# OBJECTION TO THE ISSUANCE OF NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. IN0004693

## INDIANAPOLIS POWER & LIGHT CO D/B/A AES - INDIANA EAGLE VALLEY GENERATING STATION 2025 OALP 024, CAUSE NO.: IDEM-2304-002842

Official Short Cite Name:	AES - INDIANA EAGLE VALLEY, 2025 OALP 024
Cause Nos.:	IDEM-2304-002842 (OEA-23-W-J-5247)
Topics/Keywords:	National Pollutant Discharge Elimination System (NPDES)
	Ind. Code § 13-13 et seq.
	Ind. Code § 13-13-5-1(1)
	Ind. Code § 13-14-1-1 et seq.
	Ind. Code § 13-14-1-11.5
	Ind. Code § 13-15-6
	Ind. Code § 13-15-6-2(6)
	Ind. Code § 4-15-10.5-12
	Ind. Code § 4-21.5-3-7(a)(1)(B)
	Ind. Code § 4-21.5-3-14(c)
	Ind. Code § 4-21.5-3-23
	Ind. Code § 4-21.5-3-27(d)
	Ind. Code § 4-21.5-5-5
	315 IAC 1-3-2(b)(3)
	315 IAC 1-3-2(b)(4)
	315 IAC 1-3-3(b)(4)
	315 IAC 1-3-4(d)
	315 IAC 1-3-6(6)
	327 IAC 2-1.3-5
	327 IAC 2-1.3-6
	327 IAC 2-1-6
	327 IAC 2-1-6(a)(2)(A)(iv)
	327 IAC 2-1-6(a)(2)(C)
	327 IAC 2-1-6(a)(3)
	327 IAC 2-1-6(a)(7)
	327 IAC 2-1-8.2
	327 IAC 2-1-8.6
	327 IAC 2-1-8.9
	327 IAC 5-2-2
	327 IAC 5-2-5(b)
	327 IAC 5-2-11
	327 IAC 5-2-11(a)
	327 IAC 5-2-11(d)

Topics/Keywords cont.:	327 IAC 5-2-13
	327 IAC 5-2-13(c)(2)
	Ind. Tr. R. 12(B)(6)
	Ind. Tr. R. 56(C)
	33 U.S.C. § 1342
	40 CFR 122(d)
	40 CFR 122.44(d)(1)(i)
	54 Fed, Reg. 23868, 23875 (Jun. 2, 1989)
	US EPA's Technical Support Document for Water Quality-based Tox
	Control
	Monitoring requirements
	Schedule of Compliance
	Human health cancer criteria
	Associational standing
Presiding ELJ:	Hon. Lori Kyle Endris
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#### ISSUED:

February 18, 2025

### STATE OF INDIANA OFFICE OF ADMINISTRATIVE LAW PROCEEDINGS

HOOSIER ENVIRONMENTAL COUNCIL, INC., Petitioner,

v.

INDIANAPOLIS POWER & LIGHT COMPANY D/B/A AES INDIANA-EAGLE VALLEY GENERATING STATION, Permittee/Respondent,

and

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, **Respondent.** 

Administrative Case Number: IDEM-2304-

002842 OEA 23-W-J-5247

**Agency Number:** NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. IN0004693

#### FINDINGS OF FACT, CONCLUSIONS OF LAW and FINAL ORDER

The Administrative Law Judge (ALJ) having considered the pleadings now enters this Final Order addressing Hoosier Environmental Council's (HEC) Petition for Administrative Review of the Indiana Department of Environmental Management's (IDEM) issuance of a National Pollutant Discharge Elimination Permit No. IN0004693 (NPDES Permit or Permit) to Permittee/Respondent, Indianapolis Power & Light Company d/b/a AES Indiana-Eagle Valley Generating Station (AES).

#### Jurisdiction

The Office of Administrative Law Proceedings (OALP or Court) has jurisdiction over this case pursuant to Ind. Code § 4-15-10.5-12.

#### Issues

1. Whether the Permit fails to impose proper limits, monitoring requirements and Schedule of Compliance to ensure the water quality criteria for mercury is met; and

2. Whether IDEM failed to assess the reasonable potential to exceed human health cancer criteria for carcinogenic contaminants and the chronic aquatic criteria for other pollutants.

#### **Procedural History**

- 1. On March 31, 2023, the IDEM issued AESI a renewal of its NPDES Permit No. IN0004693<sup>1</sup> AES' which authorizes AES to discharge to the west fork of the White River in accordance with the effluent limitations, monitoring requirements and other conditions.
- 2. On April 17, 2023, Petitioner, Hoosier Environmental Council, Inc. (HEC) filed its original Petition for Administrative Review (Petition).
- 3. On May 30, 2023, the Administrative Law Judge (ALJ) entered a Case Management Order outlining the filing and briefing of preliminary motions, disclosure of preliminary witness and exhibit lists, fact and expert discovery, and filing and briefing of dispositive motions.
- 4. On July 5, 2023, HEC filed an Amended Petition for Administrative Review (Amended Petition). HEC raised four (4) technical Deficiencies in its Amended Petition:
  - i. IDEM issued AES a Permit that violates 327 IAC 5-2-5(b) because it authorizes infringement of federal, state or local laws or regulations --- specifically, the Permit allows continuous releases of coal combustion residuals (CCR) to the White River in violation of the CCR Rule and the Clean Water Act (CWA);
  - ii. The Permit violates Indiana's antidegradation standards by allowing a new discharge of mercury, a Bioaccumulative Chemical of Concern (BCC), without requiring AES to comply with the antidegradation demonstration procedures set forth in 327 IAC 2-1.3-5 and 2-1.3-6;
  - iii. The Permit fails to impose proper limits, monitoring requirements and Schedule of Compliance to ensure the water quality criteria for mercury is met; and
  - iv. IDEM failed to assess the reasonable potential to exceed human health cancer criteria for carcinogenic contaminants and the chronic aquatic criteria for other pollutants.

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<sup>&</sup>lt;sup>1</sup> VFC # 83453815.

HEC relied upon the following Exhibits attached to its Amended Petition to contend it had associational standing:

- Exhibit A: Affidavit of Anna Radue;
- Exhibit B: Affidavit of Roger Radue; and
- Exhibit C: Affidavit of David McSwane;
- 5. On July 28, 2023, AES and IDEM filed separate Motions to Dismiss. Both Respondents contended that technical Deficiencies i and ii in the Amended Petition did not state a claim upon which relief could. be granted under Ind. Tr. R. 12(B)(6) and 315 IAC 1-3-6(6).
- 6. On September 5, 2023, HEC filed its Combined Response in Opposition to AES' and IDEM's Motions to Dismiss.
- 7. On September 25, 2023, AES and IDEM filed separate Replies in Support of their Motions to Dismiss.
- On October 30, 2023, the Court, pursuant to Tr. R. 12(B)(6) and 315 IAC 1-3-6(6), 8. entered Findings of Fact, Conclusions of Law and Non-Final Order as to the first two Deficiencies. The Court incorporates the Findings of Fact, Conclusions of Law and Non-Final Order into this Final Order.
- 9. On July 26, 2024, the Court issued an Order granting an extension to the Case Management Order requiring all Dispositive Motions filed by August 26, 2024, Responses to Dispositive Motions filed thirty days after any Dispositive Motion is filed and Replies filed twenty days after any Response to a Dispositive Motion.
- 10. On August 26, 2024, AES filed its Motion for Summary Judgment (AES' Motion) and supporting memorandum on HEC's Deficiencies iii and iv in addition to standing.
- On the same date, HEC filed its Motion for Partial Summary Judgment (HEC 11. Motion) and supporting memorandum. In its Motion, HEC withdrew Deficiencies 1 and 2.
- 12. On September 10, 2024, the ALJ granted a continuance of only the deadlines to file Responses to October 25, 2024, and Replies to November 14, 2024. (Emphasis added).

- 13. On October 25, 2024, HEC filed a Brief in Opposition to AES' Motion for Summary Judgment (HEC Response). On the same day, HEC filed a Cross-Motion for Summary Judgment on associational standing.<sup>2</sup>
- 14. On November 13, 2024, the Court denied HEC's Cross-Motion for Summary Judgment.

#### **Findings of Fact**

- 1. IDEM is authorized by Section 402 of the federal Clean Water Act (CWA), as well as Indiana's water laws and regulations, to administer the National Pollutant Discharge Elimination System (NPDES) program.<sup>3</sup> This program includes the issuance of permits for the point source discharge of pollutants to waters of the state.<sup>4</sup>
- 2. IDEM is authorized to implement and enforce Indiana environmental statutes and rules promulgated relevant to those statutes.<sup>5</sup>
- 3. As a state agency, IDEM only has the authority to take those actions which are granted by the law. *See In Re: Cooper Farms*, 2018 OEA 24; *In Re: Twin Lakes Regional Sewer District*, 2007 OEA 53, 61. An agency may not by its rules and regulations add to or detract from the law as enacted, or may it extend its powers beyond those conferred upon it by law." *Lee Alan Bryant Health Care Facilities, Inc. v. Hamilton*, 788 N.E.2d 495, 500 (Ind. Ct. App. 2003).
- 4. OALP must apply a de novo standard of review when determining the facts at issue. *Indiana Dept. of Natural Resources v. United Refuse Co., Inc.,* 615 N.E.2d 100 (Ind. 1993). Findings of fact must be based exclusively on the evidence presented to the ALJ, and deference to the agency's initial factual determination is not allowed. *Id.*; IC § 4-21.5-3-27(d). Pursuant to IC § 4-21.5-3-23, an ALJ shall consider a summary judgment motion as would a court that is considering a motion for summary judgment filed under Trial Rule 56 of the Indiana Rules of Trial Procedure.

<sup>&</sup>lt;sup>2</sup> A Cross-Motion for Summary Judgment is indubitably a dispositive motion; thus, given the Court's Case Management Order, HEC's filing was untimely. Moreover, HEC's Response to AES' Motion for Summary Judgment and its Cross-Motion for Summary Judgment exceeded 30 pages notwithstanding that 315 IAC 1-3-4(d) states that "[a] brief, excluding attachments, filed in support of any motion shall not exceed thirty (30) pages in length." HEC neither requested nor was granted leave to file an oversized brief.

<sup>&</sup>lt;sup>3</sup> See 33 U.S.C. § 1342; Ind. Code § 13-14-1-1 et seg.; IC § 13-13-5-1(1).

<sup>&</sup>lt;sup>4</sup> 327 IAC 5-2-2.

<sup>&</sup>lt;sup>5</sup> IC § 13-13 *et seq*. and IC § 13-14-1-11.5.

- 5. The Court may enter summary judgment for a party if it finds that "the designated evidentiary matter shows that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Ind. Tr. R. 56(C); IC 4§-21.5-3-23. The moving party bears the burden of establishing that summary judgment is appropriate. All facts and inferences must be construed in favor of the non-movant, and all doubts as to the existence of a material issue must be resolved against the moving party. *Gibson v. Evansville Vanderburgh Building Commission, et al., 725 N.E.2d 949* (Ind. Ct. App. 2000); *City of North Vernon v. Jennings Northwest Regional Utilities,* 829 N.E.2d 1, (Ind. 2005); *Tibbs v. Huber, Hunt & Nichols, Inc.,* 668 N.E.2d 248, 249 (Ind. 1996). Each movant has the burden of proof, persuasion and of going forward on its motion for summary judgment. IC § 4-21.5-3-14(c).
- 6. Summary judgment shall be rendered if the designated evidentiary matter shows that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law. Ind. T.R. 56(C).
- 7. IDEM is authorized to determine whether a permit should be issued by applying the relevant statutes and regulations pertaining to permits and can only consider the relevant statutes and regulations when deciding whether to issue a permit. *Page Road*, 2022 OEA 150, 152; *Wolf Lake*, 2023 OEA 001, 006; *American Suburban Utilities*, 2019 OEA 48, 53.
- 8. OALP's review is limited to determining whether IDEM complied with applicable statutes and regulations pertaining to permits when it issues a Permit. *Berkshire Pointe WWTP*, 2023 OEA 105, 110; *Blue River Valley*, 2005 OEA 1, 11. OALP's jurisdiction is limited to and cannot be extended beyond those matters over which the General Assembly has determined that it may exert subject matter jurisdiction.
- 9. The Permit authorizes AES (an electric power generating facility located in Martinsville, Indiana) to discharge to the West Fork of the White River in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in the Permit.<sup>6</sup> The Permit authorizes discharges from two outfalls: Outfall 003 and Internal Outfall 103<sup>7</sup> and the limits are based on the more stringent of Indiana water quality-based effluent limitations, technology-based effluent limitations in accordance with 327 IAC 5-2-11 and US EPA's Technical Support Document for Water Quality-based Tox Control (TSD).<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> Petition Ex. A, p. 1.

<sup>&</sup>lt;sup>7</sup> Petition Ex. A, +pp. 2-11.

<sup>&</sup>lt;sup>8</sup> TSD, p. 15.

- 10. Before renewing the Permit, IDEM conducted a Wasteload Allocation based on representative sampling data to evaluate whether the Outfall 003 discharge to the West Fork of the White River had a reasonable potential to exceed Indiana's water quality criteria (RPE analysis). Groundwater, via production wells, provides the source water for all processes at the facility. 10
- 11. Given the vicinity of the wells to the ash ponds and the potential for elevated concentrations of coal combustion residuals (CCR) pollutants in the groundwater, IDEM conducted the RPE analysis of the Outfall 003 effluent for the following contaminants that may be present in CCR ash ponds: antimony, arsenic, barium, beryllium, boron, cadmium, cobalt, free cyanide, fluoride, hexavalent chromium, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, thallium and vanadium.<sup>11</sup>
- 12. Of these parameters, only mercury was found to have a reasonable potential to exceed. Based on the RPE analysis, IDEM included a final daily maximum limit for Mercury of 20 nanograms per liter (ng/l) and a final monthly average limit of 12 ng/l. IDEM set the monitoring frequency for Mercury at six times annually, specifically, February, April, June, August, October, and December of each year. April

#### **Conclusions of Law**

1. This is an Order issued pursuant to IC § 4-21.5-3-23. Findings of Fact that may be construed as Conclusions of Law and Conclusions of Law that may be construed as Findings of Fact are so deemed.

#### HEC did not prove it has associational standing.

2. HEC admits it does not have standing, <sup>15</sup> but opines three non-voting members, Anna and Roger Radue and David McSwane do because they "would otherwise have standing in their own right." <sup>16</sup> IC § 4-21.5-3-7(a)(1)(B) and 315 IAC 1-3-2(b)(3) require that a petitioner

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<sup>&</sup>lt;sup>9</sup> HEC Petition Appendix A, p. 43.

<sup>&</sup>lt;sup>10</sup> *Id.*, p. 12.

<sup>&</sup>lt;sup>11</sup> *Id*., p. 6.

<sup>&</sup>lt;sup>12</sup> *Id.*, p. 3 (Table 2).

<sup>&</sup>lt;sup>13</sup> HEC Petition Appendix A, NPDES Permit, p. 3.

<sup>&</sup>lt;sup>14</sup> *Id*., p. 7.

<sup>&</sup>lt;sup>15</sup> HEC Am. Petition ¶ 15 (citing, *inter alia, Save the Valley, Inc. v. Indiana-Kentucky Elec. Corp.*, 820 N.E.2d 677, 682 (Ind. Ct. App. 2005)).

<sup>&</sup>lt;sup>16</sup> HEC Am. Petition ¶ 17 and no. 12.

"state facts demonstrating that [a] petitioner is aggrieved or adversely affected by the [agency's] order."

In *Huffman v. Office of Envir. Adjud.,* the Court interpreted the meaning of aggrieved or adversely affected and stated, "[t]o be "aggrieved or adversely affected," a person must have suffered or be likely to suffer in the immediate future harm to a legal interest, be it a pecuniary, property, or personal interest" and "aggrieved is more than a feeling of concern or disagreement; it is a personalized harm." <sup>17</sup>

HEC stated its Amended Petition was being brought "on behalf of its members who live in Martinsville and rely on the City's water supply for residential use and/or recreate in and around the White River downstream of the Eagle Valley plant;" <sup>18</sup> thereby making the point that the Radues and McSwane would have the same issues as any citizen of Martinsville. Indiana's Supreme Court has held that a party has standing under AOPA when s/he is "not claiming a general injury sustained by the community as a whole." <sup>19</sup> In sum, HEC did not prove the Radues and McSwane had personal rather than general interest in the outcome.

The affiants' averments state that they fear the alleged groundwater contamination will make their water supply unsafe, <sup>20</sup> adversely affect their health through contaminants deposited on agricultural fields and/or make it unsafe to view surrounding wildlife or harm the health of wildlife. <sup>21</sup> Despite their claiming they were aggrieved or adversely affected in their Affidavits, all three affiants acknowledged in their Responses to AES' Interrogatories that their activities around the White River have not changed as a result of the Permit, and they have suffered no injuries. <sup>22</sup> Moreover, no evidence of harm to their or the wildlife's health was submitted. Thus, HEC failed to show the Radues and McSwane have suffered or are likely to suffer harm in the immediate future. <sup>23</sup> In sum, HEC did not prove it had associational standing.

<sup>&</sup>lt;sup>17</sup> Huffman v. Office of Environ. Adjudication, 811 N.E.2d 806, 809 (Ind. 2004). 810, 812.

<sup>&</sup>lt;sup>18</sup> Am. Pet. ¶ 20.

<sup>&</sup>lt;sup>19</sup> Save the Valley, Inc. v. Indiana-Kentucky Elec. Corp., 820 N.E.2d 677, 681.

<sup>&</sup>lt;sup>20</sup> The concerns regarding unsafe water supply ostensibly were employed to support HEC's Amended Petition deficiencies i and ii, but those deficiencies were deemed to have failed to state a claim upon which relief could be granted via the Court's October 30, 2023 Order of Dismissal.

<sup>&</sup>lt;sup>21</sup> Am. Pet. Ex. A, pp. 3 – 4; Am. Pet. Ex. B, pp. 3 – 4; Am. Pet. Ex. C, p. 2.

<sup>&</sup>lt;sup>22</sup> AES Ex. 13.

<sup>&</sup>lt;sup>23</sup> Am. Pet ¶ 44. HEC argued that it need not show that it sustained or was in immediate danger of sustaining some direct injury citing *Huffman v. Indiana Department of Environmental Management*, 788 N.E.2d 505, 509 (Ind. Ct. App. 2003) but that decision was vacated when the Indiana Supreme Court, accepted the case on transfer. *Huffman v. Off. Of Env't Adjudication, Indiana Department of Environmental Management and Eli Lilly and Company*, 811 N.E.2d 806, 810 (Ind. 2004).

#### The Permit's mercury limits conform to IDEM's rules and U.S. EPA guidance.

- HEC contends "the mercury limits and monitoring requirements that IDEM imposed in [the] Permit do not assure compliance with Indiana's [water quality criteria] for mercury."<sup>24</sup> HEC claims 327 IAC 5-2-11.1(b)(6) prohibits IDEM from issuing an NPDES permit with a maximum daily limit of 20 ng/l.<sup>25</sup> HEC proffered no evidence in support of its contention or language providing permit terms or conditions in violation of IC 13-15-6 and 315 IAC 1-3-2(b)(4).<sup>26</sup> Moreover, HEC did not consider the differences between water quality standards, maximum daily effluent limits, average monthly effluent limits and the processes used by IDEM to generate the Permit's limitations.
- Water quality standards<sup>27</sup> provide the basis for the maximum daily and average 4. monthly effluent limitations that IDEM applies to individual dischargers in NPDES permits. 327 IAC 5-2-11.1(a) states:

The water quality standards established through the criteria set forth in 327 IAC 2-1-6 and 327 IAC 2-1-8.9 or under the procedures described in 327 IAC 2-1-8.2 through 327 IAC 2-1-8.6 and 327 IAC 2-1-8.9 shall be the basis for water quality-based effluent limitations (WQBELs) applicable to point source dischargers, not discharging to waters within the Great Lakes system, through NPDES permits . . . [and] not be enforceable against point source dischargers until translated into effluent limitations that are incorporated in NPDES permits in accordance with this article.

The numeric water quality criteria for mercury for downstate waters<sup>28</sup> is 12 ng/l<sup>29</sup> 5. which means that all downstate waterbodies should achieve no more than 12 ng/l mercury, but 12 ng/l is the chronic aquatic criteria. Mercury has an acute aquatic criterion of 2,400 ng/1 --- a value much higher than the maximum daily mercury limit in the Permit.<sup>30</sup>

<sup>&</sup>lt;sup>24</sup> HEC Motion, p. 3; HEC Memo, pp. 8 - 10.

<sup>&</sup>lt;sup>25</sup> Am. Pet. ¶ 65.

<sup>&</sup>lt;sup>26</sup> IC § 13-15-6-requires a request for adjudicatory hearing regarding a permit to state with particularity the issues proposed for consideration at the hearing and identify the permit terms and conditions that, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing permits of the type granted or denied by the commissioner's action. In addition to the requirements under IC § 13-15-6, 315 IAC 1-3-2(b)(4) requires a petitioner to include the permit terms and conditions that it contends would be appropriate.

<sup>&</sup>lt;sup>27</sup> Indiana's water quality standards are found in 327 IAC 2.

<sup>&</sup>lt;sup>28</sup> In Indiana, water quality standards are separated into two groups: standards applicable to the Great Lakes System and standards applicable to all waters outside of the Great Lakes System (referred to as "downstate waters"). The Permit authorizes AES to discharge to a downstate water.

<sup>&</sup>lt;sup>29</sup> 327 IAC 2-1-6(a)(3), Table 6-1.

<sup>&</sup>lt;sup>30</sup> *Id*.

- 6. Pursuant to 327 IAC 5-2-11(d), IDEM is required to include both maximum daily and average monthly effluent limitations in an NPDES permit. 327 IAC 5-2-11(d) states, "for continuous dischargers, all interim and final permit effluent limitations, including those necessary to achieve water quality standards, shall be stated, unless impracticable, as maximum daily and average monthly discharge limitations for all dischargers." 327 IAC 5-2-11(a) provides:
  - (1) "Average monthly discharge" means the total mass or flow-weighted concentration of all daily discharges sampled or measured during a calendar month on which daily discharges are sampled and measured, divided by the number of daily discharges sampled and/or measured during such month. The **average monthly discharge limitation** is the highest allowable average monthly discharge for any calendar month. (emphasis added).
  - (4) "Daily discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to subsection (e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four (24) hour period that reasonably represents the calendar day for the purposes of sampling. The **maximum daily discharge limitation** is the maximum allowable daily discharge for any calendar day. (emphasis added).
- 7. HEC argues that because the chronic water quality criterion for mercury is 12 ng/l, "a WQBEL in a NPDES permit limit must likewise be 12 ng/l." This argument is not supported by 327 IAC or by how maximum daily limits are calculated. Neither 327 IAC 2 nor 327 IAC 5 require or indicate that the maximum daily limit be set the same as the water quality criteria.
- 8. Chapter 5 of the EPA TSD describes "the basic principles of effluent variability and permit limit derivation and provides recommendations for deriving limits from various types of wasteload allocation outputs such that water quality standards are protected." Section 5.1.1 states:

The permit limit derivation procedure used by the permitting authority should be fully enforceable and should adequately account for effluent variability, consider available receiving water dilution, protect against acute and chronic impacts, account for compliance monitoring sampling frequency, and protect the wasteload allocation

<sup>32</sup> EPA TSD, p. 93.

<sup>&</sup>lt;sup>31</sup> Am. Pet. ¶ 65.

and ultimately water quality standards. To accomplish these objectives, EPA recommends that permitting authorities use the statistical permit limit derivation procedure discussed in Section 5.4.<sup>33</sup>

9. The statistical permit limit derivation procedure is the procedure that "EPA believes . . . will result in the most defensible and protective water quality-based permit limits for both specific chemicals and whole effluent toxicity." Section 5.4.1 details the methodology to derive permit limits, and Table 5-2 provides the calculations for determining both the maximum daily and average monthly limits for specific parameters. Two separate calculations, the maximum daily limit (MDL) and average monthly limit, must be included in the Permit. HEC's contention that IDEM simply adopts the minimum water quality criteria for both limits is without merit. According to Table 5-2 of EPA's TSD, the maximum daily limit calculation is calculated as follows:

MDL =LTA X e [z 
$$\sigma$$
-0.5  $\sigma$ <sup>2</sup>]

Where 
$$\sigma^2 = \ln[CV^2 + 1]^{36}$$

10. IDEM created an Excel spreadsheet reflecting its calculations for the Permit's maximum daily limit for mercury<sup>37</sup> to generate Attachment 8 of the Wasteload Allocation in the Permit.<sup>38</sup> The mercury effluent limit calculations can be found in row 58, column CC.<sup>39</sup> The spreadsheet reflects that the coefficient of variation (CV) for mercury is 0.6, the long-term average (LTA) is 0.0063, and columns CV and CW of the spreadsheet contain the respective "z statistics" as shown in EPA's TSD 2.326 and 1.645.<sup>40</sup>

Based upon the numbers in IDEM's spreadsheet to calculate the value of  $\sigma^2$ , the following is generated:

$$\sigma^2 = In[0.6^2 + 1]$$

$$\sigma^2 = .3075$$

<sup>&</sup>lt;sup>33</sup> Id.

<sup>&</sup>lt;sup>34</sup> *Id.*, p. 98.

<sup>&</sup>lt;sup>35</sup> *Id*, p. 103.

<sup>&</sup>lt;sup>36</sup> *Id*.

<sup>&</sup>lt;sup>37</sup> AES' Memo Ex. 4.

<sup>&</sup>lt;sup>38</sup> *See* Pet. Ex. A p. 126.

<sup>&</sup>lt;sup>39</sup> Id.

<sup>&</sup>lt;sup>40</sup> AES' Memo Ex., p. 100.

The value of  $\sigma$  itself is 0.5545 (the square root of 0.3075).<sup>41</sup> With these values, the calculation to determine the maximum daily limit for mercury was 99th percentile occurrence probability z statistic MDL=0.0063 x  $e^{[2.326^*.5545-0.5^*.3075]}$ . When using the 99th percentile occurrence probability z statistic, the maximum daily limit was 0.0197 (which rounded off is 20 ng/l reflected in both the Permit and spreadsheet).<sup>42</sup> The calculations relied upon are in accordance with 327 IAC 5-2-11 and EPA's TSD;<sup>43</sup> thus, HEC did not meet its burden of proving IDEM's calculations for the Permit's mercury limits do not comply with 327 IAC 5-2-11 or the TSD.

#### The Permit's mercury monitoring frequency conforms to IDEM's rules and U.S. EPA guidance.

- 11. 327 IAC 5-2-13(c)(2) requires IDEM's Commissioner to specify the "[m]onitoring frequency, type, and intervals sufficient to yield continuing data representative of the volume of effluent flow and the quantity of pollutants discharged based on the impact of the wastestream on the receiving water in accordance with 40 CFR 122.44." The language does not establish specific monitoring frequencies for NPDES permits but instead gives IDEM's Commissioner discretion to determine them.<sup>44</sup>
- 12. HEC contends "IDEM's 'technical, detailed spreadsheet' of calculations confirms that IDEM calculated the effluent limits for mercury based on a single monthly sample" and "even if IDEM increased the monitoring frequency to once a month, it would still be inadequate

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<sup>&</sup>lt;sup>41</sup> AES' Ex. 4 at row 58 columns CX and CY.

<sup>&</sup>lt;sup>42</sup> *Id.*, row 58, column DH.

<sup>&</sup>lt;sup>43</sup> AES' Ex. 5, p. 6. See also, NPDES Permit No. IN0002780, Duke Energy Indiana, LLC – Edwardsport IGCC Generating Station at 2 (Dec. 22, 2020) (IDEM VFC Doc. No. 83087557); NPDES Permit No. IN0002763, Duke Energy Indiana, LLC – Cayuga Generating Station at 2 (Aug. 1, 2018) (IDEM VFC Doc. No. 82626436); NPDES Permit No. IN0002887, Indianapolis Power & Light Company – Petersburg Generating Station at 3 (Oct. 1, 2017) (IDEM VFC Doc. 80528046); NPDES Permit No. IN0053201, Northern Indiana Public Service Company LLC – R.M. Schahfer Generating Station at 2 (Oct. 1, 2020) (IDEM VFC Doc. No. 83057294); and NPDES Permit No. IN0064122, St. Joseph Energy Center, LLC at 2 (Dec. 1, 2018) (IDEM VFC Doc. No. 82691027 which are permits that also contain the maximum daily mercury limit of 20 ng/l.

<sup>&</sup>lt;sup>44</sup> See, e.g., NPDES Permit No. IN0051845, American Electric Power – Rockport Plant at 2 (Dec. 1, 2020) (IDEM VFC Doc. No. 83067547); NPDES Permit No. IN0002780, Duke Energy Indiana, LLC – Edwardsport IGCC Generating Station at 2 (Dec. 22, 2020) (IDEM VFC Doc. No. 83087557); NPDES Permit No. IN0002763, Duke Energy Indiana, LLC – Cayuga Generating Station at 2 (Aug. 1, 2018) (IDEM VFC Doc. No. 82626436); NPDES Permit No. IN0002887, Indianapolis Power & Light Company – Petersburg Generating Station at 3 (Oct. 1, 2017) (IDEM VFC Doc. 80528046); NPDES Permit No. IN0053201, Northern Indiana Public Service Company LLC – R.M. Schahfer Generating Station at 2 (Oct. 1, 2020) (IDEM VFC Doc. No. 83057294); NPDES Permit No. IN0000132, Northern Indiana Public Supply Company LLC-Bailly Generating Station at 2 (Aug. 1, 2022) (IDEM VFC Doc. No. 83352883); NPDES Permit No. IN0000116, Northern Indiana Public Service Company LLC-Michigan City Generating Station at 2 (April 1, 2021) (IDEM VFC Doc. No. 83151669); NPDES Permit No. IN0001759, Indiana-Kentucky Electric Corporation at 2 (May 1, 2017) (IDEM VFC Doc. No. 80495920); NPDES Permit No. IN0064122, St. Joseph Energy Center, LLC at 2 (Dec. 1, 2018) (IDEM VFC Doc. No. 82691027).

to assure compliance with the Permit's Mercury limits"<sup>45</sup> citing EPA TSD 5.7.5 Selection of Monitoring Frequencies in support of its contention. EPA's TSD 5.7.5 states,

There is no fixed guidance on establishment of monitoring frequencies. The decision on the monitoring frequency is case specific and needs to consider a number of factors, including those listed below:

- Type of treatment process, including retention time;
- Environmental significance and nature of the pollutant or pollutant parameter;
- Cost of monitoring relative to the discharger's capabilities and benefit obtained;
- Compliance history;
- Number of monthly samples used in developing the permit limit; [and]
- Effluent variability.
- 13. HEC concedes "there are no 'specific monitoring frequencies' spelled out in IDEM's rules" <sup>46</sup> but claims IDEM's requiring AES to monitor for mercury six times annually is impermissible. <sup>47</sup> HEC provides no legal support for its conclusion or explain how the Permit's frequency does not comply with 327 IAC 5-2-13. Moreover, HEC offers no alternative frequency it believes IDEM was required by law to include in the Permit thereby failing to comply with IC § 13-15-6-2(6). A party opposing summary judgment must present specific facts demonstrating a genuine issue for trial which HEC did not. When a motion for summary judgment is made, an adverse party may not rest upon the mere allegations or denials of their pleading but must set forth specific facts showing that there is a genuine issue for trial. <sup>48</sup>

#### HEC failed to prove IDEM was required by law to derive numeric human health cancer criteria.

14. HEC avers that "IDEM failed to assess whether levels of carcinogens in [AES'] discharges have the reasonable potential to exceed the human health cancer criteria." HEC's Amended Petition does not distinguish numeric water quality criteria from narrative water quality criteria and incorrectly states 327 IAC 2-1-8.6 governs "human health cancer criteria." <sup>50</sup>

<sup>&</sup>lt;sup>45</sup> HEC Memo, p. 10.

<sup>&</sup>lt;sup>46</sup> 327 IAC 5-2-13(c) does not establish specific monitoring frequencies.

<sup>&</sup>lt;sup>47</sup> HEC Response to AES MSJ, p. 33.

<sup>&</sup>lt;sup>48</sup> Ind. Tr. R. 56(E).

<sup>&</sup>lt;sup>49</sup> HEC Motion for Partial Summary Judgment, p. 4.

<sup>&</sup>lt;sup>50</sup> HEC Am. Pet., pp. 22 – 23.

327 IAC 2-1-8.6 sets forth the procedures for IDEM to *derive* human health cancer criteria but 327 IAC 2-1-8.6 does not establish specific criteria.<sup>51</sup> (emphasis added).

327 IAC 2-1-6(a)(2)(A)(iv) establishes the narrative criterion "to protect human health from unacceptable cancer risk of greater than one (1) additional occurrence of cancer per one hundred thousand population." Moreover, 327 IAC 2-1-6(a)(2)(C) gives IDEM discretion to determine when to derive human health cancer criteria.

40 CFR 122.44(d)(1)(i) requires NPDES permits to contain effluent limits that "control all pollutants or pollutant parameters (convention, nonconventional or toxic) which the [permitting agency] determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." 40 CFR 122(d) recognizes "[t]here is flexibility in the state's interpretation of its narrative water quality criteria," and "water quality-based effluent limits are required only for pollutants present in an effluent at concentrations of concern to the permitting authority." (emphasis added). HEC has neither provided evidence that AES' Permit will allow it to discharge pollutants in amounts that have the potential to cause an excursion of the narrative human health cancer criteria nor shown that deriving numeric human health cancer criteria would have resulted in more stringent effluent limits in AES' Permit. HEC did not prove IDEM violated 327 IAC 2-1-8.6.

In sum, HEC neither proffers legal argument or evidence to support its claimed technical deficiencies nor included permit terms and conditions it contends would be appropriate in violation of IC § 13-15-6-2(6) and 315 IAC 1-3-3(b)(4).

#### FINAL ORDER

IT IS THEREFORE ORDERED, ADJUDGED AND DECREED that AES' and IDEM's Motions for Summary Judgment are hereby **GRANTED**, and HEC's Partial Motion for Summary Judgment is hereby **DENIED**.

HEC is further notified that pursuant to the provisions of IC § 4-15-10.5-12 the Office of Administrative Law Proceedings serves as the ultimate authority in the administrative review of decisions of the Commissioner of the Indiana Department of Environmental Management. This is a Final Order subject to judicial review consistent with applicable provisions of IC § 4-21.5.

<sup>&</sup>lt;sup>51</sup> 327 IAC 2-1-6(a)(7), Table 6-4.

<sup>&</sup>lt;sup>52</sup> 54 Fed, Reg. 23868, 23875 (Jun. 2, 1989).

Pursuant to IC § 4-21.5-5-5, a Petition for Judicial Review of this Final Order is timely if it is filed with a civil court of competent jurisdiction within thirty days after the date this notice is served.

**SO ORDERED**: February 18, 2025.

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