization for wholesale power sales.¹³ AboutBit announced that it entered into a five-year PPA to buy power from WIN Energy REMC (a distribution cooperative that purchases all its power needs from Hoosier Energy) for 115 MW of power.¹⁴ We believe it is likely that its highly energy intensive operations make it the largest single user of electricity in the Hoosier Energy service area. The following diagram outlines the contractual relationships that are animating this facility previously determined to be uneconomic for its customers:

⁸ Hallador Energy Company Form 8-K/A (Amendment No. 1), Feb. 18, 2022, available at https://www.sec.gov/Archives/edgar/data/788965/000143774922006045/hnrg20220309_8ka.htm.

⁹ Mary Roberts, *Hallador finalizes purchase of Merom Generating Station*, Inside IN Bus., Oct. 24, 2022, <https://www.insideindianabusiness.com/articles/hallador-finalizes-purchase-of-merom-generating-station>.

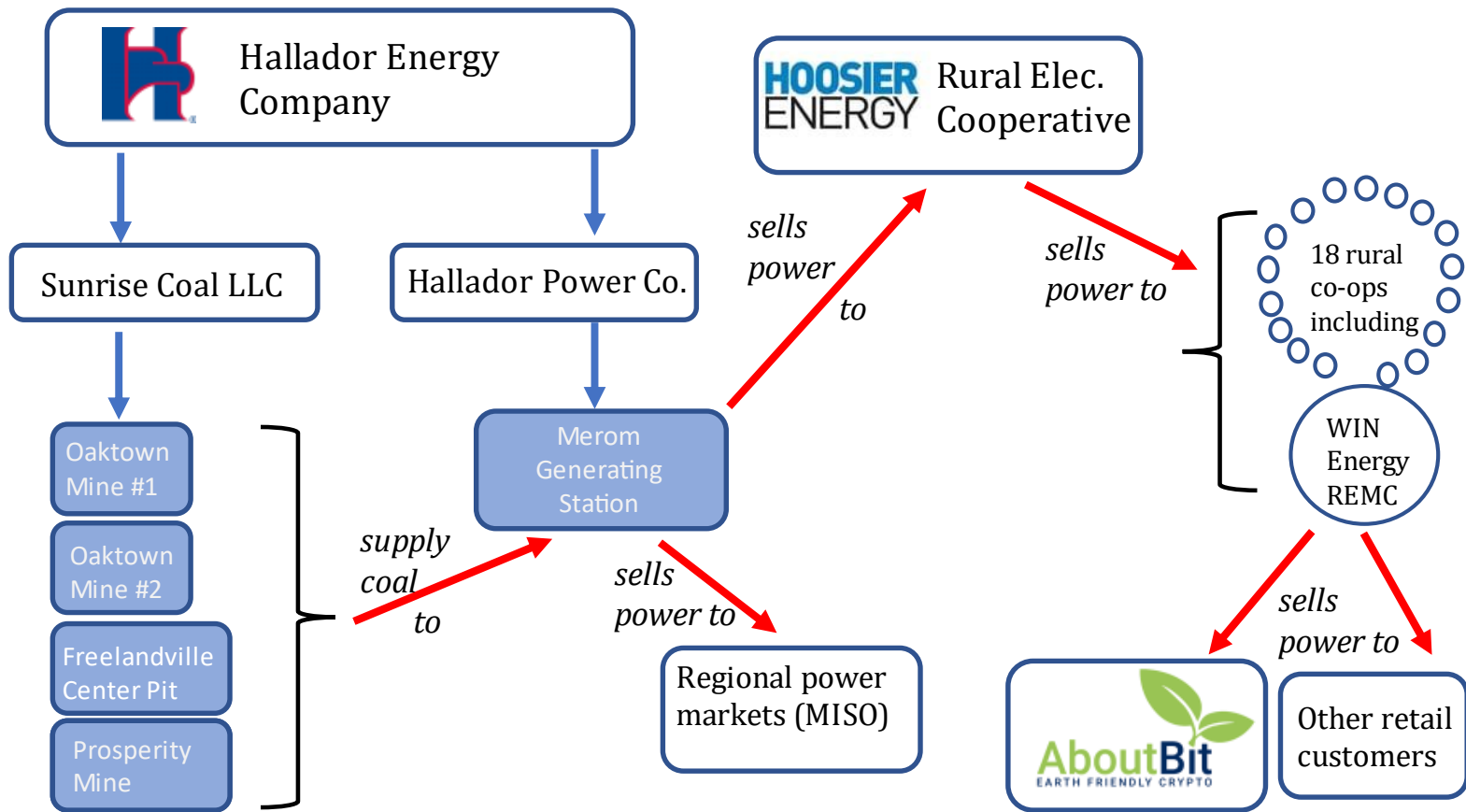
¹⁰ Hallador Energy Company press release (Oct. 21, 2022), <https://halladorenergy.com/news-events/news/news-details/2022/Hallador-Energy-Company-Hoosier-Energy-finalize-ownership-transfer-of-Merom-Generating-Station-multiyear-PPA/default.aspx>.

¹¹ See <https://halladorenergy.com/our-businesses/hallador-power-company> ("Merom Generating Station will provide dispatchable power to Hoosier Energy customers and the power grid in the coming years") (last accessed June 8, 2023).

¹² See Alex Brown, *Startup to Establish Crypto Mining Facility in Sullivan County*, Inside IN Bus., May 11, 2022, <https://www.insideindianabusiness.com/articles/startup-to-establish-crypto-mining-facility-in-sullivan-county>.

¹³ Haley Cawthon, *AboutBit to Open New Crypto Mining Facility in Southern Indiana*, KY Innov, May 11, 2022, <https://www.bizjournals.com/louisville/inno/stories/news/2022/05/11/aboutbit-merom-mining.html>.

¹⁴ <https://www.globenewswire.com/news-release/2022/05/11/2440883/0/en/AboutBit-launches-one-of-nation-s-largest-cryptocurrency-mining-facilities.html>



Cryptocurrency mining is an extremely energy-intensive process that increases local air and water pollution, increases local noise pollution, and threatens the ability of governments across the globe to reduce our dependence on climate-warming fossil fuels.¹⁵ Distinguishing it from other technologies and industries that use large amounts of electricity, crypto mining can be highly mobile, with a risk of imposing stranded asset costs on local users if the operations leave, and produces a relatively low number of jobs per unit of electricity consumed.¹⁶

The Merom Generating Station's recent partnership with AboutBit is one example of an electric cooperative increasing electricity sales through partnership with cryptocurrency mining operations. The upshot of the deal is that a coal plant previously slated to retire in 2023 will now operate indefinitely, which further deepens the harm this site will cause to health and environmental quality in Indiana, and should reinforce the need for careful monitoring of its operations.¹⁷ While previously, the Merom station was part of Hoosier Energy's generating portfolio, and Hoosier Energy conducted triennial Integrated Resource Plan reviews that examined whether the Merom station continued to fit into an economically optimized portfolio, Hallador has no such incentives or requirements: Hallador in fact owns coal mines that it is using to supply the Merom station; it restarted two of its coal mines last year, in concert with the Merom purchase.¹⁸ Hallador, through its subsidiary, Sunrise Coal, LLC, has been cited throughout the past four years by the Department of Natural Resources for multiple violations of mining permit terms at each of multiple Indiana coal mines.¹⁹ One of the newly re-opened mines, Prosperity Mine, was cited by the Department of Natural Resources in January – four months after it re-opened – for violating its surface mining permit, in that it failed to pass surface drainage through a siltation structure as required before the liquid flowed offsite.²⁰ The Merom station's continued operation comes in addition to the cumulative public health and environmental harm the plant has already caused over time, with a string of violations illuminating this issue. Merom's now open-ended operation will further imperil the water, air, and local environment in Sullivan County and throughout the United States.²¹

¹⁵ For more about the adverse impacts of crypto mining operations to local communities, see Sierra Club and Earthjustice, *The Energy Bomb: How Proof-of-Work Cryptocurrency Mining Worsens the Climate Crisis and Harms Communities Now* ("Energy Bomb"), https://earthjustice.org/wp-content/uploads/energy_bomb_bitcoin_white_paper_101322.pdf, at 2.

¹⁶ Testimony of Steve Wright, former CEO of Chelan County (Washington) Public Utility District, before U.S. House Energy and Commerce Committee, Oversight and Investigations Subcommittee, January 20, 2022, <https://www.congress.gov/117/meeting/house/114332/witnesses/HHRG-117-IF02-Wstate-WrightS-20220120.pdf>.

¹⁷ Energy Bomb at 19.

¹⁸ Hallador Energy Company press release (July 12, 2022), <https://halladorenergy.com/news-events/news/news-details/2022/Sunrise-Coal-LLC-Expanding-Operations-/default.aspx>.

¹⁹ Ace in the Hole Mine: DNR Notice of Violation nos. N00812-S-370 (Aug. 19, 2020), 01124-S-370 (Nov. 24, 2020), N20721-S-370 (date unknown). Carlisle Mine: DNR Notice of Violation nos. N90521-U-028 (May 29, 2019), N00721-U-028 (July 21, 2020). Oaktown Mine: DNR Notice of Violation nos. N90913-U-031 (Sep. 16, 2019), N00227-U-031 (Feb. 27, 2020), N20112-U-031 (Jan. 18, 2022), N20331-U-031 (Mar. 31, 2022).

²⁰ DNR Notice of Violation N30120-U-025 (Jan. 23, 2023).

²¹ For example, power plant pollution in the U.S. is responsible for 13,200 premature deaths and 9,700 hospitalizations each year. See Clean Air Task Force, *The Toll from Coal: An Updated Assessment of Death and Disease from America's Dirtiest Energy Source*, (Sept. 2010), at 4, https://www.catf.us/wp-content/uploads/2010/09/CATF_Pub_TheTollFromCoal.pdf; see also Nat'l Rsch. Council, *Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use*, (1st ed. 2010), at 82-94.

Indeed, rural electric cooperatives such as Hoosier Energy and WIN Energy, partnering with large energy customers such as AboutBit, have alternative opportunities to support their energy needs rather than utilizing power from old, dirty coal power plants like the Merom station. Pursuant to last year’s federal Inflation Reduction Act,²² the U.S. Department of Agriculture’s Rural Utilities Service is now sponsoring two discrete programs to support clean energy at rural cooperatives: first, the Powering Affordable Clean Energy program, which provides \$1 billion of funding to forgive up to 60 percent of loans (starting at \$1 million per loan) for rural electric providers’ renewable energy projects that use wind, solar, hydropower, geothermal, or biomass, as well as for renewable energy storage projects; letters of interest for that program were due between June 30 and September 29 of this year.²³ Second, the Empowering Rural America program provides nearly \$10 billion of funding for loans, grants, and other financial assistance to rural electric cooperatives to “achieve the greatest reduction in carbon dioxide, methane, and nitrous oxide emissions associated with rural electric systems through the purchase of renewable energy, renewable energy systems, zero-emission systems [etc.]”; letters of interest for that program were due between July 31 and September 15 of this year.²⁴

Coal-fired power plants like the Merom Generating Station are serious threats to human health in Indiana. The United States Environmental Protection Agency (“EPA”) recently published a Final Rule entitled National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Revocation of the 2020 Reconsideration and Affirmation of the Appropriate and Necessary Supplemental Finding. EPA found that:

EGUs [Electric Generating Units] are [] the largest source of HCl, HF, and selenium emissions, and are a major source of metallic HAP [Hazardous Air Pollutant] emissions including arsenic, chromium, nickel, cobalt, and others. Exposure to these HAP, depending on exposure duration and levels of exposures, is associated with a variety of adverse health effects. These adverse health effects may include chronic health disorders (e.g., pneumonitis, decreased pulmonary function, pneumonia, or lung damage; detrimental effects on the central nervous system; damage to the kidneys) and alimentary effects (such as nausea and vomiting). As of 2021, 3 of the key metal HAP emitted by EGUs (arsenic, chromium, and nickel) have been classified as human carcinogens, while 3 others (cadmium, selenium, and lead) are classified as probable human carcinogens. Overall (metal and nonmetal), the EPA has classified 4 of the HAP emitted by EGUs as human carcinogens and 5 as probable human carcinogens.²⁵

²² Public Law 117-169, §§ 22001, 22004.

²³ See <https://www.rd.usda.gov/programs-services/electric-programs/powering-affordable-clean-energy-pace-program>; 7 U.S.C. § 8103(h).

²⁴ See <https://www.rd.usda.gov/programs-services/electric-programs/empowering-rural-america-new-era-program>; 7 U.S.C. § 8103(j).

²⁵ 88 Fed. Reg. 13,956, 13,970 (Mar. 6, 2023).

Several weeks after publishing this revocation of its prior rulemaking, EPA published its Proposed Rule for National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Review of the Residual Risk and Technology Review, reiterating many of the same findings.²⁶ These risks to human health are no less salient when it comes to the specific case of the Merom station, which has regularly incurred violations and exceedances of the limits in its air and water emissions permits over the past several years, with no serious enforcement action taken by IDEM.

Water Pollution and Clean Water Act Violations

Comments submitted to IDEM by several organizations on a proposed NPDES permit modification for the Merom station last year documented numerous iron exceedances in water effluent dating back to 2020.²⁷

Over the past year and a half alone, Merom has reported numerous exceedances of its NPDES permit,²⁸ including excessive levels of iron, total suspended solids, and ammonia; as well as higher than allowed temperatures. These have included:

- Iron in excess of permitted levels on fifteen occasions between January 2022 and April 2023.
- Total suspended solids (“TSS”) in excess of permitted levels (including almost *three times* the permitted level) on eleven different occasions between January 2022 and January 2023. TSSs, including sand, clay, silt, and microorganisms, can harm aquatic life in a variety of ways.²⁹
- Ammonia in excess of permitted levels on at least four occasions between January 2022 and March 2023, including levels more than four times the permitted limit on February 4, 2023.
- Temperature in excess of permitted levels on 5 occasions. High temperatures, as discussed in last year’s NPDES comments, can harm local fish populations.

²⁶ See https://www.epa.gov/system/files/documents/2023-04/EPA%20OAR%20NESHAP%20MATS_RTR_Proposal%20%282060-AV53%29_EPA_3.31.23_Signature.pdf at 13.

²⁷ July 11, 2022 Comments on April 14, 2022 modification request to NPDES Permit No. IN0050296 (attached as **Exhibit A**) at 11-12. Sierra Club also submitted comments, attached as **Exhibit B**.

²⁸ The most recent version of Merom Generating Station’s NPDES (Clean Water Act) Permit No. IN0050296 prior to IDEM’s 2022 modification is found at IDEM VFC Doc No. 83119775 (Jan. 28, 2021). The modified NPDES permit as of September 2, 2022 is found at IDEM VFC Doc No. 83365166.

²⁹ U.S. EPA, *Volunteer Stream Monitoring: A Methods Manual* (Nov. 1997), § 5.8, <https://www.epa.gov/sites/default/files/2015-06/documents/stream.pdf>.

The specific measured exceedances in this time period are as follows:³⁰

Date	Pollutant	Outfall Pipe	Measured value	Maximum permitted value
January 2022 ³¹	Temperature	002	(5 daily exceedances)	73°F
February 2022 ³²	TSS	301	(1 daily exceedance)	50 mg/L
February 2022 ³³	TSS	401	(2 daily exceedances)	50 mg/L
March 2022 ³⁴	TSS	301	(1 daily exceedance)	50 mg/L
March 2022 ³⁵	TSS	401	(1 daily exceedance)	50 mg/L
March 2022 ³⁶	TSS	501	(1 daily exceedance)	50 mg/L
April 2022 ³⁷	TSS	401	(1 daily exceedance)	50 mg/L
May 2022 ³⁸	TSS	401	(1 daily exceedance)	50 mg/L
July 2022 ³⁹	TSS	301	(1 daily exceedance)	50 mg/L
January 2023 ⁴⁰	TSS	201	49.3 mg/L	18 mg/L
January 2023 ⁴¹	TSS	201	24.5 mg/L	18 mg/L
January 2023 ⁴²	TSS	201	19 mg/L	12 mg/L
January 2022 ⁴³	Ammonia	201	(1 daily exceedance)	2.4 mg/L
January 2023 ⁴⁴	Ammonia	201	3.2 mg/L	2.4 mg/L
February 2023 ⁴⁵	Ammonia	201	10.95 mg/L	2.4 mg/L
April 2022 ⁴⁶	Iron	101	(2 daily exceedances)	0.88 mg/L
May 2022 ⁴⁷	Iron	101	(3 daily exceedances)	0.88 mg/L
September 2022 ⁴⁸	Iron	101	(1 daily exceedance)	0.88 mg/L

³⁰ These are just the exceedances that Commenters have observed in our incomplete review of IDEM documents, although there could be other measured exceedances across the 2022-2023 time period.

³¹ Inspection Summary / Noncompliance Letter from IDEM to Hallador Power Company, LLC (Dec. 22, 2022), IDEM VFC Doc No. 83409683.

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ Noncompliance 24-Hour Notification Report (Jan. 19, 2023), IDEM VFC Doc No. 83419131.

⁴¹ *Id.*

⁴² Noncompliance 24-Hour Notification Report (Feb. 4, 2023), IDEM VFC Doc No. 83425859.

⁴³ Inspection Summary / Noncompliance Letter from IDEM to Hallador Power Company, LLC (Dec. 22, 2022), *supra* note 30.

⁴⁴ Noncompliance 24-Hour Notification Report (Jan. 26, 2023), IDEM VFC Doc No. 83421665.

⁴⁵ Monthly Monitoring Report (MMR) for Industrial Discharge Permits for February 2023 (March 21, 2023), IDEM VFC Doc No. 83492111.

⁴⁶ Inspection Summary / Noncompliance Letter from IDEM to Hallador Power Company, LLC (Dec. 22, 2022), *supra* note 30.

⁴⁷ *Id.*

⁴⁸ *Id.*

Date	Pollutant	Outfall Pipe	Measured value	Maximum permitted value
October 2022 ⁴⁹	Iron	101	(6 daily exceedances)	0.88 mg/L
November 2022 ⁵⁰	Iron	101	0.966 mg/L	0.88 mg/L
April 2023 ⁵¹	Iron	101	1.358 mg/L	0.88 mg/L
April 2023 ⁵²	Iron	101	0.933 mg/L	0.88 mg/L

Hallador Power’s attempts at remediating these violations are yet unproven. For example, in January and February 2023, two daily TSS exceedances and two daily ammonia exceedances were measured at Outfall Pipe 201. For all except one of these, the plant owner described these exceedances as due to an **unexplained “shock to the biological health of the system”**⁵³ (emphasis added). The plant owner has attempted to address this biological shock by adding daily molasses doses and adding 2,000 gallons of “seed sludge” to the aeration tank at the onsite sewage treatment plant, but admits that the biological shock will “take[] time to recover.”⁵⁴

Hallador described in a January 2023 letter to IDEM its measures to address the water effluent permit exceedances (asserting that it took “all appropriate measures to correct these items”), but has provided no evidence as to whether those measures were completed satisfactorily or whether they will remedy the problems causing them to exceed the health limits⁵⁵. Notably, at least one exceedance (ammonia) has persisted into February 2023, and another exceedance (iron) persisted into April 2023. Additionally, Hallador offered no explanation or solution for five temperature exceedances in January 2022 at Outfall Pipe 002, other than “unseasonably warm weather” at the time. The public can only guess at what may happen if similar weather conditions recur in future winters as climate change grows more intense.

Air Pollution and Clean Air Act Violations

Water violations are not the only violations at Merom. Since at least 2016, IDEM has identified “deviations” in the coal plant’s permits on allowable air opacity level.⁵⁶ Opacity refers to the visible emissions coming from stationary energy sources; oftentimes they are indicators of

⁴⁹ *Id.*

⁵⁰ Letter from Hallador Power to IDEM (Dec. 27, 2022), IDEM VFC Doc No. 83434312.

⁵¹ Noncompliance 24-Hour Notification Report (April 11, 2023), IDEM VFC Doc No. 83460757.

⁵² *Id.*

⁵³ Noncompliance 24-Hour Notification Report (Jan. 26, 2023), *supra* note 43.

⁵⁴ *Id.*

⁵⁵ Letter from Hallador Power Company to IDEM (Jan. 20, 2023), IDEM VFC Doc No. 83421469.

⁵⁶ Letter from Lynne J. Sullivan, Chief, IDEM – Air Compliance and Enforcement Section 2, Office of Air Quality, to Angie Lee, Hoosier Energy – Merom Generating Station, (Aug. 30, 2016), https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=80346211&dDocName=80345828&Rendition=web&allowInterrupt=1&noSaveAs=1.

types of emissions and the efficiency of the energy generator. The denser the smoke, the less efficient the facility is, and the more likely it is that the smoke is harmful or that it creates a nuisance to the surrounding human environment.^{57,58}

The Merom station was shown to be in violation of opacity limits throughout calendar year 2022. This includes the 1st Quarter Deviation Report submitted April 29, 2022; the 2nd Quarter Deviation Report submitted July 29, 2022; the 3rd Quarter Deviation Report submitted October 27, 2022; and the 4th Quarter Deviation Report submitted January 30, 2023.

Meanwhile, the plant has also failed to collect required quality assured SO₂ (sulfur dioxide) and Hg (mercury) data - serious air toxins – during dozens of hours of monitoring system malfunctions, as indicated in the Semi-Annual Mercury and Air Toxics Standards (MATS) Compliance Report 1st Half 2022 and the Semi-Annual MATS Compliance Report 2nd Half 2022⁵⁹ – leaving the public in the dark about the status of air quality around the plant.

Violation letters with respect to Merom’s air permit have been issued by IDEM annually since 2016.⁶⁰ Overall, the Merom plant incurred a High Priority Violation of Clean Air Act

⁵⁷ U.S. EPA, *Visible Emissions Field Manual: EPA Methods 9 and 22*, (EPA 340/1-92-0004, Dec. 1993), <https://www.epa.gov/sites/default/files/2020-08/documents/vfieldmanual.pdf>.

⁵⁸ Exhibit A, NPDES Comments at 15.

⁵⁹ Merom Generating Station Annual Compliance Certification under Title V Permit Nos. AR153-41923-00005, T153-41933-00005, AA T153-45962-0005, AA AR 153-46051-00005 153-41933-00005 (March 27, 2023), IDEM VFC Doc No. 83455423. *See also* Semi-Annual MATS Compliance Report 1st Half 2022 (July 29, 2022), IDEM VFC Doc No. 83353376; Semi-Annual MATS Compliance Report 2nd Half 2022 (Jan. 24, 2023), IDEM VFC Doc No. 83427630.

⁶⁰ *Letter from Lynne J. Sullivan, Chief, IDEM – Air Compliance and Enforcement Section 2, Office of Air Quality, to Angie Lee, Hoosier Energy – Merom Generating Station*, (Aug. 30, 2016), https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=80346211&dDocName=80345828&Rendition=web&allowInterrupt=1&noSaveAs=1; *Letter from Roger Letterman, Chief, IDEM – Air Compliance Section 3, Office of Air Quality, to Angie Lee, Hoosier Energy – Merom Generating Station*, (July 20, 2017), https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=80495809&dDocName=80495244&Rendition=web&allowInterrupt=1&noSaveAs=1; *Letter from Roger Letterman, Chief, IDEM – Air Compliance Section 3, Office of Air Quality, to Angie Lee, Hoosier Energy – Merom Generating Station*, (July 18, 2018), https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=82582476&dDocName=82583081&Rendition=web&allowInterrupt=1&noSaveAs=1; *Letter from Roger Letterman, Chief, IDEM – Air Compliance Section 3, Office of Air Quality, to Angie Lee, Hoosier Energy – Merom Generating Station*, (July 8, 2019), https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=82817955&dDocName=82816760&Rendition=web&allowInterrupt=1&noSaveAs=1; *Letter from Roger Letterman, Chief, IDEM – Air Compliance Section 3, Office of Air Quality, to Lucas Reynolds, Hoosier Energy – Merom Generating Station*, (June 9, 2020), https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=82985073&dDocName=82984477&Rendition=web&allowInterrupt=1&noSaveAs=1; *Letter from Roger Letterman, Chief, IDEM – Air Compliance Section 3, Office of Air Quality, to Lucas Reynolds, Hoosier Energy – Merom Generating Station*, (2021), https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=83213370&dDocName=83214775&Rendition=web&allowInterrupt=1&noSaveAs=1; *Letter from Roger Letterman, Chief, IDEM – Air Compliance Section 3, Office of Air Quality, to Darrell Bayless, Hoosier Energy – Merom Generating Station*, (June 16, 2022), https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=83330199&dDocName=83332044&Rendition=web&allowInterrupt=1&noSaveAs=1.

provisions in each of the last 10 recorded quarterly measurement periods going back to the third quarter of 2020.⁶¹

The pattern of violations at the plant are another significant reason that IDEM should take a close look at the plant's operations before renewing the plant's Title V Operating Permit⁶² in 2025, especially now that the plant is no longer slated for closure this year as previously planned.

Solid Waste CCR Pollution and Violations

In addition to water and air violations, a dangerous seep has been observed at the Area 2A coal combustion residuals ("CCR" or coal ash) landfill at the site, dating back to 2017.⁶³ As described above in footnote 7 and related text, IDEM issued Notices of Violation related to these seeps in 2019 and 2020. As documented in last year's NPDES comments, it appears that the landfill leak has not been remedied, and a strong chemical odor and visible white precipitate can be found near the seep.⁶⁴ The NPDES comments also discussed a *second* seep, this one discovered during a 2021 inspection at the Area 1 landfill basin, causing a strong chemical odor and erosion rills of up to 75 feet long, and which the then-owner stated was going into an unlined drainage ditch not designed for leachate.⁶⁵ IDEM must ensure that Hallador Power fully remedies both of these seeps, particularly before taking any action on the permit renewal application for Areas 1, 2A, and 2B, now pending, submitted by the Merom plant's owner last year.⁶⁶

Moreover, publicly available groundwater monitoring data around Merom's CCR landfill system shows exceedances of state and/or federal standards for barium, chromium, cadmium, lead, sulfate, and fluoride, indicating the likelihood of groundwater contamination from the bottom of the coal ash landfills themselves.⁶⁷ The Merom station posted Annual Groundwater Monitoring and Corrective Action Reports for 2019⁶⁸ and 2022⁶⁹ that indicated statistically significant increases over background levels for boron and pH, respectively, which are Appendix III (detection monitoring) constituents under the federal CCR Rule.⁷⁰ In each case, the owner stated that it relied on an engineer's certification that the statistically significant increases were

⁶¹ U.S. EPA Detailed Facility Report for Merom Generating Station, Three-Year Compliance History by Quarter, <https://echo.epa.gov/detailed-facility-report?fid=110000592831>.

⁶² IDEM Notice of Decision: Part 70 Operating Permit Renewal (Nov. 30, 2020), IDEM VFC Doc No. 83076381.

⁶³ IDEM, *Violation / Inspection Summary Letter* (March 16, 2018), IDEM VFC Doc No. 80630583.

⁶⁴ Exhibit A, NPDES Comments at 14.

⁶⁵ IDEM, *Violation / Inspection Summary Letter* (April 9, 2021), IDEM VFC Doc No. 83159032.

⁶⁶ See Solid Waste Land Disposal Facility Permit Renewal Application (RWS Type II Landfill, FP 77-03) (Aug. 15, 2022), IDEM VFC Doc No. 83360293.

⁶⁷ Environmental Integrity Project, Ashtracker, <https://ashtracker.org/facility/232/merom-generating-station> (last accessed June 8, 2023).

⁶⁸

https://s27.q4cdn.com/270326732/files/doc_hallador_power_company_resources/Annual_Groundwater_Mon_Reports/Merom-Area-3-Landfill-2019-Annual-GWM-and-CA-Report.pdf.

⁶⁹

https://s27.q4cdn.com/270326732/files/doc_hallador_power_company_resources/Annual_Groundwater_Mon_Reports/Merom-Area-3-Landfill-2022-Annual-GWM-and-CA-Report.pdf.

⁷⁰ 40 C.F.R. Part 257, Appx. D.

not caused by the nearby CCR landfill, although in the case of elevated boron levels observed in 2018, neither the 2018 annual groundwater monitoring report⁷¹ nor the 2019 report include a copy of that certification. (The engineer’s certification is required to avoid the requirement to initiate assessment monitoring for a wider set of constituents under the CCR Rule.⁷²)

Moreover, a report to IDEM by the Merom station’s then-owner in August 2020 identified significant increasing trends over the past decade for dissolved boron, chloride, field pH, dissolved sodium, specific conductance, and sulfate at certain groundwater monitoring wells around the Area 1 landfill; and significant increasing trends for dissolved boron, chloride, dissolved sodium, specific conductance, and sulfate at certain monitoring wells around the Area 2A landfill.⁷³ These trends are concerning and must be more closely monitored.

* * * * *

While we recognize that IDEM has recently stated an increased commitment to inspection and enforcement measures for the Merom site,⁷⁴ we want to emphasize that to protect people, water, air, and the planet, more needs to be done, especially with cryptocurrency mining operations increasing the plant’s operations and pollution.

In the long run, continued operation of the Merom Generating Station, particularly at levels that exceed allowed permit limits, would result in dangerous, toxic harm to the people, wildlife, and natural environment of Indiana. As an agency, IDEM has a notable opportunity to rewrite this narrative. With the power plant now set to run indefinitely into the future, we strongly urge you to consider heightened enforcement, including additional inspections and site visits, as well as additional monitoring and remedial measures. For example, for each emissions or effluent constituent that has repeatedly been found to be in exceedance of permitted limits, such as iron ammonia, or opacity, Merom’s owner or operator must be required to demonstrate a compliance plan that will sustainably cure those continued patterns of violations. We also urge the maximum amount of warranted fines and penalties to be assessed for every year the plant does not retire as previously planned.

Finally we respectfully request a meeting with IDEM’s air quality, water quality, and land quality officials of the to discuss the serious concerns we have raised in this letter about the Merom Generating Station now that it is no longer retiring as planned.

Thank you for your consideration. Please do not hesitate to contact us with any questions.

⁷¹

[https://s27.q4cdn.com/270326732/files/doc_hallador_power_company_resources/Annual Groundwater Mon Reports/Merom-Area-3-Landfill-2018-Annual-GWM-and-CA-Report.pdf](https://s27.q4cdn.com/270326732/files/doc_hallador_power_company_resources/Annual_Groundwater_Mon_Reports/Merom-Area-3-Landfill-2018-Annual-GWM-and-CA-Report.pdf).

⁷² 40 C.F.R. § 257.94(e)(2).

⁷³ Hoosier Energy REC, Inc., Addendum to the November 2019 Groundwater Quality Report dated January 16, 2020 and Response to April 30, 2020 IDEM Review Letter, IDEM VFC Doc No. 82998149.

⁷⁴ ACC Review / Violation Letter from IDEM (April 4, 2023), stating “The Office of Air Quality will not take legal action at this time for these violations. However any such violations in the future may result in legal action being pursued.”; IDEM VFC Doc No. 83455503.

Respectfully submitted,

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