January 27, 2012

Ms. Tinka Hyde
USEPA Region 5
77 W. Jackson Blvd.
Mail Code W-15j
Chicago, Illinois
60604-3507

RE: Petition for Corrective Action or Withdrawal of the NPDES Program delegation from the State of Indiana –"Protocol for Responding to Issues Relating to Permitting"

Dear Tinka:

Thank you for sharing the December 2011 draft Protocol for Responding to Issues Relating to Issues Relating to Permitting (the "Protocol") relating to the issues raised by the petition for corrective action that was filed pursuant to 40 CFR 123.64 by Hoosier Environmental Council, Sierra Club and the Environmental Law and Policy Center on December 17, 2009 (the "Petition"). This letter constitutes the comments of the petitioners on the draft Protocol.

As an initial and general matter, the response of U.S. EPA to the Petition has been wholly inadequate to satisfy the requirements of the Clean Water Act (CWA) and the Administrative Procedure Act. We have great respect for Region 5 staff, recognize that Region 5 has many duties, and acknowledge that the agency has taken initial steps to correct the Indiana NPDES program. Nevertheless, Indiana and the Indiana Department of Environmental Management (IDEM) continue to run a program that fails to comply with the CWA or protect Indiana waters despite the fact that more than a decade has passed since EPA has recognized deficiencies in the Indiana program and two years since filing of the Petition. The NPDES delegation process will not work if it takes two years to develop a protocol for correcting deficient state programs and even longer before corrective action is taken.

Indeed, the biggest flaw in the Protocol is its general lack of any sense of urgency to correct problems having an adverse impact on Indiana waters and downstream waters. The damage from mercury, phosphorus, sediments and other forms of pollution in Indiana waters and the Gulf of Mexico would not exist but for the flaws in Indiana's NPDES permitting program. This damage is done and will not be repaired by future corrections to the Indiana program. Meanwhile, the damage continues as more pollution enters Indiana waters every day while the Petition is contemplated by USEPA and IDEM.

Accordingly, the Protocol should take a more proactive form and include statements such as "antidegradation rules must be adopted for the State of Indiana by May 31, 2012, or U.S. EPA will use its authority to promulgate such regulations" and "IDEM must issue legitimate NPDES permits to all coal mines in the state of Indiana before July 1, 2012, or Region 5 will evaluate withdrawing IDEM's authority to issue permits."

The Protocol section referred to as "Allegation 1" of the Petition[1] stresses that methods for implementing antidegradation "are not subject to EPA approval, except to the extent they fall within the scope of 40 C.F.R. Part 132 or modify the approved policy in a manner that is inconsistent with 40 C.F.R. §131.12. " This is not consistent with the legal requirement that any state rule or policy change that has the effect of modifying a water quality standard must be approved by EPA whether the state labels the change to be a standards change or not. *Florida Public Interest Research Group v. EPA*, 386 F.3d 1070, 1088-90 (11th Cir. 2004); *Ohio Valley Environmental Coalition v. Horinko*, 279 F. Supp. 732, 763-5 (S.D. Va. 2003). Certainly, any rules established by Indiana that would establish a de minimis exemption or other exemptions, or that limit the extent of consideration of the necessity of new or increased pollution must be approved by EPA.

The Protocol correctly notes that the Petition states that IDEM does not implement Indiana's antidegradation policy because of the lack of rules – a statement that was true at the time of filing the petition and still accurate although IDEM is now addressing antidegradation requirements on a sporadic basis.

The Protocol also mentions that the Water Pollution Control Board has "preliminarily adopted" an antidegradation rule. This is true, but as of this time, two years after the filing of the Petition and at least 16 years since EPA notified Indiana that it needed antidegradation rules, it is still not certain that Indiana will adopt the rule. IDEM has said that it intends to bring the rule to the water board on March 14, 2012, for final adoption. However, some opponents of the proposed rule are pressuring the board to delay action and are suggesting that the rule needs a complete overhaul. We urge EPA to send a letter to the board chair expressing the need for a quick conclusion to this rulemaking, which was begun more than three years ago.

Regarding "Allegation 2," the Protocol notes the issues regarding application of antidegradation to the U.S. Steel and BP Refinery permits. We agree with EPA's acknowledgement that it must review under Section 303(c) the Indiana antidegradation rules that hopefully will be adopted soon. The discussion of "Allegation 3" mentions that the Petition pointed out shortcomings in the draft of the Indiana antidegradation rule as then proposed. Petitioners agree that the draft has been changed and, at least for the time being, improved over what was being circulated in 2009. However, it is unknown what will finally be adopted by Indiana at the end of the regulatory and legislative process. If the rules are significantly weakened from the current draft, EPA will have to disapprove the rules and establish proper rules itself under Section 303 (c).

As to "Allegation 4" (a), the Protocol discusses the statutory obstacles in Indiana to adoption of a proper antidegradation rule as explained in the Petition. As to the de minimis issue, Petitioners agree substantially with EPA's decision now to wait to see whether the rules that emerge from the Indiana process comply with the CWA, but not to wait very long. If Indiana cannot establish rules this spring, EPA should develop rules for it or take back the Indiana NPDES program.

The Allegation 4(b) discussion in the Protocol discusses IDEM's plan for bringing its current general permits-by-rule program into compliance with the antidegradation policy. In 2011 the Indiana legislature passed a law enabling IDEM to replace the present permit-by-rule with administrative general permits. However, IDEM is proceeding at a glacial pace. It hasn't proposed a single new general permit to replace the existing illegal permits-by-rule. While this situation continues, IDEM allows new and increased pollution under the general permit rules that the EPA has said are invalid.

[1] The Petition is divided into three Roman numerals: (I) antidegradation, (II) coal and (III) permits by rule with sections describing issues and problems that have arisen under those headings.

As to the state legislation discussed in the Petition, we hope that EPA is correct that "giving weight to determinations by other government entities does not prevent IDEM from making its own determination" (Protocol p. 3) but ask that EPA receive clear assurances of that before approving Indiana antidegradation rules.

We are pleased that EPA intends to review some major permits in 2012 (Protocol p. 4) but fear that this will not address the CAFO issues presented in the Petition. Currently, most confined feeding operations in Indiana continue to be permitted under the permits-by-rule provisions**,** which is to say that they are not properly considered under 40 C.F.R. 122.44(d). The water pollution control board has adopted new rules for confined feeding that are yet to take effect. When they do, it is expected that most CAFOs will receive "approvals" rather than individual NPDES permits, so there may be no written CAFO permits for EPA to review as to which may be causing or contributing to impairments of existing conditions or other water quality standards. It is necessary for Region 5 to subject the Indiana rules to the type of study of CAFO regulation that was done in Illinois. We are confused by the statement in the Protocol that the CWA "does not require states to ban phosphorus fertilizers." The Petition certainly did not suggest that the CWA did this but does state that if TMDLs are based on certain steps being taken (e.g., a local ban on lawn fertilizers containing P or limits on fall application of fertilizer) those steps should be implemented.

Petitioners agree that it would be useful for Region 5 to review the Jefferson, Austin and McCordsville permits to determine compliance with the Indiana antidegradation policy. We would further ask that Region 5 determine whether IDEM has a consistent policy regarding antidegradation pending adoption of implementation rules. It appears that IDEM requires antidegradation demonstrations for some permits with new or additional pollutant discharges but not others.

The discussion in the Protocol of "Allegations" 7-9 somewhat tracks other portions of the Protocol regarding the Indiana permit-by-rule practice. There are a few key points here that we must emphasize:

- The permit-by-rule provisions as currently constituted violate numerous requirements for NPDES permitting including antidegradation (both Tier 1 and Tier 2), the principle that discharges that may cause or contribute to violations of water quality standards must not be allowed, the prohibition on new discharges to impaired waters and the basic requirements for allowing public comment. For a detailed example of IDEM's significant failures to regulate pollution, see Sierra Club's summary judgment brief from its challenge to the use of Rule 7 to authorize discharges to the largest coal mine in the eastern U.S., the Bear Run Mine. (Summary Judgment Brief attached)
- Whatever it might be possible to do in the abstract with properly enacted and protective general permits, the current permits-by-rule were not properly enacted, did not receive any sort of antidegradation analysis, were not drawn so as to prevent any potential violation of water quality standards, have not been updated to include new water quality standards, and were not enacted with the public notice and comment requirements specified for general permits (or any kind of NPDES permits) by the federal regulations.
- Petitioners are aware that coal mining is not categorically exempted from being treated under general permits under 40 C.F.R. 122.28 but the requirements of 40 C.F. R. 122.28(a)(2)(ii) are such that coal mining discharges do not fit within what is allowed to be permitted by general permits.
- Even assuming arguendo that some coal mining operations may properly be permitted under 40 C.F.R. 122.28, it could only be done for the subset of coal mines that qualified for such treatment under the rule and the general permits would have to be subject to

proper monitoring and limits so as to prevent discharges that cause or contribute to violations of water quality standards. 40 C.F.R. 122.44(d), 40 C.F. R. 122.46.

- IDEM did not follow the proper rules, including public participation requirements, for establishing general NPDES permits in establishing or extending the permits-by-rule that are the subject of the Petition. Accordingly, the extent of the public notice that is required to be given prior to use of a properly established general permit is not relevant here except insofar as such notice is required by new and proper general permits that may be considered for issuance by IDEM in the future.

Regarding the discussion of "Allegation 10," EPA correctly took action in April 2010 to ask IDEM to correct several plain procedural errors relating to the establishment of general permits in Indiana. However, that the Indiana legislature has removed roadblocks to the future establishment of proper general permits does not alleviate the problem that all the permits-by-rule now in effect in Indiana are illegal. Dischargers now purporting to comply with the CWA through use of the illegal permits-by-rule should be required to obtain individual permits unless IDEM can establish proper general permits immediately.

Regarding "Allegation 11," we agree that Region 5 should take action to review the Indiana DNR inspections of mines and their implications for CWA enforcement. USEPA, however, must go beyond reviewing the MOU to determine the extent to which the few requirements that are placed on coal mine discharges are actually being enforced.

Sincerely,

Albert Ettinger
One of the Counsel for Petitioners

Kim Ferraro
Hoosier Environmental Council

Jessica Dexter
Environmental Law and Policy Center.

Bowden Quinn
Sierra Club Hoosier Chapter

Attachment:

Sierra Club's Summary Judgment Brief
(July 22, 2011)

STATE OF INDIANA	)	BEFORE THE INDIANA OFFICE OF
	)	ENVIRONMENTAL ADJUDICATION
COUNTY OF SULLIVAN	)	
IN THE MATTER OF:	)	
	)	
OBJECTION TO THE ISSUANCE OF	)	
NPDES PERMIT NO. ING040239	)	
BEAR RUN MINE -	)	
PEABODY MIDWEST MINING, LLC	)	
SULLIVAN, SULLIVAN COUNTY, INDIANA	)	
_____	)	CAUSE NO. 10-W-J-4386
Hoosier Environmental Council, Sierra Club	)	
Petitioners,	)	
Peabody Midwest Mining, LLC.,	)	
Permittee/Respondent,	)	
Indiana Department of Environmental Management	)	
Respondent	)	

SIERRA CLUB'S MEMORANDUM
IN SUPPORT OF ITS MOTION FOR SUMMARY JUDGMENT

Petitioner Sierra Club respectfully moves for summary judgment pursuant to I.C. 4-21.5-3-23 on Counts One, Two, Three, Four, Five and Six of its *Amended Petition for Administrative Review of General Permit No. ING040062*, filed with the Office of Environmental Adjudication on August 12, 2010[1]. As reasons for this motion, Sierra Club states that no genuine issue of material fact exists for any of the claims discussed below, and, as a matter of law, Sierra Club is entitled to summary judgment and the relief sought from the OEA. Because IDEM does not dispute the facts supporting its failure to meet several regulatory requirements of the National Pollution Discharge Elimination System (NPDES) program when authorizing water pollution discharges from the Bear Run Mine, the OEA should set aside the authorization for the mine to discharge under 327 IAC 15-7 as arbitrary, capricious and not in accordance with law and require the Bear Run Mine to apply for an individual NPDES permit for its pollution discharges.

[1] Counts 7 and 8 will be proposed to be dismissed pursuant to a stipulation agreement among the parties to conform with OEA's February 8, 2011 decision in the matter of Objections to the Modification of Request for General Permit No. ING040062/IDNR Permit No. S-287 Farmersburg Mine Peabody Midwest Mining, LLC, Pimento, Sullivan County, Indiana (Cause No. 10-W-J-4350).

STATEMENT OF UNCONTROVERTED FACTS

The Bear Run Mine expansion has been touted by its developer, Peabody Midwest Mining, LLC (Peabody), as "the largest surface coal mine in the Eastern United States." (Am. Pet. Attach. 1) In 2010, the mine produced over 2.7 million tons of coal---more than 40 times as much as it produced the prior year. Ex. 1 at 4. This "major new coal mine" (Am. Pet. Attach. 1) expands into previously unmined areas, Ex. 2, and will discharge pollution for up to seventeen years or more (Am. Pet. Attach. 1) into at least six streams, two of which (Pollard Ditch and Maria Creek) have not received pollution from this mine previously. Ex. 3. The mine is expected to generate nearly $6 billion dollars in revenue. (Am. Pet. Attach. 1) By any measure, the Bear Run Mine is a major industrial endeavor---one that certainly has the resources apply for and comply with an individual NPDES permit---yet IDEM has allowed the mine to proceed with polluting Indiana waters with virtually no review of the consequences, and without ensuring that those discharges comply with state and federal law.

Coal mining discharges are known to contain pollutants such as sulfate, chloride, total dissolved solids, pH, total suspended solids, aluminum, iron, manganese and other metals. Ex. 4, App. 1 at ii and Ex. 5 at 21. A growing body of evidence supports a correlation between coal mining discharges and downstream water quality impairments. Ex. 6 Encl. 5.

By way of background, on July 31, 2009, Sierra Club and two other environmental groups sent a letter to IDEM Commissioner Easterly petitioning the agency to reform serious deficiencies in its regulation of pollution discharges from coal mines and require individual NPDES permits for future coal mines, especially in light of Peabody's announcement of the Bear Run Mine. Ex. 7. The letter pointed out that Rule 7 (327 Ind. Admin. Code 15-7) does not contain terms and conditions necessary to protect existing uses, conduct a proper antidegradation analysis, or comply with water quality standards for sulfate, chloride and other pollutants. *Id.*

Nonetheless, when Peabody sought permits for a major part of its Bear Run expansion (adding thirteen new outfalls and modifying four more) on March 25, 2010 (Am. Pet. Attach 2) IDEM authorized those pollution discharges under the deficient Rule 7 without considering whether authorizing that discharge was consistent with IDEM's duties to comply with state and federal NPDES regulations. Among the many actions IDEM should have taken to ensure that the Bear Run Mine discharges were authorized in accordance with applicable law, IDEM failed to:

- analyze the predicted chemical composition of the discharges from the Bear Run Mine,
- assess the condition of the receiving waters,
- analyze the impact of the discharge from the mine on the receiving waters,
- analyze whether the discharge will comply with current water quality standards,
- conduct a reasonable potential analysis for any pollutant parameters,
- conduct an antidegradation analysis,
- evaluate whether the discharge would harm existing uses of the receiving waters,
- review Discharge Monitoring Reports to assess compliance with permit terms at existing outfalls,

- discover impairments identified on IDEM's 303 (d) list, Ex. 8, in Buttermilk Creek, Busseron Creek, Black Creek, Spencer Creek, Brewer Ditch and Maria Creek downstream from the discharge,
- develop TMDLs, wasteload allocations and compliance schedules in the impaired waters prior to authorizing the discharge,
- consider whether an individual permit would be more appropriate.

(IDEM Resp. to Pet'r Interrogs.)

On November 19, 2010, U.S. EPA Region 5 sent a letter to IDEM stating that "EPA believes…that discharges from the Bear Run Mine may cause, have reasonable potential to cause, or contribute to excursions of the numeric and narrative criteria within Indiana's water quality standards." Ex. 6. EPA recommended that IDEM require the Bear Run Mine to obtain an individual permit, which would involve a complete characterization of the waste stream. *Id*. The letter cites downstream impairments and effluent violations as justification for requiring an individual permit. *Id*.

IDEM distributed public notice number 2010-6D-GP on June 16, 2010. (Am. Pet. Attach. 4 and 5) Sierra Club petitioned OEA for review of IDEM's authorization to discharge on June 30, 2010. Peabody moved to dismiss for lack of jurisdiction and failure to state a claim on July 13, 2010. On August 2, 2010, on agreement of the parties, the Court suspended further briefing on that motion pending an order in Cause No. 10-W-J-4350. Sierra Club filed the Amended Petition upon which this motion is based on August 12, 2010. The Court's decision in Cause No. 10-W-J-4350 was issued on February 8, 2011, and the pending motion to dismiss is likely to be resolved by stipulation of the parties.

STANDING

Sierra Club has associational standing to seek administrative review of IDEM's authorization to discharge pollutants from the Bear Run mine under the test established by *Hunt* and adopted by *Save the Valley*. *Hunt v. Wash. State Apple Advertising Comm'n*, 432 U.S. 333 (1977) and *Save the Valley, Inc. v. Ind.-Ky. Elec. Corp.*, 820 N.E.2d 677 (Ind. Ct. App. 2005). The associational standing doctrine gives an association "standing to sue on behalf of its members when '(a) its members would otherwise have standing to sue in their own right; (b) the interests it seeks to protect are germane to the organization's purpose; and (c) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.'" *Save the Valley*, 820 N.E.2d at 679-80 (quoting *Hunt*, 432 U.S. at 344). To meet the first prong of the test, an organization "must allege that its members, or any one of them, are suffering immediate or threatened injury as a result of the challenged action." *Hunt*, 432 U.S. at 342 .

Sierra Club has identified three members who have demonstrated that they each suffer a threatened injury as a result of the improper authorization to discharge pollution from the Bear Run Mine. Bowden Quinn is a Sierra Club member and staff member who has watched birds and other wildlife in the vicinity of the Bear Run Mine and locations downstream of the mine on numerous occasions. (Quinn Aff. ¶ 6) He states that he is concerned that poorly regulated water

pollution from the Bear Run Mine may adversely affect the birds and wildlife downstream and impact his enjoyment of those activities in the future. (*Id.* at ¶ 8) Dr. Rae Schnapp is a Sierra Club member and holds the title of Wabash Riverkeeper. (Schnapp Aff. ¶ 2, 9) As Riverkeeper, and as a board member of Banks of the Wabash, she is involved in watershed planning and implementation in the Busseron Creek watershed[2] (*Id. at 6*), within which the Bear Run Mine is located. She kayaks, canoes, paddles, visits, wades and hikes along the Wabash River and its tributaries. (*Id.* at ¶ 7) She has hiked in the Busseron Creek watershed, observing waterfowl and other birds and photographing wildlife. (*Id.* at ¶ 8) She states that increased pollution and degradation of these waters would adversely affect her enjoyment of such activities in the future and harm the watershed restoration activities in which she takes part. (*Id.* at ¶ 6, 8) John Gettinger is a Sierra Club member who owns property in the Busseron Creek watershed and participates in Busseron Creek watershed planning and restoration. (Gettinger Aff. ¶ 1, 4, 6)He canoes and leads educational trips on the lower Wabash River (downstream of the mine) and is concerned that increased pollution and degradation would adversely affect his enjoyment of those activities. (*Id.* at ¶ 2, 4)

Sierra Club is a California-based 501(c)(3) nonprofit organization with local chapters throughout the country. The mission of the Sierra Club is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives. The Sierra Club's Hoosier Chapter, representing 7,000 members in the state, works to protect water quality throughout Indiana. Working on behalf of its members to ensure that water pollution is properly regulated is therefore germane to its organizational purpose. Sierra Club's claims in this case do not require the participation of individual members in the lawsuit.

STANDARD OF REVIEW

The Office of Environmental Adjudication (OEA) must apply a *de novo* standard of review when making findings of fact during review of agency action. *Ind.-Ky. Elec. Corp. v. Comm'r, IDEM,* 820 N.E.2d 771, 781 (Ind. Ct. App. 2005); *Ind. Dep't of Natural Res. v. United Refuse Co., Inc.,* 615 N.E.2d 100, 103-104 (Ind. 1993); *Rowe Brothers, Inc.* (05-F-J-3650), 2007 OEA 94, 100. A *de novo* standard of review requires that the ALJ serve as the trier of fact and not afford any degree of deference to the agency's initial determination. Rather, the ALJ is to determine the facts of the case "anew, based solely upon the evidence adduced at [the] hearing and independent of any previous findings." *Elrod Water Company* (08-W-J-4104), 2009 OEA 43, 47. Furthermore, the ALJ is required to base its factual findings on substantial evidence. *Huffman v. Office of Envt'l Adjudication,* 811 N.E.2d 806, 809 (Ind. 2004); *Elrod Water Company* (08-W-J-4104), 2009 OEA 43, (cited page).

The OEA will grant a summary judgment motion to a party if "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits and testimony, if any, show that a genuine issue as to any material fact does not exist and that the moving party is

[2] Busseron Creek is a tributary of the Wabash River. Ex. 3.

entitled to judgment as a matter of law." Ind. Code § 4-21.5-3-23 (2011). A genuine issue of material fact exists where "facts concerning an issue which would dispose of litigation are in dispute or where the undisputed facts are capable of supporting conflicting inferences on such an issue." *Ind.-Ky. Elec. Corp. v. Comm'r, IDEM,* 820 N.E.2d 771, 776 (Ind. Ct. App. 2005). To prevail on this motion, the movant must show no genuine issue of material fact exists and that the party is entitled to judgment as a matter of law. *Id.* Upon the movant meeting this burden and demonstrating these two considerations, the burden shifts to the non-movant to assert specific facts in order to demonstrate that there exists a genuine issue of material fact. *Id.*

ARGUMENT

For the reasons detailed below, IDEM's authorization to discharge pollutants from the Bear Run Mine into waters of the state violated a number of state and federal NPDES rules and was therefore arbitrary, capricious and not in accordance with law. All Clean Water Act National Pollution Discharge Elimination System (NPDES) permits, whether individual permits or general permits, must comply with the rules governing the NPDES program. However, IDEM authorized discharges from the Bear Run Mine that do not protect water quality and do not comply with the NPDES requirements, which is expressly prohibited by the Clean Water Act and Indiana law.

The first section of this argument will review the legal requirements that apply to general permits under the Clean Water Act NPDES program as it has been delegated to states. The remaining sections will address Counts One through Six of Sierra Club's legal claims regarding IDEM's failure to adhere to NPDES requirements in authorizing discharges from the Bear Run Mine under Indiana's Rule 7 "Indiana Coal General Permit" at 327 IAC 15-7.

In fact, the evidence is undisputed that IDEM did not consider, let alone ensure, that the new discharges from the Bear Run Mine would not cause or contribute to a violation of water quality standards in the downstream waters. Nearly all of these downstream waters are already recognized by IDEM as impaired for pollutants that IDEM recognizes come from coal mines. Issuance of a permit that discharges into impaired waters is prohibited unless a TMDL has been finalized and a Waste Load Allocation has been calculated for the new discharge.

Further, IDEM did not ensure that existing uses would be protected, nor did it prohibit unnecessary degradation of water quality from the mine's pollution. For these (among other) reasons, IDEM erred in authorizing the discharges from the Bear Run Mine under Rule 7 instead of with an individual NPDES permit. Further, because Rule 7 lacks the terms and conditions required of an NPDES permit, the discharges from the Bear Run Mine are not governed by a valid NPDES permit so IDEM was in error for authorizing discharges absent such permit.

Finally, the monitoring required of the Bear Run Mine by Rule 7 is inadequate to assure permit compliance and water quality protection, which provides yet reason why IDEM's authorization to discharge under Rule 7 was arbitrary, capricious and not in accordance with law.

I. All water pollution discharges authorized by IDEM must comply with NPDES rules governing pollution discharges.

a. NPDES program background and NPDES general permits

The Clean Water Act explicitly prohibits all discharges of pollutants into waters of the U.S. unless those discharges are authorized by an NPDES permit issued by U.S. EPA or a state that has been delegated permitting authority. 33 U.S.C. § 1311 (a) (2011). As a delegated NPDES permitting authority, IDEM has a responsibility to operate the pollution discharge permitting program consistently with the requirements of state and federal law implementing the Clean Water Act. *Save the Valley, Inc. v. U.S. EPA*, 223 F. Supp. 2d 997, 1008 (S.D. Ind. 2002). *See also* 327 Ind. Admin. Code 5-2-1 (2011) (stating that the purpose of the pollutant discharge permit system is to be consistent with NPDES requirements under the Clean Water Act). The Clean Water Act requires that a state that has been delegated NPDES permitting authority "shall at all times be in accordance with" the NPDES permit rules and EPA guidance, or be subject to EPA withdrawal of state authority to administer the program. 33 U.S.C. §§ 1342 (c) , 1344 (h)--(i) (2011).

In Indiana (and throughout the nation) no NPDES permit may be issued unless it provides for and ensures compliance with "all applicable requirements of the Clean Water Act (CWA), regulations promulgated under the CWA, and state law." 327 Ind. Admin. Code 5-2-10 and 5-2-7 (2011) and 40 C.F.R. § 122.4 (a) (2011). The "applicable effluent standards and limitations" referred to in the above regulations are defined in the Indiana NPDES program as "all federal, state, and interstate standards and limitations to which a discharge is subjected under the Clean Water Act and Indiana law." 327 Ind. Admin. Code 5-1.5-5 (2011). Further, Indiana has incorporated into its program by reference the Clean Water Act and implementing regulations in the Code of Federal Regulations, 327 Ind. Admin. Code 5-2-1.5 (2011).[3] Indiana law requires that state NPDES regulations be "liberally construed to effectuate the purposes of the water pollution control laws." Ind. Code § 13-18-3-11 (2011).

An NPDES permit is the means of lawfully authorizing pollution discharges from a particular facility, as contemplated by the Clean Water Act. Most NPDES permits are individual permits, that is, the permit terms and conditions are tailored to the circumstances of the discharger and the receiving waters (the waters to which pollution is proposed to be discharged. The concept of a general permit for NPDES discharges began to take hold in 1979. An NPDES general permit covers discharges of the same type within a specified geographic area. 40 C.F.R. § 122.28 (a) (2) (2011). *See also Nw. Envtl. Advocates v. U.S. EPA*, 537 F.3d 1006, 1010-11 (9th Cir. 2008). According to federal and state regulations, general permits are appropriate for categories of point source dischargers that:

(A) Involve the same or substantially similar types of operations;
(B) Discharge the same types of wastes or engage in the same types of sludge use or disposal practices;
(C) Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal;

[3] Because Indiana statutes and regulations have strongly expressed an intent to comply with federal law, and because there is a dearth of Indiana caselaw interpreting many of the NPDES regulations upon which Sierra Club's claims rest, interpretations of parallel federal NPDES requirements will be used throughout this brief to inform interpretations of NPDES requirements as adopted in Indiana state law.

(D) Require the same or similar monitoring; and
(E) In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

40 C.F.R. § 122.28 (a) (2) (ii) (2011). All dischargers who opt to seek coverage under a particular NPDES general permit are subject to the same or similar permit conditions.

b. General NPDES permits must conform to all NPDES permit requirements.

While under the proper circumstances, NPDES general permits can be an efficient way of dealing with categories of pollution, it is well-established that NPDES general permits are still "NPDES permits" and are thus subject to the requirements applicable to "all NPDES permits." *Envtl. Def. Ctr., Inc. v. EPA*, 344 F.3d 832, FN32 (9th Cir. 2003) (stating with regard to general permits that, "every permit must comply with the standards articulated by the Clean Water Act.") and *Pac. Coast Seafoods Co.*, 361 F. Supp. 2d 1232 at 1236 ("Substantively, a general permit is no different from an individual permit; it must include the same permit limitations required in individual permits."). In recent years, a number of federal courts have struck down specific NPDES general permit programs that failed to comply with the overall NPDES program requirements.

In *Waterkeeper Alliance v. U.S. EPA*, the Second Circuit rejected an EPA regulation governing general permits for Concentrated Animal Feeding Operations (CAFOs) because it did not contain effluent limitations that would ensure that every discharge of pollutants under the rule would comply with all applicable effluent limitations and standards. *Waterkeeper Alliance, Inc. v. U.S. EPA*, 399 F.3d 486, 498-503 (2d Cir. 2005). Under that NPDES general permit program, the primary effluent limitation was a nutrient management plan that consisted of best management practices to deal with animal waste. The rule required each large CAFO to develop its own nutrient management plan, and the terms of that plan (the best management practices and the waste application limits) would represent the effluent limitations of its NPDES permit. However, the Second Circuit struck down that NPDES general permit as arbitrary, capricious and contrary to the requirements of the Clean Water Act because it didn't require that a permitting authority to review the nutrient management plan for each discharger, and therefore EPA could not demonstrate that it had ensured that the effluent limitations (i.e. the nutrient management plans) would *in fact* comply with all applicable effluent limitations and water quality standards. *Waterkeeper*, 399 F.3d at 499 (2d Cir. 2005). Instead the court demanded individualized, site-specific review by the permit writer to ensure that the effluent limitation guidelines will achieve water quality standards. *Waterkeeper*, 399 F.3d at 498-503 (2d Cir. 2005). Similarly, a Michigan appellate court has held that the Clean Water Act requires "meaningful review" of each nutrient management plan prior to authorizing discharge under Michigan's CAFO general permit. *Sierra Club Mackinac Chapter v. Dep't of Envtl. Quality*, 747 N.W.2d 321, 333 (Mich. Ct. App. 2008).

In *Environmental Defense Center*, environmental groups challenged EPA's "Phase II" rule governing discharges of stormwater under an NPDES general permit. Under the rule, a discharger was required to submit information as part of a notice of intent letter (NOI) stating how it would meet particular Clean Water Act standards, but the rule did not require that NPDES

permitting authorities review those plans to ensure that Clean Water Act standards would in fact be achieved. *Envtl. Def. Ctr., Inc. v. U.S. EPA*, 344 F.3d 832, 853-56 (9th Cir. 2003). The court faulted this approach as a "failure to regulate," and remanded the rule, directing EPA to make changes such that, in every instance, regulated parties are subject to meaningful review by NPDES permit authorities for compliance with Clean Water Act standards. *Envtl. Def. Ctr.,* 344 F.3d at 853-56. "That the Rule allows a permitting authority to review an NOI is not enough; every permit must comply with the standards articulated by the Clean Water Act, and unless every NOI issued under a general permit is reviewed, there is no way to ensure that such compliance has been achieved." *Envtl. Def. Ctr.,* 344 F.3d at 855 n 32. Similarly, a federal District Court in West Virginia concluded that EPA's approval of state rules implementing antidegradation requirements that exempted general permits from individualized antidegradation review of each discharge was arbitrary and capricious. *Ohio Valley Envtl. Coal. v. Horinko*, 279 F. Supp 2d 732, 761-62 (S.D.W. Va. 2003).

Even in the context of authorizing a pollution discharge under an NPDES general permit, a state must conduct an individualized review of a proposed discharge when it is necessary to ensure compliance with water quality standards. IDEM has the authority and the duty to review each discharge for compliance with all of the state and federal NPDES rules it is charged with administering. In the case of the Bear Run Mine, IDEM's admitted failure to review the proposed discharge for compliance with NPDES regulations other than those contained in Rule 7 was arbitrary, capricious, and not in accordance with law.

II. IDEM failed to assure that water quality standards will be attained in light of additional discharges from the Bear Run Mine

IDEM admits that when authorizing pollution discharges from the Bear Run Mine under Rule 7, 327 Ind. Admin. Code 15-7, it did not undertake even a cursory review of the types and amounts of pollution that would increase as a result of the discharges, the chemical or biological condition of the receiving waters or the impact the increase in pollutants would have on the receiving waters. Without such a review, it is not possible for IDEM to have complied with its obligations under the Clean Water Act to assure that discharges will not cause or contribute to a violation of water quality standards and establish permit conditions necessary to achieve water quality standards. The following sections analyze why the authorization to discharge must be invalidated under two separate, but related, legal theories.

a. IDEM has failed to ensure that the discharges from the Bear Run Mine are governed by an NPDES permit that contains all effluent limits necessary to meet water quality standards.

One of the fundamental tenets of NPDES permitting under the Clean Water Act is that all permits must include any effluent limits necessary to meet water quality standards. 33 U.S.C. § 1311 (b) (1) (C) (2011). This federal requirement is incorporated into Indiana law at 327 IAC 5-2-10. ("Each NPDES permit shall provide for and ensure compliance with all applicable requirements of the Clean Water Act (CWA), regulations promulgated under the CWA, and state law.")

Effluent limits can take the form of Technology Based Effluent Limits (which are industry-specific baseline effluent limits) or Water Quality Based Effluent Limits (WQBELs) (which are calculated for an individual facility based on the volume of the discharge and the volume and quality of the receiving waters when necessary to achieve water quality standards). Effluent limits are usually numeric limits on the concentration and/or load of a particular pollutant that can be discharged, but they can also include best management practices that are deemed necessary to "to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA." 327 Ind. Admin. Code 5-2-10 (a) (7) (2011).

NPDES permits must contain WQBELs for any pollutant that will cause or contribute to an excursion above a water quality standard. 40 C.F.R. § 122.44 (d) (2011) and 327 Ind. Admin. Code 5-2-10 (a) (4) (2011). *See also Waterkeeper Alliance, Inc. v U.S. EPA*, 399 F.3d 486, 492 (2d Cir. 2005) and *Am. Iron & Steel Inst. v. EPA*, 115 F.3d 979, 999 (D.C. Cir. 1997). As a D.C. Circuit opinion explains, 40 C.F.R. § 122.44 (d) requires that "a permitting authority 'must use all relevant available data, including facility-specific effluent monitoring data where available' and employ 'procedures which account for existing controls on point and non-point sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing … and, where appropriate, the dilution of the effluent in the receiving water' when it determines whether a pollutant discharge has the reasonable potential to cause an excursion above a water quality standard." *Am. Iron & Steel Inst., 115* F.3d at 999. This required analysis is commonly referred to as a "reasonable potential analysis."

In order to assess the impact of a proposed discharge on receiving waters, a permit writer must characterize both the effluent and the receiving water. Ex. 3 at 6-12. The analysis is necessarily specific to the receiving waters, because conditions could vary widely from stream to stream. For example, there may already be high levels of a particular pollutant in the receiving waters, the stream may have low flow conditions or there may be a number of permits authorizing high levels of that pollutant already.

A reasonable potential analysis is not limited to pollutants for which there are numeric water quality criteria. IDEM is not allowed to issue an NPDES permit if the discharges would cause or contribute to a violation of applicable water quality standards. "Applicable water quality standards" include designated uses, numeric and narrative water quality criteria, and antidegradation rules. *See* 40 C.F.R. § 131.6 (2011), *North Dakota v. U.S. Army Corps of Eng'rs*, 270 F. Supp. 2d 1115, 1124 (D.N.D. 2003) and Ex. 9 at 6-3--6-9. Indiana's water quality standards are set forth in Article 2 of Title 327 of the Indiana Administrative Code. Numeric criteria include standards like pH between 6.0 and 9.0, an absolute minimum dissolved oxygen concentration of 4.0 mg/L or a daily maximum chloride limit of 860 mg/L. *See* 327 Ind. Admin. Code 2-1-6 (a)--(b) (2011).

Working in tandem with numeric criteria, narrative criteria are standards for "minimum surface water quality conditions," which apply to conditions like toxic levels of substances sufficient to injure, kill or be chronically toxic, carcinogenic to humans, animals aquatic life or plants; floating debris, oil, scum; putrescent, unsightly, deleterious or otherwise objectionable conditions; nuisance conditions of color, visible sheen or odor; and algal overgrowth. 327 Ind. Admin. Code 2-1-6 (a) (1)--(2) (2011). While Indiana's water quality standards do not contain

numeric criteria for many of the pollutants one would expect to find in discharges from coal mining (such as iron, manganese, aluminum, copper and zinc), Indiana has developed a methodology for conducting reasonable potential analyses and calculating WQBELs for those parameters based on its narrative standard. *See* Ex. 5 at 15-16, citing 327 Ind. Admin. Code 2-1-8.2 and 2-1-8.3. 40 C.F.R. § 122.44 (d) also discusses how to conduct a reasonable potential analysis to meet narrative criteria as well as parameters for which a state has established numeric water quality criteria.

Here, IDEM authorized discharges from the Bear Run Mine under "Rule 7" (327 Ind. Admin. Code 15-7), but Rule 7 does little more than incorporate the technology-based effluent limits required by 40 C.F.R. Part 434. Rule 7 contains no water quality-based effluent limits. By definition, the technology-based effluent limits do not account for local circumstances in the receiving waters---factors including low flow, existing water quality impairments or high levels of pollution from other dischargers.

There is no genuine issue of material fact as to whether IDEM actually took any of the steps necessary to determine whether, in authorizing discharges from the Bear Run Mine, effluent limits other than those contained in Rule 7 are necessary to protect water quality standards.[4] IDEM admits that it "did not analyze the predicted chemical composition of discharge from the Bear Run Mine;" (IDEM Resp. to Pet'r Interrogs. #7) it "did not review any assessments of the condition of the receiving waters and waters downstream of the Bear Run Mine discharge;" (IDEM Resp. to Pet'r Interrogs. #8) it "did not analyze the impact of the discharge from the mine on the receiving waters and waters downstream prior to granting the modification;" (IDEM Resp. to Pet'r Interrogs. #9) and it "did not analyze whether the discharge will comply with current water quality standards prior to issuing the modification." (IDEM Resp. to Pet'r Interrogs. #18)

IDEM admits it did not conduct a reasonable potential analysis and did not consider whether water quality based effluent limitations were necessary to protect water quality. This failure is especially significant in this case for two reasons: first, because downstream concentrations of several pollutants proposed to be discharged by the Bear Run Mine already exceed numeric water quality criteria for those pollutants; and second, because IDEM adopted water quality criteria for sulfate in May 2008, Ex. 10, six months after Rule 7 was last renewed in 2007---in other words, IDEM has not considered whether coal mine discharges will comply with those new standards. By failing to consider the factors necessary to conduct a reasonable potential analysis and establish water quality based effluent limits, as required by 327 IAC 5-2-10 (a) and 40 C.F.R. § 122.44 (d) IDEM both failed to ensure that the discharges are not prohibited by 327 IAC 5-2-7 for failure to meet water quality standards, and failed to meet its obligation to authorize discharges only as consistent with state and federal NPDES regulations.

[4] Indeed, the November 19, 2010 letter from U.S. EPA to IDEM concludes that the discharges from the Bear Run Mine may cause or contribute to violations of water quality standards, and therefore should be governed by an individual permit. Ex. 6.

There is no "general permit exception" from the requirement in 327 IAC 5-2-10 (a) and 40 C.F.R. § 122.44 (d) to conduct reasonable potential analyses and establish necessary water quality based effluent limits. *See* Ex. E, 3-6 (permitting authority must assure that water quality standards can be attained through use of uniform WQBELs in order for discharges to be regulated by general permit). While a well-drafted general permit may be used where it will satisfy all the requirements satisfied by individual permit, an agency may not use a general permit that does not achieve the purposes satisfied by individual permits to short-circuit CWA requirements. *See*, *Waterkeeper Alliance, Inc. v. U.S. EPA*, 399 F.3d 486, 498-503 (2d Cir. 2005); *Envtl. Def. Ctr., Inc. v. U.S. EPA*, 344 F.3d 832, 853-56 (9th Cir. 2003); *Ohio Valley Envtl. Coal. v. Horinko*, 279 F. Supp 2d 732, 761-62 (S.D.W. Va. 2003); and *Sierra Club Mackinac Chapter v. Dep't of Envtl. Quality*, 747 N.W.2d 321, 333 (Mich. Ct. App. 2008). Here IDEM did nothing to satisfy many of those requirements other than point to a general permit which in this case was insufficient on several counts.

By failing to investigate the condition of the receiving waters before approving the discharges, IDEM missed the fact that IDEM itself has designated all but one of the receiving waters as impaired on its Clean Water Act Section 303(d) list for pollutants that are known to be discharged from coal mines.[5] In this case the receiving waters include Buttermilk Creek and Middle Fork Creek (both in the Busseron Creek watershed), Spencer Creek and unnamed tributaries to Spencer Creek, Pollard Ditch, and Black Creek (which are in the White River watershed) and Maria Creek (which drains directly to the Wabash River). Even the most basic comparison of waters downstream of the Bear Run Mine discharge to Indiana's 2008 303(d) list (the most recent to be approved by U.S. EPA) reveals that Buttermilk Creek, Busseron Creek, Black Creek, Spencer Creek and Brewer Ditch are all listed as impaired with total dissolved solids and sulfates[6] as the impairment source; Black Creek, Spencer Creek, Brewer Ditch and Maria Creek have all identified "impaired biotic communities," and Maria Creek also lists dissolved oxygen[7] as an impairment source. Ex. 3 and Ex. 8.

IDEM has even developed a draft Total Maximum Load (TMDL) for the Busseron Creek watershed, Ex. 5, as is required by the Clean Water Act Section 303 (d) (1) (C), 33 U.S.C. § 1313 (d) (1) (C) (2011), in order to address that watershed's failure to meet water quality standards for several parameters. Several outfalls discharge into the Busseron Creek watershed (including outfalls 045, 046 and 063 included in this modification). Yet IDEM admits that it did not even consider the downstream impairments, nor the draft TMDL to assess whether additional discharges (from the largest mine in the eastern U.S.) might cause or contribute to the continued violation of water quality standards downstream.

When a source discharges a pollutant to a waterbody where the standard for that pollutant has already been exceeded, it may be presumed that the source has a reasonable potential to contribute to that standard not being met. *Am. Iron & Steel Inst. v. EPA*, 115 F.3d 979, 1000

[5] A waterbody is considered by the state to be impaired if it fails to support designated uses. Exceedences of water quality criteria is one of the factors considered in making an impairment determination. Ex. 11.

[6] Pollution from surface coal mining is known to raise levels of total dissolved solids and sulfates in downstream waters. Ex. 4, App. 1 at ii.

[7] IDEM recognizes that "the oxidation of iron may be consuming large amounts of oxygen which in turn stresses fish and other aquatic organisms" Ex. 5 at 18.

(D.C. Cir. 1997). Authorizing additional discharges of pollutants IDEM is seeking to manage in the downstream waters without considering whether those discharges would cause or contribute to an *already existing* violation of water quality standards is not only inefficient and counterproductive, it violates IDEM's obligation under 327 IAC 3-2-7 and 5-2-10 (a).

Because IDEM admits that it did not ensure that the permit included effluent limits necessary to protect water quality standards as was required by 327 IAC 3-2-7 and 5-2-10 (a) and the corresponding federal law, this authorization to discharge is, as a matter of law, arbitrary, capricious and not in accordance with law and should be remanded for proper consideration as an individual NPDES permit.

b. IDEM has authorized discharges from the Bear Run Mine into impaired waterways without an approved TMDL or wasteload allocation, in violation of 40 C.F.R. § 122.4(i) .

By authorizing the addition of thirteen new outfalls and modification of four outfalls as part of the Bear Run Mine, IDEM has authorized a discharge that causes or contributes to an existing violation of water quality standards. The conditions under which such a discharge may be authorized are set forth in, which states:

> No permit shall be issued in the following circumstances:
> . . . .
>
> (f) To facility which is a new source or a new discharger, if the discharge from the construction or operation of the facility will cause or contribute to the violation of water quality standards in the receiving waters, unless:
>
> (1) The commissioner has conducted a pollutant load allocation analysis for the pertinent segment of the receiving stream which will result in compliance with applicable water quality standards;
>
> (2) Sufficient pollutant load allocations remain to accommodate the proposed discharge and the permit contains effluent limitations consistent with the remaining allocations.
>
> (3) The commissioner has imposed schedules for compliance with the pollutant load allocation upon all existing dischargers into the segment.

327 Ind. Admin. Code 5-2-7 (f) (2011). *See also* 40 C.F.R. § 122.4 (i) (2011). Because the Bear Run Mine qualifies as a new source under the regulation, and Peabody has not met the requisite conditions, IDEM's authorization to discharge must be invalidated.

i. Bear Run Mine is a new source of pollution proposing to discharge into impaired waters

The massive expansion of the Bear Run Mine constitutes a new source under federal regulations. A new source is defined as:

> "any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commences: (1) after promulgation of standards of performance under Section 306 of the Clean Water Act which are applicable to such source; or (2) after publication of proposed standards of performance in accordance with Section 306 of the Clean Water Act that are applicable to such source if the standards subsequently are promulgated in accordance with Section 306 of the Clean Water Act."

327 Ind. Admin. Code 5-1.5-37 (2011). *See also* 40 C.F.R. § 122.2 (2011). Section 306 of the Clean Water Act sets the national standards of performance for certain industries and pollutants. Under Section 306 of the Clean Water Act, a new source is described as "any source, the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance under this section which will be applicable to such source, if such standard is thereafter promulgated in accordance with this section." 33 U.S.C. § 1316 (a) (2011).

EPA adopted new performance standards for coal mining in 1984. 40 C.F.R. Part 434. The expansion of Bear Run Mine, which includes the addition and/or modification of the 17 outfalls at issue in this case, began in 2010---well after the May 4, 1984 date when Section 306 regulations were adopted for coal mines. Therefore the mine is a new source under both 40 C.F.R. § 434.11 (j) (1) (i) and the 40 C.F.R. § 122.2 definition.

Alternatively, the 40 C.F.R. § 434.11 (j) performance standards definition of a new source coal mine includes certain "major alterations". 40 C.F.R. § 434.11 (j) (1) (ii) (2011). Indeed the Bear Run Mine will involve "extraction of a coal seam not previously extracted by that mine", *Id.* § 434.11 (j) (1) (ii) (A), and "extensive new surface disruption at the mining surface," *Id.* § 434.11 (j) (1) (ii) (C), as its maps show that the mine expands into previously unmined territory. Ex. 2. The mine, by seeking to discharge from its outfalls into Pollard Ditch and Maria Creek, now discharges "into a drainage area not previously affected by wastewater from that mine." *Id.* § 434.11 (j) (1) (ii) (B).

Therefore, looked at from several angles, the Bear Run mine constitutes a new source and is subject to 40 C.F.R. § 122.4. As discussed above, the waters into which the Bear Run Mine proposes to discharge are listed as impaired in Indiana's most recent 303(d) list to be approved by U.S. EPA, for pollutants known to be discharged by coal mines. Ex. 3 and Ex. 5 at 21 ("the five industrial dischargers associated with active mining activities are potential sources of TSS, pH and metals"). Listing on the 303(d) list is considered to be *prima facie* evidence of a water quality impairment. *Ala. Dep't of Envtl. Mgmt. v. Ala. River Alliance*, 14 So.3d 853, 864 (Ala. Civ. App. 2007). Additionally, upon closer examination of data and collection of more data, the Busseron Creek TMDL found that the Buttermilk Creek is impaired for total aluminum, total iron, and total suspended solids and the Busseron Creek downstream is impaired for total aluminum and total iron. Ex. 5 at 20.

ii. The NPDES permit cannot be issued because Peabody failed to demonstrate that a valid TMDL with Wasteload Allocations available for the Bear Run Mine has been approved for the impaired watersheds into which it proposes to discharge.

The language of 40 C.F.R. § 122.4 (i) is quite clear: if the discharger cannot demonstrate prior to the close of the public comment period that 1) a TMDL has been approved for the impaired waterways; 2) there are sufficient waste load allocations available for the new discharge and 3) existing dischargers in the watershed are subject to compliance schedules, an NPDES permit cannot be issued.

Courts have invalidated NPDES permits to discharge from mines on the basis of this regulation in both *Friends of Pinto Creek v. U.S. EPA*, 504 F.3d 1007, 1009-1015 (9th Cir. 2007), and *Ala. Dep't of Envtl. Mgmt. v. Ala. River Alliance*. 14 So. 3d 853, 858-65 (Ala. Civ. App. 2007). In *Pinto Creek*, a mine proposed to discharge copper (among other pollutants) into a stream which was listed as impaired for copper. 504 F.3d at 1009. The Ninth Circuit prohibited an NPDES permit from being issued to the mine because it failed to show that there were compliance schedules in place to bring Pinto Creek into compliance with applicable water quality standards. *Id. at 1014*. Similarly, in *Alabama River Alliance*, a coal mine applied for a permit to discharge into waters that were included on Alabama's 303(d) list as impaired for iron, aluminum and turbidity. 14 So. 3d at 858-65. Although the issuance of that individual NPDES permit was supported by far more evidence than was examined when authorizing discharges under Rule 7 in this case, the court nonetheless invalidated the issuance of that permit because it concluded that the discharges would cause or contribute to an already-existing impairment of the receiving stream and the conditions of having a TMDL with available wasteload allocations and a compliance plan were not met at the time the permit was issued. *Id*. at 868.

As discussed above, IDEM did not even assess the condition of the receiving waters before it issued the modification to the Bear Run Mine (IDEM Resp. to Pet'r Interrogs. #8), let alone develop a TMDL or determine wasteload allocations for the mine. Of the six (at least) impaired waters into which the Bear Run Mine proposes to discharge, only the waters within the Busseron Creek watershed (Buttermilk Creek and Busseron Creek) have even been contemplated for TMDL development at this point. Ex. 8. No TMDL development has even been proposed for Black Creek, Spencer Creek, Maria Creek or Pollard Ditch. Ex. 12, Ex. 13, Ex. 14. A revised draft TMDL for Busseron Creek was released on September 3, 2008 for public comment, but has not yet been finalized. Ex. 5. IDEM admits that it "did not review the draft Busseron Creek TMDL and analyze the impact of the proposed discharge on the TMDL prior to issuing the modification" (IDEM Resp. to Pet'r Interrogs. #11), nor did it "review the impact of the proposed discharge on the Busseron Creek watershed project prior to issuing the modification." (IDEM Resp. to Pet'r Interrogs. #13)

It is worth noting that the Bear Run Mine (in its previous incarnation prior to this recent expansion) is discussed throughout the Busseron Creek TMDL. IDEM even uses the Farmersburg Bear Run Mine as an example of how it calculates Waste Load Allocations (WLAs) within the TMDL. Ex. 5 at 31. Although Sierra Club would argue that the approach used to calculate WLAs in the draft TMDL is flawed, that is not the issue before us in this case. The document shows that IDEM clearly recognizes that WLAs are necessary for a much smaller version of the Bear Run Mine, and that effluent limits are necessary for not only the iron, manganese and total suspended solids parameters governed by Rule 7, but also for aluminum, copper and zinc, which are not included among the Rule 7 effluent limits that apply to the Bear Run Discharges at issue in this proceeding. *Id*. The draft TMDL recognizes that the

Farmersburg Bear Run Mine "is a potential source of total aluminum and total iron," in one subwatershed, Ex. 5 at 43, but declined to assign WLAs to the Farmersburg Bear Run Mine under another NPDES permit within the Buttermilk Creek subwatershed. Ex. 5 at 46-47. From this evidence it is obvious that the massive expansion of the Bear Run Mine is relevant to the Busseron Creek watershed impairments, and IDEM was in error in not considering the impact of the new discharges on the impairments prior to authorizing pollution discharges.

Since no TMDL has been finalized and approved for any of the watersheds into which the Bear Run Mine proposes to discharge, it follows that Peabody cannot demonstrate that there are sufficient wasteload allocations available for the Bear Run Mine in those nonexistent TMDLs. Nor can it demonstrate that the other dischargers within those watersheds are subject to compliance schedules

As a new discharge into impaired waters, Bear Run Mine's NPDES permit cannot be approved until a TMDL is completed with wasteload allocations for the facility and compliance schedules have been adopted to bring the impaired watershed into compliance with state water quality standards. None of those conditions have been met here, so IDEM's authorization to discharge must be invalidated.

III. IDEM failed to assure protection of existing beneficial uses of the waters receiving pollution from the Bear Run Mine.

IDEM also admits that it did not assess the existing beneficial uses of the waters receiving the proposed Bear Run Mine discharge, and did not assess the impact of those discharges on those existing uses. This represents another failing of IDEM's NPDES permitting duty under both state law and the federal law upon which its authority is based.

Indiana law states that "no degradation of water quality shall be permitted which would interfere with or become injurious to existing and potential uses." 327 Ind. Admin. Code 2-1-2 (2011). This section, which incorporates federal "Tier 1" antidegradation requirements, 40 CFR 131.12(a)(1) , constitutes one of Indiana's water quality standards, which also establishes that, "for all waters of the state, existing beneficial uses shall be maintained and protected." *Id.* Beneficial uses include domestic, fish and wildlife and recreational uses. Ind. Code § 14-25-7-2 (2011).

Because the requirement to protect existing uses is one of Indiana's adopted water quality standards, IDEM is prohibited by operation of 327 IAC 5-2-7 (discussed above) from using its NPDES authority to authorize discharges that interfere with, injure or otherwise fail to maintain and protect existing uses. Furthermore, IDEM is required to establish permit terms and conditions (including effluent limits) as necessary to protect those existing uses. 327 Ind. Admin. Code 5-2-10 (a) (2011) (discussed above).

The federal equivalent upon which the Indiana regulation is based states that "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." 40 C.F.R. § 131.12 (a) (1) (2011). *See also*, *PUD No. 1 of Jefferson County v. Wash. Dep't of Ecology*, 511 U.S. 700, 705 (1994) (affirming state's denial of water quality certification based on the existing use aspect of antidegradation standard) and *Islander E.*

Pipeline Co. v. McCarthy, 525 F.3d 141, 144 (2d Cir. 2008) ("[N]o activity that would 'partially or completely eliminate any existing use' is permitted").

The existing use standard is part of a state's antidegradation standard, and applies to all waters in a state. *Ohio Valley Envtl. Coal. v. Horinko*, 279 F. Supp. 2d 732, 740 (S.D.W. Va. 2003). Existing uses are defined as "those uses actually attained in the water body on or after November 28, 1975, whether or not they are included [as designated uses] in the water quality standards." 40 C.F.R. § 131.3 (e) (2011) (explanatory parenthetical added for clarity).

In order to assure that existing uses are protected, IDEM must identify 1) the existing uses of waters downstream of the proposed discharges and 2) the pollutants in the proposed waste stream. IDEM must then evaluate whether the identified pollutants will harm or interfere with the identified existing uses.

IDEM did not examine existing uses, the pollutants in the proposed waste stream or the impact of the pollutants on existing uses. (IDEM Resp. to Pet'r Interrogs. #7, #8 and #9) Again, authorizing discharges without undertaking this required analysis is inconsistent with IDEM's duty to administer its NPDES program consistent with state and federal law. *See Ill. Envtl. Protection Agency v. Ill. Pollution Control Bd.*, 896 N.E. 2d 479, 491 (Ill. App. 2008). Because the discharges from the Bear Run Mine were improperly authorized, OEA should find the decision was inconsistent with law and remand the matter to IDEM for proper consideration.

IV. IDEM failed to prohibit unnecessary degradation of water quality by Bear Run Mine discharges.

Yet another of Indiana's water quality standards requires that "waters whose existing water quality exceeds [Indiana's water quality criteria]… be maintained in their present high quality, unless and until it is affirmatively demonstrated to the commissioner that limited degradation of such waters is justifiable on the basis of necessary economic or social factors and will not interfere with or become injurious to any beneficial uses made of, or presently possible, in such waters" 327 Ind. Admin. Code 2-1-2 (2) (2011) (parenthetical added for clarification). This requirement is commonly known as a "Tier 2 antidegradation" policy, as it is called in the corresponding federal regulation:

> Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

40 C.F.R. § 131.12 (a) (2) (2011). As before, because this requirement is a water quality standard, permits cannot issue that would violate the standard, *see* 327 Ind. Admin. Code 5-2-7

(2011), and permit terms and conditions must be adopted to ensure that water quality is not lowered unnecessarily.

To illustrate by example, if Indiana has a numeric criteria of 100 parts per million of the (fictional) chemical zanium, and the receiving water currently has a concentration of 10 parts per million of zanium, IDEM cannot authorize discharges that would increase the concentration of zanium in the receiving waters above 10 parts per million unless the permittee "affirmatively demonstrates" that the project that increases the pollution is socially worthwhile and that there are no alternatives available that would reduce the pollution loading to the receiving waters. This review is often called a "Tier Two antidegradation analysis." *Ohio Valley Envtl. Coal. v. Horinko*, 279 F. Supp. 2d 732, 740 (S.D.W. Va. 2003) ("In Tier 2 waters, water quality (as opposed to uses) 'shall be maintained and protected' unless the State finds, after a process of public participation, 'that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.' [citing 40 C.F.R. § 131.12(a) (2)] This process of public participation and a finding of economic or social necessity is known as Tier 2 review."). *See also Columbus & Franklin County Metro. Dist. v. Shank*, 600 N.E.2d 1042, 1062 (Ohio 1992) (Holding that lowering of water quality can only be allowed after public hearing, showing of necessity and consideration of alternatives).

General permits are not exempt from antidegradation requirements. To the contrary, courts have rejected the idea that discharges under a general permit are not subject to Tier 2 review. In *Ohio Valley Envtl. Coal. v. Horinko*, the court repeatedly emphasized that a Tier 2 antidegradation review is necessarily "location-specific" and found no reasoned analysis or reasonable factual basis to support the idea that such a review could be done at the stage of issuing the general permit in lieu of examining the individual discharges. 279 F. Supp. 2d 732, 761-62 (S.D.W. Va. 2003). The court interprets the rule to mean that each discharge must be examined to determine whether it is "'necessary to accommodate important economic or social development *in the area in which the waters are located*'" or "whether, in the particular area in which the affected waters are located, lowering water quality was 'necessary' for such development." *Id*. at 761 (emphasis as quoted). Tier 2 review also requires public participation, and the court also faulted a scheme that denied "a meaningful public participation process regarding potential degradation of the State's waters prior to the time when members of the public were aware of the nature and location of specific discharges covered by the permit." *Id*. In another case, the Sixth Circuit rejected a state's attempt to exempt coal mining discharges permitted under a general permit from Tier 2 review. *Ky. Waterways Alliance v. Johnson*, 540 F.3d 466, 491-94 (6th Cir. 2008) (concurring opinion representing majority holding on this issue).

IDEM did not conduct an antidegradation analysis for the Bear Run Mine. (IDEM Resp. to Pet'r Interrogs. #21) As with the other NPDES requirements discussed thus far, IDEM's failure to require a Tier Two antidegradation analysis from the applicant is a violation of IDEM's NPDES duties and necessitates that the authorization to discharge be invalidated and remanded for a proper NPDES permit.

V. IDEM improperly authorized Bear Run Mine pollution discharges under Rule 7

Indiana's general permit regulations contain a provision that gives IDEM the discretion to require a discharger to apply for an individual permit under a number of circumstances. If IDEM contends that it cannot meet its NPDES permitting duties under the present Rule 7 "coal general permit" it is obligated to use that discretion to require an individual permit that complies with NPDES requirements.

Title 327 of the Indiana Administrative Code, Section 15-2-9 (b) states in relevant part, "The commissioner may require any person either with an existing discharge subject to the requirements of this article or who is proposing a discharge that would otherwise be subject to the requirements of this article to apply for and obtain an individual NPDES permit if one (1) of the six (6) cases listed in this subsection occurs." Of the six cases listed in the regulation, the first two are the most clearly applicable to the Bear Run Mine:

> (1) The applicable requirements contained in this article [the general permit rules] are not adequate to ensure compliance with:
>
> (A) water quality standards under 327 IAC 2-1 or 327 IAC 2-1.5; or
>
> (B) the provisions that implement water quality standards contained in 327 IAC 5.
>
> (2) The person is not in compliance with the terms and conditions of the general permit rule.

327 Ind. Admin. Code 15-2-9 (b) (2011) (parenthetical added for clarity). *See also*, 40 C.F.R. § 122.28 (b) (3) (2011). IDEM may also possess information that would warrant requiring an individual permit under the other four conditions of 327 IAC 15-2-9 (b).

As discussed in Sections II, III and IV above, IDEM admits that it did not analyze the proposed discharges from the Bear Run Mine to determine whether they will cause or contribute to violations of water quality standards, (IDEM Resp. to Pet'r Interrogs. #7 and #8) harm existing uses or unnecessarily degrade water quality, as it is required to do under Indiana water quality standards at 327 IAC 2-1. In other words, even absent any other factual information, IDEM admits it did not "ensure compliance with…water quality standards," with regard to proposed discharges from the Bear Run Mine. Therefore, on its face, this discharge meets the criteria under 327 IAC 15-2-9 (b) (1) for requiring an individual NPDES permit for those discharges.

Alternatively, the record shows that the Bear Run Mine meets the criteria of 327 IAC 15-2-9 (b) (2), which presents noncompliance with the terms of the general permit rule as a reason to require an individual permit. The documents that would prove such a violation are the Discharge Monitoring Reports (DMRs) and/or the Indiana-specific Monthly Monitoring Reports (MMRs) the permittee is required to submit to IDEM based on required effluent sampling. IDEM admits that it did not review the Discharge Monitoring Reports for the existing outfalls associated with this permit before it authorized discharges from the additional outfalls at issue in this appeal. (IDEM Resp. to Pet'r Interrogs. #27(b))

Sierra Club's June 9, 2011 request to obtain these documents by FOIA request has not yet been fulfilled. However, the U.S. EPA provides some compliance data to the public (based on information transmitted to U.S. EPA by the states) via its Integrated Compliance Information

System - National Pollutant Discharge Elimination System (ICIS-NPDES) online database. The ICIS-NPDES report for the Bear Run Mine indicates a January 2010 violation for TSS and two reporting violations for pH in 2010 and 2011 and four quarters in 2009 and 2010 where the mine's compliance status is listed as "unavailable." Ex. 15. In addition, the Busseron Creek draft TMDL identified numerous violations from the Bear Run Mine (although perhaps under different NPDES permits) in the watershed, including 14 pH violations, 3 total suspended solids violations and 6 iron violations. Ex. 5 at 23. The November 19, 2010 letter from U.S. EPA similarly detailed a number of effluent violations from the mine. Ex. 6 Encl. 4. At any rate, the information available to Sierra Club shows a strong indication that IDEM possesses information about permit violations at Bear Run Mine such that, if IDEM investigated the compliance history properly, may support justification of requiring an individual permit for the mine.

Furthermore, Sierra Club called these problems to IDEM's attention prior to Bear Run Mine's December 21, 2009 application for coverage under Rule 7. On July 31, 2009 Sierra Club (along with two other environmental groups) sent a letter petitioning IDEM Commissioner Easterly to require individual NPDES permits for all existing coal mine dischargers and all proposed coal mine discharges going forward. Ex. 7. The letter faulted Rule 7 on its face for failing to comply with antidegradation requirements, failing to protect existing uses, failing to ensure compliance with water quality standards, failure to include effluent limits for pollutants known to be present in coal mining discharges and failure to require adequate monitoring, and specifically requested an individual permit for the Bear Run Mine. Ex. 7. Although the failures of Rule 7 identified in the July 31, 2009 letter appear to be systemic problems with using Rule 7 to govern coal mine discharges instead of a proper NPDES permit, they are no less problematic "as applied" to the discharges from the Bear Run Mine.

Nonetheless, IDEM did not even consider whether the modification request for the Bear Run Mine expansion would be more appropriate as an individual NPDES permit. (IDEM Resp. to Pet'r Interrogs. #5) IDEM's failure to require an individual permit for the Bear Run Mine was arbitrary, capricious and an abuse of discretion. IDEM was put on notice that the Rule 7 requirements were not sufficient to ensure compliance with water quality standards, and possessed information submitted by the permittee (the DMRs and MMRs) indicating that the existing discharges from the Bear Run Mine are not in compliance with the minimal requirements of Rule 7. Although IDEM's authority to require an individual NPDES permit in lieu of authorizing a discharge under the Rule 7 is discretionary, if allowing a discharge under Rule 7 does not ensure compliance with water quality standards, IDEM must require an individual NPDES permit for the discharge. IDEM does not have discretion to fail to protect Indiana rivers, lakes or streams and the people who rely on them.

VI. IDEM failed to issue a valid NPDES permit governing discharges from the Bear Run Mine

IDEM's authorization to discharge pollutants from the Bear Run Mine not only ran afoul of the substantive requirements to comply with water quality standards discussed in Sections II, III and IV above, the authorization to discharge also falls short of the more procedural requirement that valid NPDES permits contain enforceable terms and conditions adequate to comply with requirements of Clean Water Act and state and federal regulations implementing the Clean Water Act. 327 Ind. Admin. Code 5-2-7 (a) (2011) and 40 C.F.R. § §122.4 (a) (2011). The

specific rules governing general permits further reinforce that a general permit "must clearly identify the applicable conditions for each category or subcategory of dischargers…covered by the permit." 40 C.F.R. § 122.28 (4) (i) (2011).

Waterkeeper also reaffirms that "The Clean Water Act unquestionably provides that all applicable effluent limitations be included in each NPDES permit." *Waterkeeper Alliance, Inc. v U.S. EPA*, 399 F.3d 486, 502 (2d Cir. 2005). Where non-numerical effluent limitations are established by a general permit in the form of best management practices, the terms of those best management practices must be set forth by the NPDES permit. *Waterkeeper*, 399 F.3d at 502-03.

For example, if Rule 7 were a valid NPDES permit, it might contain a condition that required water quality-based effluent limits to be added as necessary to protect numeric and narrative water quality standards. It might contain a condition stating that if a downstream receiving water violates water quality standards for pollutants discharged by coal mines, then an individual NPDES permit must be sought rather than coverage under Rule 7. It might contain a condition stating that prior to coverage under Rule 7, the applicant must submit an analysis of which pollution-reducing alternatives to the discharge were considered and explaining to IDEM's satisfaction why the discharge meets the standard of no unnecessary degradation of water quality. It might contain a condition requiring the applicant to submit information establishing the existing uses for the proposed receiving waters and any other information necessary for IDEM to ensure those existing uses will be protected. But Rule 7 does not contain any of these conditions, nor does it contain any other terms or conditions that are sufficient to comply with the requirements of the federal NPDES program and Indiana law. IDEM is prohibited from authorizing discharges outside of a valid NPDES permit.

What's more, the letter sent by IDEM to the Bear Run Mine authorizing pollution discharges under Rule 7 also fails to contain even the basic terms and conditions necessary to ensure that the applicable requirements of Rule 7 are applied to the discharge. For example, Rule 7 sets forth four different sets of technology-based effluent limits for alkaline, acid, undetermined and post mining discharges. 327 Ind. Admin. Code 15-7-7 (a) (1)-(4). The NPDES General Permit Notice of Intent Letter Submittal Application for 328 IAC 15-7 (Am. Pet. Attach. 2) does not require the applicant to submit information supporting which type (i.e. alkaline, acid, undetermined or post-mining) apply to which outfalls, and the February 15, 2010 letter from IDEM to Mr. James F. Tolen (Am. Pet. Attach. 3) does not specify which effluent limits the Bear Run Mine must meet at each outfall. Effluent limits are the most straightforward and familiar type of permit condition, yet IDEM has failed to even specify which effluent limits are terms of the Bear Run Mine "permit."

A similar example is evidenced when the 327 IAC 15-7-7 (b) (6) BMP requirement is applied (or, more accurately, *not* applied) to a particular discharger. For some stormwater discharges, 15-7-7 (b) (6) requires that the discharger use best management practices to "reduce overload flow velocity, reduce run-off volume or trap sediment." The rule suggests several BMPs, "including but not limited to" rip rap, straw dikes, check dams, mulch or dugouts that could be used to accomplish the requirement, but does not specify which BMPs should be used in which circumstances, which "other measures" would accomplish the objective, or what extent of implementation of one or more of the BMPs constitutes compliance with the subdivision. The

NPDES General Permit Notice of Intent Letter Submittal Application for 328 IAC 15-7 (Am. Pet. Attach. 2) does not require an applicant to identify whether the facility will include stormwater run-off subject to section 15-7-7 (b) (6) or which BMPs it agrees to implement. The February 15 letter from IDEM to Mr. James Tolen authorizing discharges from the Bear Run Mine (Am. Pet. Attach. 3) does not specify anywhere which specific best management practices the Bear Run Mine must employ to control water pollution from the mine.

Without specifically identifying which actions the permittee must take, it is virtually impossible for IDEM or citizens to determine whether the permittee has complied with the 327 IAC 15-7-7 (b) (6) condition (rendering that provision virtually unenforceable), and impossible for the permittee to rest assured that it is discharging in compliance with the terms and conditions of Rule 7. Several courts have held that, even in the general permit context, a permitting agency must review dischargers' plans for implementing BMPs pursuant to a permit condition. *Waterkeeper Alliance, Inc. v. U.S. EPA*, 399 F.3d 486, 498-503 (2d Cir. 2005); *Envtl. Def. Ctr., Inc. v. U.S. EPA*, 344 F.3d 832, 853-56 (9th Cir. 2003); *Sierra Club Mackinac Chapter v. Dep't of Envtl. Quality*, 277 Mich. App. 531, 552-553 (2008). *Ohio Valley Envtl. Coal. v. Horinko*, 279 F. Supp 2d 732, 761-62 (S.D.W. Va. 2003). Such plans constitute effluent limitations that the permitting agency must incorporate into the permit itself. *Waterkeeper Alliance, Inc. v. U.S. EPA*, 399 F.3d 486, 498-503 (2d Cir. 2005).

In this case IDEM has failed to issue a valid NPDES permit to the Bear Run Mine because Rule 7 does not contain the effluent limitations and permit conditions necessary to render it a valid NPDES permit. Authorizing water pollution discharges without a valid NPDES permit is strictly prohibited. Because this action is arbitrary, capricious and not in accordance with law, the authorization to discharge should be invalidated and the decision remanded to IDEM for issuance of a proper, individual NPDES permit.

VII. IDEM failed to require monitoring of discharges and receiving waters sufficient to assure permit compliance and water quality protection

Under NPDES rules, IDEM must also include permit terms and conditions that establish adequate monitoring requirements for the discharger. Such monitoring requirements must be sufficient to both evaluate compliance with the permit terms and conditions and ensure that instream water quality is protected.

Title 327 of the Indiana Administrative Code, Section 5-2-13 requires the following monitoring requirements to be incorporated into all NPDES permits:

> (2) Monitoring 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 C.F.R. § 122.44 .

327 Ind. Admin. Code 5-2-13 (2011). *See also*, 40 C.F.R. § 122.48 (2011).

Although the effluent limits contained in Rule 7 are daily limits (both average and maximum), the rule only requires weekly, twice-monthly, monthly or even quarterly monitoring to determine whether the discharges comply with the effluent limits. 327 Ind. Admin. Code 15-

7-7 (2011). Because effluent composition can vary over time, as new areas are mined and as sediment ponds accumulate more and more sediment, this infrequent monitoring is not sufficient to adequately represent the pollution discharge.

The monitoring requirements of Rule 7 are also insufficient to determine whether the alternate precipitation-driven effluent limits under 327 IAC 15-7-7 (c) are being properly applied by the permittee. First, nothing in the NOI or the authorization letter from IDEM defines the 10-year, 24-hour storm. Further, recorded precipitation amounts are not required by the Rule to be submitted in DMR reports, so IDEM and the public have no way of knowing what limit should apply to the discharge. This is not sufficient to determine compliance with the requirements of Rule 7.

Because the monitoring requirements set forth in 327 IAC 15-7-7 are legally and practically inadequate to determine permit compliance and protection of water quality standards, OEA should require IDEM to issue an individual permit to the Bear Run Mine that establishes proper monitoring requirements.

CONCLUSION

Because all facts identified are founded on the Respondents' own admissions, Sierra Club has established that no genuine issue of material fact exists in the case of the Bear Run Mine discharges. The undisputed evidence supports Sierra Club's legal claims, so Sierra Club is therefore entitled to summary judgment on each claim and for OEA to order the sought-for relief of invalidating the authorization for the Bear Run Mine to discharge under Rule 7 and requiring the Bear Run Mine to apply for an individual NPDES permit for its discharges that complies with NPDES legal requirements as described above.

WHEREFORE, Sierra Club respectfully requests that this motion for summary judgment be granted.