

ILLINOIS POLLUTION CONTROL BOARD

August 9, 2001

PRAIRIE RIVERS NETWORK, )  
 )  
 Petitioner, )  
 )  
 v. ) PCB 01-112  
 ) (Permit Appeal – NPDES, Third-Party)  
 ILLINOIS ENVIRONMENTAL )  
 PROTECTION AGENCY and BLACK )  
 BEAUTY COAL COMPANY, )  
 )  
 Respondents. )

ALBERT F. ETTINGER, APPEARED ON BEHALF OF PRAIRIE RIVERS NETWORK;

SANJAY K. SOFAT, ASSISTANT COUNSEL, APPEARED ON BEHALF OF RESPONDENT,  
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY; and

W.C. BLANTON, APPEARED ON BEHALF OF BLACK BEAUTY COAL COMPANY.

OPINION AND ORDER OF THE BOARD (by E.Z. Kezelis):

Petitioner Prairie Rivers Network (Prairie Rivers) appeals the issuance of a National Pollutant Discharge Elimination System (NPDES) permit to Black Beauty Coal Company (Black Beauty) by the Illinois Environmental Protection Agency (IEPA). Prairie Rivers brings this appeal pursuant to Section 40(e) of the Environmental Protection Act (Act) (415 ILCS 5/40(e) (2000)).

For the reasons described below, the Board finds that Prairie Rivers failed to sustain its burden of proving that the NPDES permit, as issued, would violate the Act or Board regulations. Accordingly, the Board finds that IEPA properly issued the permit to Black Beauty.

PRELIMINARY MATTERS

Before addressing the substance of this appeal, there are three preliminary matters before the Board. The first is a motion to supplement the record filed by Black Beauty via facsimile on May 29, 2001, and a response filed by Prairie Rivers on June 7, 2001. Black Beauty's motion seeks to supplement the record with a press release issued by Prairie Rivers on May 10, 2001. Black Beauty argues that the press release should be admitted as an admission by Prairie Rivers that the water quality standards of 35 Ill. Adm. Code 302 and 303 (Subtitle C) do not apply to mine-related discharge. Black Beauty Mot. at 2. In its response, Prairie Rivers argues that the Board should make its decisions based exclusively on the record that was before IEPA, and that the press release was written for laymen. Prairie Rivers Resp. at 1-2.

The Board finds that the press release is not relevant to the issue of whether Prairie Rivers has proven that the NPDES permit, as issued, would violate the Act or Board regulations. Further, the Board finds that the press release is not a document IEPA would have relied upon in making a permit decision. Accordingly, Black Beauty's motion to supplement the record is denied.

The second preliminary matter is IEPA's June 1, 2001 motion for leave to file its posthearing brief *instanter*. In its motion, IEPA states that although it served its posthearing brief on the parties on May 25, 2001, as required by hearing office order, it failed to also serve the Board. In fact, IEPA's brief was not filed with the Board until May 31, 2001.<sup>1</sup> IEPA's attorney claims that he misunderstood the hearing officer's directions regarding service of the brief on the Board. As a result, IEPA seeks leave to file its posthearing brief *instanter*. Because the parties to this permit appeal did receive IEPA's brief in a timely manner, and because Prairie Rivers' ability to file its posthearing reply brief was not prejudiced by IEPA's late filing with the Board, the Board grants IEPA's motion for leave to file *instanter* and accepts the brief.

Finally, the Board must address the fact that a number of the public comments submitted in this matter were filed well after the public comment period expired. Pursuant to the hearing officer's order of May 11, 2001, posthearing public comments were due on or before May 14, 2001. The hearing officer explicitly stated in his order that the "mail box rule" of 35 Ill. Adm. Code 101.300 would not apply, and that each filing, including but not limited to public comments, must be in the Board's Chicago office on or before the assigned due date.

The Board received a total of 30 public comments. The Board received 10 public comments before the May 14, 2001 deadline, and 20 more after expiration of the deadline. Of those, public comments 18, 20, 21, and 22 were docketed as group comments consisting of 46, 22, 9, and 5 (respectively) identical pre-printed postcards, which provide, in pertinent part:

I am a member of Prairie Rivers Network. As a citizen who is deeply concerned about the Little Vermilion River I urge you to make significant changes to the water pollution permit for Black Beauty Coal Company's Vermilion Grove Mine.

In issuing the permit Illinois EPA did not allow the public to comment on key aspects such as the monitoring of effluent and stream flow rates, monitoring of fish and mussel populations, and the plan for operating the mine. In short, public participation was circumvented.

This mine has already impacted the Little Vermilion River. In February Black Beauty had three illegal discharges from its facility. These discharges allowed large amounts of silt and sediment to enter a tributary to the Little Vermilion, possibly adding to siltation problems in nearby Lake Georgetown and smothering habitat important to three state

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<sup>1</sup> The Board acknowledges, however, that a copy of IEPA's brief was hand delivered to the Board's Springfield office on May 29, 2001.

protected species in the area.

We urge you to address the issues which Prairie Rivers Network has raised in its petition.

Of the 96 postcards received, only two were timely received. Vermilion Coal Company (Vermilion Coal) filed its public comment on May 14, 2001 (PC 10), then filed a supplement on May 25, 2001, without a proof of service and refiled on May 29, 2001, with a proof of service. None of the public comments received after May 14, 2001, were accompanied by a motion for leave to file *instanter*.

The Board finds that the hearing officer order imposing a deadline of May 14, 2001, for the filing of public comments was unambiguous. Among other things, it was designed to assure that the parties in this permit appeal would have a sufficient opportunity to address public comments in their posthearing briefs. No justification for these late filings was offered and leave to file comments late was not sought. Accordingly, the Board strikes those comments received by the Board after May 14, 2001. While the Board will not consider the substance of these late-filed comments, it notes that two of the Prairie Rivers “postcard” comments and the original comments from Vermilion Coal were timely received and may, therefore, be considered by the Board in this decision.

#### BACKGROUND

Black Beauty was granted an NPDES permit on December 27, 2000, for discharges from the Vermilion Grove Mine, located in Vermilion County, Illinois. R. at 953.<sup>2</sup> The Vermilion Grove Mine (mine) is an underground coal mine that is expected to produce two to three million tons of coal per year. Tr. at 383. While Black Beauty will actually be mining the coal, Vermilion Coal is the owner of the coal. R. at 321. While the Board denied Vermilion Coal’s petition for leave to intervene, the Board did grant Vermilion Coal permission to file an *amicus curiae* brief pursuant to Section 101.110(c) of the Board’s procedural rules (35 Ill. Adm. Code 101.110(c)). See Prairie Rivers Network v. IEPA (April 19, 2001), PCB 01-112. Vermilion Coal’s *amicus* brief was filed on May 25, 2001.

The mine is located approximately 2.5 miles south of Georgetown and one mile west of State Highway 1. R. at 558. The proposed discharge, via Outfall 003, is to an unnamed tributary of the Little Vermilion River. *Id.* Downstream of the unnamed tributary’s confluence with the Little Vermilion River is the Georgetown Reservoir, the Harry “Babe” Woodyard State Natural Area, and the Carl Flierman River Nature Preserve. *Id.*

Prairie Rivers is “a statewide river conservation group [that works] with organizations and individuals throughout Illinois on issues that deal with protection of our rivers and streams as well as water quality issues throughout the state of Illinois.” Tr. at 13.<sup>3</sup>

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<sup>2</sup> IEPA’s administrative record is referred to as “R. at \_\_\_.”

<sup>3</sup> The hearing transcript is referred to as “Tr. at \_\_\_.”

On January 30, 2001, Prairie Rivers filed this third-party petition for review of IEPA's December 27, 2000 issuance of a final NPDES permit to Black Beauty for the mine. On February 15, 2001, the Board accepted this matter for hearing. IEPA filed its administrative record on March 2, 2001. A hearing was held before Board Hearing Officer John Knittle on May 1 and 2, 2001, at the Vermilion County Courthouse in Danville, Illinois.

At hearing, Prairie Rivers offered testimony from two witnesses: Robert Moore, Executive Director of Prairie Rivers (Tr. at 13); and Rosa Ellis, a concerned citizen who is a member of Prairie Rivers (Tr. at 86). IEPA presented one witness, Toby Frevert, an IEPA employee who coordinated "the agency's review and preparation in response to [Black Beauty's] permit application." Tr. at 95. Two persons testified on behalf of Black Beauty: Dean Vlachos, an environmental engineer with Advent Group; and Eric Fry, a geologist for Black Beauty. In addition to the testifying witnesses, the following persons also gave public comments on the record: Jean Hayward, Gloria Mariage, Bill Ellis, Rosa Ellis, and Karen Crum. A number of exhibits were also introduced into the record at hearing.

Posthearing briefs were filed by all parties. Prairie Rivers filed its brief and reply brief on May 18, 2001, and May 31, 2002, respectively. Posthearing briefs, including *amicus* briefs, were filed on May 25, 2001, by Black Beauty, Vermilion Coal, and the Illinois Environmental Regulatory Group (IERG). IEPA filed its brief on May 31, 2001. The Board has also received a number of public comments, including comments from Vermilion Coal and from members of Prairie Rivers.<sup>4</sup>

Oral argument was sought on two separate occasions. Prairie Rivers and Black Beauty first sought oral argument after the hearing and before posthearing briefs were filed. Since the Board could not determine whether oral argument would be necessary or beneficial, this first request was denied. See Prairie Rivers Network v. IEPA (May 17, 2001), PCB 01-112. The second motion for oral argument was made by Black Beauty following completion of the posthearing briefing schedule. Having then had the opportunity to review the posthearing briefs, the Board determined that it would be beneficial to schedule an oral argument, and did so for July 12, 2001. Oral argument was held as scheduled; Prairie Rivers, Black Beauty, and IEPA all participated.<sup>5</sup>

## REGULATORY FRAMEWORK

### Statutory Authority

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<sup>4</sup> Black Beauty's hearing exhibits are referred to as "Black Beauty Exh. \_\_\_." IEPA's hearing exhibits are referred to as "IEPA Exh. \_\_\_." The supplement to the hearing record (filed via facsimile by Black Beauty on May 29, 2001) is referred to as "Supp. at \_\_\_." Prairie Rivers' petition for review is referred to as "Pet. at \_\_\_." Prairie Rivers' first brief is referred to as "Pet. Br. at \_\_\_." Black Beauty's brief is referred to as "Black Beauty's Br. at \_\_\_." IEPA's brief is referred to as "IEPA Br. at \_\_\_." Vermilion Coal's *amicus* brief is referred to as "Vermilion Br. at \_\_\_." IERG's *amicus* brief is referred to as "IERG Br. at \_\_\_." Prairie River's reply brief is referred to as "Reply Br. at \_\_\_."

<sup>5</sup> The July 12, 2001 transcript from the oral argument will be referred to as "Oral Arg. Tr. at \_\_\_."

Prairie Rivers' permit appeal was brought pursuant to a statutory provision, enacted in 1997, which authorizes interested third-parties to appeal NPDES permits to the Board. See 415 ILCS 5/40(e) (2000). Section 40(e) of the Act provides:

1. If the Agency grants or denies a permit under subsection (b) of Section 39 of this Act, a third party, other than the permit applicant or Agency, may petition the Board within 35 days from the date of issuance of the Agency's decision, for a hearing to contest the decision of the Agency.
2. A petitioner shall include the following within a petition submitted under subdivision (1) of this subsection:
  - A. a demonstration that the petitioner raised the issues contained within the petition during the public notice period or during the public hearing on the NPDES permit application, if a public hearing was held; and
  - B. a demonstration that the petitioner is so situated as to be affected by the permitted facility.
3. If the Board determines that the petition is not duplicitous or frivolous and contains a satisfactory demonstration under subdivision (2) of this subsection, the Board shall hear the petition (i) in accordance with the terms of subsection (a) of this Section and its procedural rules governing permit denial appeals and (ii) exclusively on the basis of the record before the Agency. The burden of proof shall be on the petitioner. The Agency and permit applicant shall be named co-respondents. 415 ILCS 5/40(e) (2000) (emphasis added).

#### Regulatory Obligations

In addition to the statutory framework of Section 40(e) of the Act, several rules also guide the Board's consideration of this permit appeal. In particular, the provisions of 35 Ill. Adm. Code 406.202 and 406.203 are integral to the Board's determination in this case. They provide as follows:

#### Section 406.202 Violation of Water Quality Standards:

In addition to the other requirements of this Part, no mine discharge or non-point source mine discharge shall, alone or in combination with other sources, cause a violation of any water quality standards of 35 Ill. Adm. Code 302 or 303. When the Agency finds that a discharge which would comply with effluent standards contained in this Part would cause or is causing a violation of water quality standards, the Agency shall take appropriate action under Section 31 or 39 of the Environmental Protection Act to require the discharge to meet whatever effluent limits are necessary to ensure compliance with the water quality standards. When such a violation is caused by the cumulative effect of more than one source, several sources may be joined in an enforcement or variance proceeding and measures for necessary effluent reductions will

be determined on the basis of technical feasibility, economic reasonableness and fairness to all dischargers. 35 Ill. Adm. Code 406.202.

Section 406.203 TDS Related Permit Conditions provides:

- a) This Section sets forth procedures by which water quality-based permit conditions for total dissolved solids, chloride, sulfate, iron and manganese may be established by the Agency for coal mine discharges. These procedures apply instead of Section 406.202 whenever a permit applicant elects to proceed under this Section. A permittee must comply with water quality-based permit conditions for total dissolved solids, chloride, sulfate, iron and manganese established pursuant to this Section instead of Section 406.202. Public hearings may be required pursuant to 35 Ill. Adm. Code 309.115.
- b) An applicant may elect to proceed under this Section by providing the required information as part of a new or renewed or supplemental state or NPDES permit application.
- c) The Agency shall establish permit conditions under this Section if all of the following conditions are met:
  - 1) The applicant proves to the Agency that the discharge will not cause an adverse effect on the environment in and around the receiving stream, by either:
    - A) Demonstrating that the discharge will contain a concentration less than or equal to 3500 mg/l sulfate and 1000 mg/l chloride; or,
    - B) Through actual stream studies.
  - 2) The applicant proves to the Agency that the discharge will not adversely affect any public water supply; and
  - 3) The applicant proves to the Agency that it is utilizing good mining practices designed to minimize discharge of total dissolved solids, chloride, sulfate iron and manganese.
- d) The Agency may promulgate under 35 Ill. Adm. Code 405.101(c) a code of good mining practices consistent with the definition in Section 406.204. Compliance with the code of good mining practices shall be prima facie evidence that the applicant is utilizing good mining practices within the meaning of paragraph (c)(3).

- e) Whenever the Agency issues a permit based on this Section, it shall include such conditions as may be necessary to ensure that:
- 1) There is no adverse effect on the environment in and around the receiving stream;
  - 2) The discharge does not adversely affect any public water supply; and
  - 3) The permittee utilizes good mining practices designed to minimize discharge of total dissolved solids, chloride, sulfate, iron and manganese.
- f) Whenever the Agency issues a permit pursuant to this Section, [it] may include as a condition a requirement that the permittee submit to the Agency effluent data for total dissolved solids, chloride, sulfate, iron and manganese. 35 Ill. Adm. Code 406.203.

Section 406.202 requires compliance with the general water quality standards of Section 302 and 303 (Subtitle C) of the Board's water regulations. Section 406.203, however, gives an NPDES permit applicant the option of proceeding under its provisions instead; electing this option means that IEPA (rather than a pre-existing series of regulations) establishes "water quality-based permit conditions for total dissolved solids, chloride, sulfate, iron and manganese . . . for [the] coal mine discharges." 35 Ill. Adm. Code 406.203(a).

#### BURDEN OF PROOF/STANDARD OF REVIEW

Section 40(e)(3) of the Act provides that the burden of proof shall be on the petitioner in third-party NPDES permit appeals such as this. 415 ILCS 5/40(e)(3) (2000). Although this is the first third-party appeal of an NPDES permit in which a Board hearing has been held since Section 40 was amended to specifically authorize the filing of NPDES permit appeals, (See Pub. Act. 90-274, adding Section 40(e)(1) to the Act effective July 30, 1997), the Board has consistently applied this same statutory burden in other permit appeals brought under Section 40 of the Act (415 ILCS 5/40 (2000)). See, *e.g.*, Panhandle Eastern Pipe Line Company v. IEPA (January 21, 1999), PCB 98-102.

Prairie Rivers argues that a different interpretation of the burden of proof in third-party NPDES permit appeals should be applied. Specifically, Prairie Rivers urges the Board to consider the petitioner's burden of proof "together with the language of the statute limiting the review to the Agency record and the provision of Section 39(a) of the Environmental Protection Act that states that permits shall only be issued 'upon proof by the applicant' that the permit 'will not cause a violation of this Act or the regulations hereunder.'" Prairie Rivers Br. at 12, citing 415 ILCS 5/39(a) (2000). Prairie Rivers further argues that, "while the burden of persuasion is on the petitioner . . . [i]t is for the applicant to prove to the Agency that it is eligible for the requested permit." Prairie Rivers Br. at 13. Prairie Rivers cites to case law from other states (Alabama and Alaska) in support of the proposition that IEPA

permitting decisions should be reversed if not supported by “substantial evidence in the administrative record.” *Id.* Finally, Prairie Rivers also argues that with regard to legal questions, the Board is entitled to a *de novo* review of IEPA determinations. *Id.*

Prairie Rivers reaffirmed these arguments during the July 12, 2001 oral argument. Specifically, Prairie Rivers acknowledged that as petitioner, it “must show that there were legal errors or that . . . factual determinations were made that were not supported by substantial evidence in the record.” Oral Arg. Tr. at 7. Prairie Rivers, however, argues that its burden, “is informed by the burden that went on below . . . [a]nd in this case, the burden below was on the applicant, Black Beauty Mining Company, to prove that it qualified, that it was eligible for the permit it received.” Oral Arg. Tr. at 8.

Black Beauty, IEPA, and IERG oppose Prairie Rivers’ interpretation of the burden of proof. Black Beauty argues that the burden of proof is on the petitioner in a permit appeal, regardless of whether the petitioner is the permit applicant or a third-party. Black Beauty Br. at 9. Furthermore, Black Beauty maintains that Prairie Rivers bears the burden of showing that, “the permit, as issued by the Agency, would violate the Act or the Board’s regulations.” *Id.* citing Damron v. IEPA (April 21, 1994), PCB 93-215.

Similarly, IEPA also argues that Prairie Rivers, as the petitioner, bears the burden of proof in this matter. IEPA states that, “[s]ince the Petitioner challenged the Agency’s decision, it must come forward with the evidence to show that the permit issued by the Agency will cause a violation of the Act or the regulations hereunder.” IEPA Br. at 4 (emphasis in original). IEPA agrees, however, that the “substantial evidence” test is the appropriate standard by which the Board should review IEPA’s decision. *Id.* In other words, according to IEPA, if its decision is supportable by substantial evidence in the record, then it must be sustained. *Id.*

Black Beauty and IEPA reiterate these positions during oral argument. First, IEPA states that, “for the petitioner to bring a third-party permit appeal at a bear minimum it must provide some evidence to show that the permit as issued will cause a violation of the [A]ct or the regulations.” Oral Arg. Tr. at 17. Likewise, Black Beauty argues that the nature of this appeal (third-party) does not change the burden of proof from that which is applied in permit appeals when the appellant is the permit holder. Oral Arg. Tr. at 33. Black Beauty maintains that Prairie Rivers, “must prove that this permit as written will cause a violation of Illinois law.” *Id.*

Finally, IERG’s arguments support the positions of Black Beauty and IEPA. Specifically, IERG states, “[i]t has long been clear in Illinois that in appeals of decisions by the IEPA regarding permits, ‘the burden of proof shall be on the petitioner.’” IERG Br. at 3, citing 415 ILCS 5/40(e)(3) (2000).

The Board concludes that Section 40(e)(3) of the Act unequivocally places the burden of proof on the petitioner, regardless of whether the petitioner is a permit applicant or a third-party. See 415 ILCS 5/40(e)(3) (2000). As petitioner, Prairie Rivers bears the burden of proving that the permit, as issued, would violate the Act or Board regulations.



Related to the burden of proof issue is the standard of review. Pursuant to the Board's opinion in Waste Management, Inc. v. IEPA (November 26, 1984), PCB 84-45, PCB 84-61, PCB 84-68 (consolidated), IEPA's decision to issue the permit in this instance must be supportable by substantial evidence. This does not, however, shift the burden away from the petitioner, who alone, bears the burden of proof in this matter.

### SCOPE OF BOARD REVIEW

Section 40(e)(3) of the Act directs the Board to consider the petition "exclusively on the basis of the record before the Agency." 415 ILCS 5/40(e)(3) (2000). Section 105.212(b) of the Board's procedural rules provides a listing of the information that is to be included in IEPA's administrative record, including:

- 1) Any permit application or other request that resulted in the Agency's final decision;
- 2) Correspondence with the petitioner and any documents or materials submitted by the petitioner to the Agency related to the permit application;
- 3) The permit denial letter that conforms to the requirements of Section 39(a) of the Act or the issued permit or other Agency final decision;
- 4) The hearing file of any hearing that may have been held before the Agency, including any transcripts and exhibits; and
- 5) Any other information the Agency relied upon in making its final decision. 35 Ill. Adm. Code 105.212(b) (emphasis added).

Section 105.214(a) of the Board's procedural rules also addresses the scope of review. It provides, in pertinent part, that the hearing before the Board, "will be based exclusively on the record before the Agency at the time the permit or decision was issued, unless the parties agree to supplement the record pursuant to Section 40(d) of the Act." 35 Ill. Adm. Code 105.214(a).

Prairie Rivers argues that generally, "there are sound policy reasons for . . . limiting the Board's review to the record before the Agency." Prairie Rivers Br. at 11. Prairie Rivers acknowledges, however, that under some circumstances, the Board should consider evidence outside the record, such as when IEPA record is allegedly incomplete, or when there are allegations of improper conduct in the permitting process.

Black Beauty's interpretation of the statutory scope of review is broader. Black Beauty maintains that Prairie Rivers "effectively agreed to supplement the record" and that Prairie Rivers, "[h]aving supplemented the evidentiary record itself . . . has waived any contention it might otherwise have that the Board is limited in deciding this case on the basis of the Record before IEPA alone." Black Beauty Br. at 4. At hearing, Black Beauty sought to introduce into evidence various materials which it offered to refute Prairie Rivers' allegations, but which were not necessarily part of IEPA's

record. Many of these documents were admitted without objection of Prairie Rivers or IEPA. Accordingly, Black Beauty asks the Board to consider this case based not only on the record before IEPA, but also on those documents admitted during the hearing conducted by the Board's hearing officer. Black Beauty Br. at 5.

IEPA did not address this issue in its posthearing brief. It is worth noting, however, that IEPA did not object during hearing to Black Beauty's introduction of evidence that was not in its administrative record.

In addressing the scope of review for this permit appeal, the Board is bound by the clear directives of Section 40(e)(3) of the Act (415 ILCS 5/40(e)(3) (2000)). Accordingly, for purposes of this appeal, the only information the Board may properly consider is that information that was before IEPA below.

The Board has consistently held that in permit appeals, its review is limited to the record that was before IEPA at the time the permitting decision was made. See Community Landfill Company v. IEPA (April 5, 2001), PCB 01-48, PCB 01-49 (consolidated); Panhandle Eastern Pipe Line Company v. IEPA (January 21, 1999), PCB 98-102; and West Suburban Recycling and Energy Center, L.P. v. IEPA (October 17, 1996), PCB 95-199, PCB 95-125 (consolidated); Alton Packaging Corp. v. PCB, 162 Ill. App. 3d 731, 516 N.E.2d 275 (5th Dist. 1987) (court affirmed Board, holding that scope of Board's review in permit appeal is limited to record before permitting agency). Alton Packaging, 162 Ill. App. 3d at 738, 516 N.E.2d at 280. Moreover, Section 40 of the Act (415 ILCS 5/40 (2000)) does not differentiate between the scope of review in permit appeals brought by permit holders and those brought by third parties.

Accordingly, the Board rejects Black Beauty's argument that Section 105.214(a) provides a basis for supplementing the record in this proceeding by agreement of parties. Section 105.214(a) provides the parties may agree to supplement the record pursuant to Section 40(d) of the Act. 35 Ill. Adm. Code 105.214(a). Section 40(d) of the Act provides for supplementation of the record in appeals involving permits issued pursuant to Section 9.1(c) of the Act. 415 ILCS 5/40(d) (2000). Section 9.1(c) of the Act pertains only to the establishment of permitting programs under the Clean Air Act. 415 ILCS 5/9.1(c) (2000). Therefore, reading all of these statutory provisions together, Section 105.214(a) allows for supplementation of the administrative record by agreement of parties in appeals involving Clean Air Act permits. Since the permit at issue in this case is an NPDES permit, and since there are no specific procedures allowing for supplementation of the record in NPDES permit appeals, the Board's review is limited, pursuant to Section 40(e)(3) of the Act, to the record that was before IEPA during its permit review process. See 415 ILCS 5/40(e)(3) (2000).

## FINDINGS OF FACT

### The Permitting Process

The events leading to this NPDES permit appeal are straightforward. Black Beauty has certain mining rights to coal reserves in east-central Illinois. Once all necessary permits have been issued,

Black Beauty intends to mine Herrin No. 6 coal, which exists at a depth of roughly 200 feet below land surface. IEPA Br. at 1. The coal reserve is described as “the largest remaining low sulfur coal in Illinois.” *Id.*

Black Beauty estimates that the mine will produce between two and three million tons of coal per year. Tr. at 383. The coal will be shipped via rail to a power plant. Tr. at 383-84. In its public comment, Vermilion Coal estimates that the coal mined from this site will produce, “more than 100 billion kilowatt-hours of electric energy, at less than one-fifth the fuel cost of natural gas.” PC 25 at 2. Vermilion Coal also contends that the mine contains at least 40 million saleable tons of coal. *Id.*

The surface facilities at the mine include:

the hole in the ground to enter and leave the mine . . . an air shaft that enables ventilation of the mine . . . sediment ponds to control drainage in the disturbed areas . . . a refuse pile . . . a preparation plant which more or less just washes the coal [through] a gravity separation process . . . no chemicals [are] used other than some flocculents, the same sort of flocculents that you would see used at the Georgetown water treatment facility. . . there will be a railroad . . . [and] an office, maintenance building. Tr. at 384-5.

IEPA describes the sedimentation basins as follows:

[t]he surface run-off from the mine property will be collected into three basins, designated as, 003B, 003A, and 003. These basins are connected in series. The series basin system has been designed with a capacity equal to the runoff volume from a 10 year, 24 hour precipitation event of approximately 4.5 inches. The Outfall 003 discharge structure is designed to hold discharges resulting from a 100-year, 6-hour, storm event of approximately 4.65 inches. IEPA Br. at 2; R. at 583.

On March 8, 2000, Black Beauty submitted an application for a coal mining and reclamation operating permit (Application) to the Illinois Department of Natural Resources, Office of Mines and Minerals (DNR). R. at 616. On May 15, 2000, IEPA received a copy of this Application. *Id.* The application for an NPDES permit is contained in the Application originally submitted to DNR. Tr. at 380-81. Also contained in the Application is a section that allows an applicant to identify whether it is seeking an NPDES permit and whether it is seeking a Subtitle D permit. Tr. at 382; See R. at 617. In its Application, Black Beauty checked the boxes for both the NPDES and Subtitle D permits. *Id.*

On July 31, 2000, Larry Crislip of the IEPA’s Mine Pollution Control Program, Bureau of Water, requested that a hearing be held regarding Black Beauty’s application for an NPDES permit. R. at 1. Public concern over the proposed mine and permit appears to have been the impetus for the hearing. R. at 1-7.

On August 2, 2000, IEPA issued public notice of the draft NPDES permit. IEPA Br. at 2. On September 20, 2000, it conducted a public meeting on the permit, and held a public hearing a week later, on September 27, 2000. Tr. at 96. Due to the “obvious public interest” in the proposed mine

and permit, IEPA decided to hold a public meeting in advance of the hearing in an attempt to make the hearing itself more “sufficient.” *Id.* The public meeting was held at the Georgetown High School and consisted of the “Illinois EPA, Vermilion County Department of Public Health, the Illinois Department of Natural Resources, [Prairie Rivers], and another group of concerned citizens from the area [with] information booths there.” Tr. at 15.

Prairie Rivers participated in both the public meeting and public hearing. It provided oral testimony, questioned IEPA participants, and filed written comments. Tr. at 14. Between 150 and 200 people attended the public hearing. IEPA Br. at 3; Tr. at 16. A number of the attendees were members of Prairie Rivers; some live in such proximity to the Little Vermilion watershed that they will be affected by the permit. Tr. at 16; Pet. at 2.

Following the public hearing, there was a 30-day public comment period. Numerous comments were submitted to IEPA. Tr. at 96. After the close of the record, IEPA,

evaluated the information that was brought in, assessed the issues which came to the surface . . . prepared a response to the summary, drafted the revisions to the permit, discussed and reached consensus with [the United States Environmental Protection Agency (USEPA)] on the substance of that permit as modified, and proceeded to issue that permit . . . on December 27th. Tr. at 96-7.

USEPA was consulted regarding issuance of this permit because, “[t]his is a joint state and federal discharge permit” for which IEPA is the delegated authority in Illinois. Tr. at 97. As part of the delegation of authority to IEPA, USEPA retains some oversight responsibilities with regard to NPDES permits. *Id.* IEPA witness Toby Frevert (Frevert) testified that USEPA’s interest in this particular permit was, in his opinion, the result of public interest. Tr. at 98. USEPA originally objected to the draft NPDES permit, but through discussions with IEPA, changes were made to the permit to which USEPA ultimately agreed. Tr. at 97; R. at 942-43.

The final NPDES permit was issued to Black Beauty on December 27, 2000. Tr. at 97; IEPA Br. at 3; R. at 953.

### The Permit

The NPDES permit allows Black Beauty to discharge intermittently (in response to precipitation events) from Outfall 003. Several of the permit conditions are particularly relevant to the Board’s analysis of this appeal. They are special conditions 11 and 12.

#### Special Condition No. 11: Biological Inventory

The permittee must prepare a study plan for approval by the Agency that addresses a biological inventory of the Little Vermilion River in the vicinity of the proposed mine. This study plan is due within 60 days of the effective date of this permit. The Agency will review and provide comments leading to the approval of the study plan within 45

days of its receipt. The field work for the inventory will occur during the first spring and summer following issuance of the permit.

Before runoff impacted by mining operations is discharged, two components of the aquatic life community of the river, fishes and unionid mussels, must be inventoried in the Little Vermilion River. The sites of these inventories will be immediately upstream and downstream of the confluence of the unnamed tributary that will receive the mine discharge. These sites will be chosen such that areas of similar physical habitat will be contained in each area. Before the actual aquatic life inventories begin, the habitat of each site must be evaluated and boundaries for each of the two survey sites established so that direct comparisons of aquatic life between the sites may be facilitated.

The inventory of fishes shall be conducted in both spring and summer with a minimum of one day of collection effort for each season, i.e., one-half day of effort per site per season. The study plan must identify the sampling gear to be used, which must include electrofishing and seining. All habitats supporting fish must be sampled including riffles, runs and pools. The study must strive to both qualitatively and quantitatively characterize the sites. Special attention must be paid to the identification of endangered or threatened species. If these species are encountered, every effort must be made to return them unharmed to the river. Voucher specimens may be retained for threatened or endangered species only with the permission of the Illinois Department of Natural Resources (IDNR). In order that a relevant comparison of the existing fish community may be made between the two sites, the Index of Biological Integrity (IBI) or similar indicator of the health of the fish community will be calculated for each site. Attention will also be paid to the health and physical condition of fish collected, including the incidence of external physical deformity and disease. The report for the fish inventory must include the species and quantity of fish collected at each site along with the length and weight of the larger species captured such that comparisons of species composition and biomass may be made.

The mussel inventory must be conducted once, during a period in the summer when stream flows are low, visibility high and mussels will be easily detected. At least one-half day of effort is required for each site. Species collected must be vouchered with dead shells whenever possible. Living specimens may be taken as vouchers only with the permission of the IDNR. The mussel survey must strive to identify all species present at each site, the numbers collected for each species and whether each individual collected was an adult or juvenile. Every effort must be made to release mussels in the same habitat from which they were collected. Similar areas and types of habitats must be sampled at each site in order that a comparison of the sites may be made.

#### Special Condition No. 12: Water Quality Monitoring

The permittee will monitor discharge and receiving stream water quality during discharge events. Water quality must be monitored at the following sites during discharge events:

- ?
1. Outfall 003
  2. The unnamed tributary of the Little Vermilion River upstream of the confluence with the discharged permitted effluent.
  3. The Little Vermilion River upstream of the confluence of the unnamed tributary receiving the effluent.
  4. The Little Vermilion River downstream of the confluence of the unnamed tributary receiving the effluent at a point where mixing with the unnamed tributary has been demonstrated to be complete.
  5. The Little Vermilion River (Georgetown Lake) immediately above the Georgetown dam.

All samples will be collected by the grab method. Little Vermilion River sites (#3 and #4) shall be sampled at a time sufficiently delayed from the onset of discharge to allow downstream travel such that samples from site #4 will include the contribution from the discharge. All samples, including the effluent sample collected for each studied storm event will be analyzed for each parameter listed in the table below.

This monitoring program will begin with the initial discharge from the sedimentation basins and continue for every discharge event up to and including ten events per year. One round of sampling from the five locations given above is required for each discharge event. If sampling results at site #4 exceed the trigger concentrations given in the following table, the biological inventory specified in Special Condition #11 must be repeated during the next spring and summer sampling season. If trigger concentrations are exceeded due to upstream sources apart from the Vermilion Grove Mine discharge, the permittee may document this condition and demonstrate to the Agency that no additional biological inventories should therefore be required.

<b>Substance/Units</b>	<b>STORET Number</b>	<b>Minimum Reporting Level (MDL)</b>	<b>Biological Inventory Trigger Concentration</b>
Field pH* standard units	400	Tenth of a standard unit	<6.5 or >9.0***
Total Dissolved Solids mg/L	70300	50	500 mg/L
Chloride mg/L	940	5	250 mg/L
Sulfate mg/L	945	5	250 mg/L

Total Mercury ng/L	71900	10	1,300 ng/L
Total and Dissolved Metals			Total metals except for iron**
Barium µg/L	1007/1005	10	2,500 µg/L
Boron µg/L	1022/1020	10	500 µg/L
Cadmium µg/L	1027/1025	3	13.5 µg/L
Chromium (trivalent) µg/L	1034/1030	5	1,800 µg/L
Copper µg/L	1042/1040	10	20.5 µg/L
Iron µg/L	1045/1046	50	500 µg/L
Lead µg/L	1051/1049	5	148.5 µg/L
Manganese µg/L	1055/1056	10	500 µg/L
Nickel µg/L	1067/1065	25	500 µg/L
Silver µg/L	1077/1075	3	2.5 µg/L
Zinc µg/L	1092/1090	100	500 µg/L

\* Field measurement

\*\* Total metals are regulated under water quality standards except for iron, which is a dissolved metals standard. Hardness based metals triggers are based on a Little Vermilion River hardness value of 244 mg/L

\*\*\* If pH is in violation of water quality standard at site #4 and the effluent is not in compliance with the pH permit limit, a biological inventory requirement is triggered.

Mg/L = milligrams per liter; µg/L = micrograms per liter; ng/L = nanograms per liter

As part of the same collections described above, the following parameters must be reported only.

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<b>Substance/Units</b>	<b>STORET Number</b>	<b>Minimum Reporting Level (MDL)</b>
Air Temperature* °C	20	Tenth °C
Water Temperature* °C	10	Tenth °C
Field Dissolved Oxygen* mg/L	299	Tenth of a mg/L
Field Conductivity* µmhos	94	Nearest Whole Number
Volatile Suspended Solids mg/L	535	Nearest Whole Number
Total Suspended Solids mg/L	530	Nearest Whole Number
Total Ammonia as N mg/L	610	0.01
Alkalinity mg/L	410	50
Total Acidity mg/L	70508	50
Hardness (as CaCO <sub>3</sub> ) mg/L	900	Nearest Whole Number

\* Field measurement

Within 60 days of receipt, all information, data and reports prepared in response to Special Condition Nos. 11 and 12 shall be submitted to the Agency . . . . R. at 962-64.

### The Appeal

On January 30, 2001, Prairie Rivers filed this appeal of the NPDES permit pursuant to Section 40(e) of the Act. 415 ILCS 5/40(e) (2000). In its appeal, Prairie Rivers raises a number of issues, both procedural and substantive, in support of its argument that the NPDES permit issued to Black Beauty should be revoked.

Prairie Rivers claims that its concerns for potential damage to the environment “were confirmed” by comments provided by the Illinois Nature Preserves Commission (Commission) and by DNR. Pet. at 2. Prairie Rivers maintains that during the public hearing held on September 27, 2000, and in comments submitted thereafter, it raised concerns regarding the draft NPDES permit. They included: (a) failure to specify mixing zones; (b) improper consideration of non-point source runoff as contributing to dilution of discharge; (c) potential for violation of Illinois water quality standards; (d) no guarantee that all stormwater would be collected and treated prior to discharge; (e) incomplete antidegradation



analysis; and (f) potential exacerbation of existing water quality problems in drinking water supply for the Village of Georgetown. Pet. at 3.

Prairie Rivers claims that the final permit, issued on December 27, 2000, contains “most of the defects that were identified by [it] in the draft permit.” Pet. at 4. In its petition for review, Prairie Rivers identifies the following alleged areas in which IEPA’s analysis and the final NPDES permit are flawed:

- a) insufficient monitoring requirements (*i.e.*, no provision for continuous flow monitoring to ensure that three to one dilution ratio is met);
- b) no requirement for whole effluent toxicity (WET) monitoring;
- c) IEPA improperly relied upon “grossly flawed” Advent Stormwater Mixing Zone Evaluation (Pet. at 4); and
- d) no proper antidegradation analysis, including lack of biological study in receiving water to assure protection of existing uses. See generally, Pet. at 4-5.

In addition to these alleged substantive deficiencies in the permit, Prairie Rivers also challenges the procedures utilized by IEPA prior to issuance of the final NPDES permit. Tr. at 36. Specifically, Prairie Rivers objects to the fact that the final permit is the result of what it characterizes as a “very defective permit-writing process [in which] [t]he public was denied its right under the Clean Water Act and Illinois law to participate in reviewing and commenting on permit conditions that are critical to the future of the Little Vermilion River and the unnamed tributary.” Prairie Rivers Br. at 1.

IEPA filed its 980 page administrative record on March 2, 2001, and supplemented it with an additional 16 pages on March 21, 2001. A two-day hearing was conducted by a Board hearing officer on May 1 and 2, 2001. Black Beauty filed several waivers of the decision deadline; the last extended the deadline for Board action to August 10, 2001.

## DISCUSSION

### Public Participation in Permitting Process

#### Prairie Rivers’ Argument

Prairie Rivers challenges the procedures employed by IEPA prior to issuance of the final NPDES permit. Specifically, Prairie Rivers argues that it should have been allowed an opportunity to review information submitted by Black Beauty after close of the public comment period, and that the final NPDES permit should have been available for public comment and review prior to its issuance by IEPA. Prairie Rivers Br. at 14.

Prairie Rivers cites to the public participation provisions of the Clean Water Act in support of its position that IEPA’s process is flawed. Section 101(e) of the Clean Water Act provides:

Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this chapter shall be provided for, encouraged, and assisted by the Administrator and the States. *Prairie Rivers Br.* at 15, citing 33 U.S.C. §1251(e).

*Prairie Rivers* also relies upon Section 402 of the Clean Water Act (33 U.S.C. §1342) as requiring “effective public participation . . . in the drafting of NPDES permits.” *Prairie Rivers Br.* at 15. Finally, *Prairie Rivers* claims that, unlike what happened in this case, the NPDES permit drafting process should be conducted in a “fishbowl-like” atmosphere. *Prairie Rivers Br.* at 15, citing *Adams v. USEPA*, 38 F.3d 43, 52 (1st Cir. 1994).

*Prairie Rivers* argues that the decision in *Village of Sauget v. IPCB*, 207 Ill. App. 3d 974, 566 N.E.2d 724 (5th Dist. 1990), dictates that *Black Beauty*’s permit be remanded to IEPA. In *Sauget*, the appellate court held that IEPA improperly issued a final permit in which new conditions were added after the close of the public comment period and without providing the permit applicant or another interested party with notice of the new conditions prior to issuance of the permit. *Prairie Rivers* argues that the situation in *Sauget* is similar to that currently before the Board and that, as a result, the permit should be revoked and remanded to IEPA for further consideration.

#### IEPA’s Response

IEPA maintains that it “followed all the applicable provisions of an NPDES permit public participation process.” IEPA Br. at 7. IEPA directs the Board to Sections 309.115 through 309.119 of the Board’s water regulations as being applicable to the issue of public participation. IEPA Br. at 7. These sections provide: (1) that IEPA hold a public hearing if a significant degree of public interest in the draft NPDES permit exists (35 Ill. Adm. Code 309.115); (2) that IEPA issue public notice of the draft permit and public hearing (35 Ill. Adm. Code 309.116); (3) that any person is permitted to submit oral or written public comment on the draft permit (35 Ill. Adm. Code 309.117); (4) that IEPA hearing officer prepare and make available to the public a “hearing file” (35 Ill. Adm. Code 309.118); and (5) that following the public hearing, “the [IEPA] may make such modifications in the terms and conditions of proposed permit as may be appropriate.” 35 Ill. Adm. Code 309.119 (emphasis added). IEPA Br. at 7. IEPA states that it complied with each of these procedural requirements. *Id.*

#### Black Beauty’s Response

*Black Beauty* echoes IEPA’s arguments by stating that IEPA, “scrupulously adhered to the Illinois regulations that establish the procedures that agency must follow in issuing an NPDES permit.” *Black Beauty Br.* at 27. *Black Beauty* argues that, in order to prevail, *Prairie Rivers* must prove that IEPA violated a regulation regarding public participation. *Black Beauty Br.* at 28. *Black Beauty* suggests that all *Prairie Rivers* is doing in this case is suggest that the applicable regulations be changed. *Id.* *Black Beauty* further notes that *Prairie Rivers*’ argument for applicability of the public participation procedures of the Clean Water Act (CWA) is “baseless” insofar as the CWA does not apply. *Id.*

Black Beauty also responds to Prairie Rivers' reliance on the Sauget case. Black Beauty Br. at 29. Black Beauty claims that Sauget is distinguishable because the permit appellants were not third-parties, but were the permit applicant and a major industrial facility that discharged into the applicant's treatment works. *Id.* Since the regulations only require notification of significant changes be given to the applicant, and not a third-party such as Prairie Rivers, Black Beauty argues that Prairie Rivers has not been denied an opportunity to participate in the process. Black Beauty Br. at 30.

#### Board's Finding

The Board finds that Prairie Rivers has failed to show that it was denied a meaningful opportunity to participate in the permit process before IEPA. The record is clear that IEPA provided Prairie Rivers, and other interested members of the public, with a reasonable opportunity to participate in the process. Once IEPA learned of the significant public interest in this NPDES permit, it proceeded to schedule not only a public hearing, but a preliminary public meeting at which time information regarding the permit application and draft permit was freely exchanged and questions regarding the public hearing were answered. Prairie Rivers was provided an opportunity to participate in the public hearing by providing testimony and questioning witnesses. Additionally, Prairie Rivers also participated in a public comment period by submitting written comments to IEPA.

The Board notes that since Section 40(e) of the Act (415 ILCS 5/40(e) (2000)) was enacted in 1997, this appeal is the first third-party appeal in which a hearing has been held and in which the Board will make a final, appealable determination on the merits. Nonetheless, the statutory language, for purposes of this case, is not ambiguous. Moreover, Illinois has specific regulations setting forth the procedures IEPA must follow in issuing an NPDES permit. See 35 Ill. Adm. Code 309.108, 309.109, 309.115, and 309.119. IEPA complied with these procedures. Prairie Rivers' arguments that IEPA should have provided additional opportunities pursuant to USEPA guidelines and the CWA are not persuasive, because these federal procedures are inapplicable here.

Accordingly, the Board finds that the permitting process was fair and reasonable and that IEPA complied with all regulatory "public participation" requirements in issuing the permit.

#### Applicability of 35 Ill. Adm. Code 406.203

Many of Prairie Rivers' arguments are based on the alleged failure of the NPDES permit to meet certain water quality standards (35 Ill. Adm. Code 302 and 303, generally). Black Beauty and IEPA argue that the complained of water quality standards do not apply to this permit or to Black Beauty's discharge.

Black Beauty argues that, as the permit applicant, it had the option to: (a) elect to proceed under 35 Ill. Adm. Code 406.202, which requires compliance with the general water quality standards of 35 Ill. Adm. Code 302 or 303; or (b) elect to proceed under 35 Ill. Adm. Code 406.203, which provides water quality permit conditions specifically developed for coal mine discharges. Tr. at 382. At hearing, Eric Fry, an employee of Black Beauty, testified that if a coal mine wishes to take advantage of the water quality permit conditions of Section 406.203, it must affirmatively "opt" to do so by

checking the appropriate box in the operating permit application submitted to both DNR and IEPA. *Id.* Fry testified that Black Beauty “opted” into Section 406.203. Tr. at 383.

The language of Section 406.203 is very clear. Subsection (a) provides that, “[t]hese procedures apply instead of Section 406.202 whenever a permit applicant elects to proceed under this Section.” 35 Ill. Adm. Code 406.203(a) (emphasis added). Furthermore, subsection (b) clearly gives the permittee the option of making the election:

An applicant may elect to proceed under this Section by providing the required information as part of a new or renewed or supplemental state or NPDES permit application. 35 Ill. Adm. Code 406.203(b).

The Board finds that 35 Ill. Adm. Code 406.203(a) allows IEPA to establish specific water quality standards for coal mine discharges for total dissolved solids, chloride, sulfate, iron, and manganese. The plain language of this regulation allows a permit applicant the choice of proceeding under the Section 406.203 standards or the general water quality standards of 35 Ill. Adm. Code 302 and 303. 35 Ill. Adm. Code 406.203(a), (b). The record in this case is clear as to Black Beauty’s election to proceed under the provisions of Section 406.203. Tr. at 383; R. at 618. Because the plain language of the regulation clearly and unambiguously allows a permittee to make this election, the Board concludes that the general water quality standards of 35 Ill. Adm. Code 302 and 303 do not apply to coal mine discharges from Black Beauty’s mine for chloride, sulfate, iron, or manganese, since a specific election was made in the permit application to proceed according to the conditions contained in 35 Ill. Adm. Code 406.203. Rather, the site specific requirements of 35 Ill. Adm. Code 406.203 and the NPDES permit itself apply to Black Beauty’s discharge. As discussed below, the Board also finds that these conditions are protective of the environment and of the unnamed tributary that will receive discharge from Black Beauty’s mining operations.

### Sufficiency of Permit

#### Monitoring/Dilution Ratio

Prairie Rivers’ Argument. Prairie Rivers asserts that the permit should require proper monitoring to prevent violations of the water quality standards. Specifically, Prairie Rivers argues that the permit issued to Black Beauty does not include the monitoring requirements that will assure a three-to-one dilution rate is achieved. Prairie Rivers Br. at 23-24. Instead, Prairie Rivers alleges that the permit inappropriately leaves the monitoring to a side arrangement, *i.e.*, to a plan to be developed by Black Beauty 180 days after the issuance of the permit. Prairie Rivers Resp. Br. at 14. Prairie Rivers maintains that 40 C.F.R. 122.48 requires monitoring to be included in the permit and that 35 Ill. Adm. Code 309.141(d) and Section 122.48 require Illinois NPDES permits to comply with federal monitoring requirements. Prairie Rivers Br. at 23.

Prairie Rivers’ dissatisfaction with the monitoring requirements focuses on Permit Condition No. 11(a) and its sediment pond operation and maintenance provisions. Prairie Rivers Br., Exh. E at 6. Permit Condition No. 11(a) sets forth as follows:

There shall be no offsite discharge from Outfall 003 caused by any source other than precipitation, or during “no flow” or “low flow” conditions in the receiving stream. For purposes of this paragraph “low flow” shall be defined as any condition wherein upstream flow available for mixing with the discharge from Outfall 003 is less than three times the flowrate being discharged from Outfall 003. Offsite discharge from this facility is approved only at such times that sufficient flow exists in the receiving stream to insure that water quality standards in the stream beyond the mixing zone will not be exceeded. . . . At times of discharge and monitoring of Outfall 003, receiving stream flow rates shall be determined and submitted with discharge analysis results (Discharge Monitoring Reports) to demonstrate that adequate mixing is provided to insure water quality standards are not exceeded in the receiving stream. Within 180 days of the effective date of this permit, the permittee shall submit an operational plan specifying the procedures to be utilized to accomplish the requirements of this paragraph. IEPA Exh. 1 at 6.

While the preceding condition requires Black Beauty to demonstrate that adequate mixing is available, *i.e.*, the available dilution is more than 3 to 1, the condition allows the permittee 180 days after the effective date of the permit to develop the actual monitoring protocols needed to make that demonstration. As noted above, Prairie Rivers argues that IEPA should have included in the permit the actual monitoring protocols that Black Beauty must use to demonstrate that adequate mixing is available upon discharge.

IEPA’s Response. IEPA’s response rejects Prairie Rivers’ concern regarding the dilution and monitoring requirements. First, IEPA states that the permit contains the dilution provisions found in the Board’s regulations for mine-related water pollution at Section 406.104 (35 Ill. Adm. Code 406.104). IEPA Br. at 13. IEPA explains that under the Board regulations, dilution of mine discharge is permissible as long as the effluent is given the best treatment available prior to discharge. *Id.* Further, IEPA cites to a Board opinion concerning the mine-related water pollution control regulations, in which the Board states that the controlled release of water containing high levels of total dissolved solids during periods of naturally occurring high flow in stream is not dilution. *Id.* For this reason, IEPA states that the permit allows Black Beauty to discharge only during wet weather conditions and requires that the dilution ratio in the receiving stream be 3 to 1. IEPA Br. at 13, 15. Finally, IEPA maintains that the monitoring protocols provided in the permit are adequate. Tr. at 105.

Black Beauty’s Response. Black Beauty states that Prairie Rivers’ contention regarding the monitoring requirements is without substantive merit. Black Beauty argues that the 3 to 1 dilution requirement does not violate Section 302.102(b). Black Beauty Br. at 26. In this regard, Black Beauty asserts that “dilution of the Discharge by the receiving waters of the Tributary (and vice-versa with respect to TSS [total suspended solids]) would be accomplished within one hundred feet downstream of Outfall 003, well before the Tributary enters the River.” *Id.* Furthermore, Black Beauty offered an exhibit at hearing, which was admitted as Black Beauty exhibit 56, which demonstrates that the monitoring plan has, in fact, been defined and submitted to IEPA. While the Board does not look to the substance of this plan, it is worth noting that such a plan was actually submitted pursuant to the 180 day requirement of the NPDES permit.

Board's Finding. First, the Board notes that the requirement concerning available mixing was not part of the original draft permit. See *Prairie Rivers Br.*, Exh. B at 6. It appears as if the Agency included the available mixing requirement in the final permit in response to comments received on the draft permit concerning low flow conditions in the unnamed tributary. Condition No. 11 of the final permit clearly prohibits any discharge from Outfall 003 when the dilution ratio is less than 3 to 1. The Board finds that this requirement, coupled with Black Beauty's obligation to develop and utilize discharge monitoring procedures, addresses *Prairie Rivers'* concern regarding potential violation of water quality standards during low flow conditions.

Likewise, the Board finds that allowing Black Beauty 180 days from issuance of the permit to develop a monitoring plan is not inconsistent with applicable regulations; especially since the condition appeared for the first time in the final permit. The Board believes that the 180-day period provides a reasonable amount of time for Black Beauty to develop an appropriate plan to comply with the permit condition based on site-specific factors. In this regard, the Board also notes that Black Beauty is still subject to the offsite discharge prohibition during times of "no flow" and "low flow" during the 180-day period.

The Board concludes that *Prairie Rivers* has failed to demonstrate that the terms of the permit pertaining to mixing and discharge monitoring requirements, will cause a violation of the Act or of Board regulations.

#### Advent Study/Nondegradation

Prairie Rivers' Argument. The Advent Study (Study)<sup>6</sup> was submitted to IEPA by Black Beauty after IEPA's public hearing to address concerns raised regarding the potential for water quality impacts and degradation of the receiving stream. *Prairie Rivers Resp. Br.* at 19. Because the Study was submitted after the close of the public hearing and public comment period, *Prairie Rivers* criticizes the fact that it was not made available for public review and comment. *Prairie Rivers Br.* at 22. In addition, *Prairie Rivers* argues that the Study is seriously flawed and that, had it been given the opportunity, *Prairie Rivers* would have discussed these flaws with IEPA prior to issuance of the permit. *Prairie Rivers Br.* at 24.

*Prairie Rivers* is also critical of the nondegradation analysis performed by IEPA (*Prairie Rivers Br.* at 21), and maintains that the Study does little to alleviate its concerns. *Prairie Rivers Br.* at 24. *Prairie Rivers* contends, therefore, that the Board should remand the issue of compliance with the nondegradation rules back to IEPA for a proper nondegradation demonstration that allows for public participation. *Prairie Rivers Resp. Br.* at 19.

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<sup>6</sup> "Advent Study" refers to the report prepared for Black Beauty by Advent Group, Inc. dated October 20, 2000. The report is marked as petition exhibit A.

Prairie Rivers suggests that the Study is not reliable because, instead of using maximum permit effluent limits to model water quality impacts, the Study is based on surrogate data. Prairie Rivers Resp. Br. at 19. In this regard, Prairie Rivers notes that the concentrations of the surrogate data are much lower than the maximum permit effluent limits contained in the final permit, and are therefore not reliable. Prairie Rivers Br. at 24.

Prairie Rivers also questions the Study's reliance on an arithmetic average for establishing water quality data. Prairie Rivers Br. at 20. According to Prairie Rivers, this is problematic because the simulated background conditions underestimate the actual background water quality of the receiving stream. *Id.* Prairie Rivers further contends that because an arithmetic average eliminates higher levels of pollutants from consideration, the Study

underestimates the actual levels of contaminants that may enter the receiving stream following a discharge from Outfall 003. *Id.*

Prairie Rivers further asserts that the Study is based on an incorrect assumption that mixing occurs instantaneously. Prairie Rivers Reply Br. at 20. Prairie Rivers notes that Dean Vlachos, an engineer from Advent Group, and the person responsible for preparing the Study, testified that complete mixing would occur at approximately 100 feet from Outfall 003. *Id.*; Tr. at 328. Moreover, IEPA estimated that mixing would be complete at approximately 200 feet from Outfall 003. Tr. at 159. IEPA also testified that the entire flow of the stream may be used for dilution. Tr. at 163. Prairie Rivers disagrees with these IEPA assumptions and contends that if the permit allows the entire flow of the stream to be used for dilution purposes, then the permit should be found to violate 35 Ill. Adm. Code 302.102 (b)(6) and (b)(10) and 406.204(e). *Id.*

Similarly, Prairie Rivers disagrees with an assumption contained in the Study that the entire flow from the watershed caused by a precipitation event reaches the unnamed tributary and the Little Vermilion River instantaneously, rather than over a period of time. Prairie Rivers Reply Br. at 21-22. Prairie Rivers argues that this is an incorrect assumption that ignores the time dependent nature of the peak flows. *Id.* Thus, Prairie Rivers contends that the assumption results in model simulations that represent "average" discharge conditions instead of the "worst case" conditions. *Id.*

Another concern raised by Prairie Rivers involves the failure of the Study to address the possible instream impacts from manganese, which is one of the regulated permit parameters. Prairie Rivers Reply Br. at 22. Prairie Rivers asserts that the Study completely neglected to simulate or predict the levels of manganese that would be present in the Outfall 003 discharge, receiving stream, or the Little Vermilion River. *Id.*

Finally, Prairie Rivers contends that the Study does not accurately reflect the measured levels of pollution in the Little Vermilion River. Prairie Rivers Resp. Br. at 22. Prairie Rivers asserts that the monitoring station 7SW-6, which is located on the Little Vermilion River, downstream of the confluence with the unnamed tributary, actually detected higher levels of pollution than those predicted by the Study. *Id.* Prairie Rivers notes that the predicted levels of iron are less than the average levels of iron in

the Little Vermilion River; predicted levels of sulfate are less than the lowest levels detected in the Little Vermilion River; and predicted levels of total suspended solids are barely above the lowest levels detected in the Little Vermilion River. *Id.* Prairie Rivers concludes that if the model cannot accurately predict even the lowest levels of pollution, it does not predict a “worst case” scenario. *Id.*

IEPA’s Response. According to IEPA, the Study is not flawed. IEPA Br. at 21. Regarding the issue of mixing, IEPA states that even if mixing does not occur instantaneously, the discharge will still meet the water quality standards due to the significant mixing (dilution) available in the receiving waters. IEPA Br. at 22. Further, IEPA notes that mixing regulations do not require instantaneous mixing and do allow for creation of mixing zones. *Id.* Therefore, IEPA maintains that Prairie Rivers has failed to demonstrate that even if mixing does not occur instantaneously, that this would lead to a violation of the Act or Board regulations. *Id.*

IEPA disagrees with Prairie Rivers’ allegations that the Study is flawed and maintains that it was justified in relying on it and in issuing the final permit. In response to Prairie Rivers’ concerns that the Study underestimates background values, IEPA notes that it performed its own water quality impact analysis using historically high background water quality parameters and that the results of its own analysis were not much different from the Study results. IEPA Br. at 23. Finally, IEPA states that Prairie Rivers has failed to demonstrate that the failure of the Study to address either a 3 to 1 dilution scenario or the potential impacts from manganese will somehow result in a violation of the Act or Board regulations. IEPA Br. at 22-23.

Black Beauty’s Response. Black Beauty claims that the Study accurately demonstrates that if the discharge from Outfall 003 contains certain regulated constituents at the same concentrations historically recorded at the nearby Riola Mine, then the water quality standards of Section 302.208 will not be exceeded in either the unnamed tributary or the Little Vermilion River. Black Beauty Br. at 20. In response to Prairie Rivers’ assertions that the Study did not consider the “worst case” conditions, Black Beauty states that even those calculations made by Robert Moore, an employee of Prairie Rivers, show that there will be no exceedence of water quality standards for sulfates, chlorides, or iron. Black Beauty Br. at 21.

Black Beauty acknowledges that the Study is silent as to any potential impacts from manganese, indicating that there was no available data on manganese from the Riola mine. Black Beauty Br. at 21. However, Black Beauty argues that the Board, in a previous rulemaking, has already addressed the issue of manganese in coal mine discharge. Oral Arg. Tr. at 31. Specifically, Black Beauty directs the Board to its own opinion and order in Proposed Amendments to Title 35, Subtitle D: Mine Related Water Pollution, Chapter I, Parts 405 and 406 (December 15, 1983), R83-6. *Id.* In R83-6, the Board determined that an effluent standard of 2.0 milligrams per liter (mg/L) manganese was appropriate for mine waste effluent, and was accordingly added to the table of mine waste effluent found at 35 Ill. Adm. Code 406.106. See Proposed Amendments to Title 35, Subtitle D: Mine Related Water Pollution, Chapter I, Parts 405 and 406 (December 15, 1983), R83-6. Since the manganese limit contained in Black Beauty’s NPDES permit is 2.0 mg/L, Black Beauty argues that the Board has already found this to be an appropriate amount. Oral Arg. Tr. at 31.



Black Beauty also argues that additional sampling performed by Vlachos supports the conclusions contained in the Study. At hearing, Black Beauty introduced exhibits 39, 40, and 41, in support of its position that sampling and analysis conducted after issuance of the permit demonstrate that the permit, as issued, will not violate the Act or Board regulations. However, because the additional analyses are based on data collected after issuance of the NPDES permit, the information is not properly considered by the Board in the scope of this permit appeal. Accordingly, the Board strikes these exhibits and will not consider them in rendering a decision in this matter.

Nevertheless, the Board concludes that, while raising a number of concerns regarding the Study, Prairie Rivers has failed to make a demonstration that the terms of the permit issued by IEPA will result in a violation of the Act or Board regulations. The Board is persuaded that the terms of the permit itself, specifically Special Conditions 11 and 12 (See *supra* pp. 13-17), which require a specific biological inventory and monitoring, will ensure that the requirements of the Act, Board regulations, and NPDES permit are met, and that the stream quality of the unnamed tributary and Little Vermilion River is not degraded.

The Board finds that the information submitted by Black Beauty to IEPA, including the Study, provided IEPA with enough substantive information upon which it could rely in issuing a permit that is protective of water quality. Moreover, IEPA performed its own evaluations, including a nondegradation analysis, that support issuance of the permit. The Board concludes that Prairie Rivers has not proven that the permitted discharge will harm beneficial uses or cause violations of water quality standards. Therefore, the Board finds that the permit as issued will not violate the Act or Board regulations.

#### Whole Effluent Toxicity Monitoring

Prairie Rivers' Argument. Prairie Rivers argues that the NPDES is flawed in that it fails to require whole effluent toxicity (WET) monitoring and biological monitoring. Prairie Rivers Br. at 25. Prairie Rivers argues that this monitoring is important given the potential effluent characteristics and the importance of the Little Vermilion River. *Id.*

At hearing, Moore described WET testing as follows:

Whole effluent toxicity testing differs from the normal chemical -- monitoring chemical parameters in the permit. When you're monitoring specific parameters, specific chemicals within a permit, you're basically measuring concentrations of a pollutant and comparing them against a standard which has been established and assumed to be protective of various uses of the stream.

It's commonly accepted that those standards are certainly not assumed to be protective of every use of every aquatic organism known to man because, quite honestly, they haven't been tested.

Whole effluent toxicity testing is done in order to gauge the toxicity of the effluent in its entirety. All chemicals present at one time in specific -- in whatever concentrations they happen to be present in, you'll then be able to measure the actual toxicity of the effluent itself, not simply measuring the chemical concentrations and comparing those against some standard which has been assumed to be protective. It's really an important backstop. It's a well accepted methodology which U.S. EPA encourages the use of in numerous permits. And, in fact, based on some initial research which Prairie Rivers conducted, we've even found other mines in the country which require whole effluent toxicity testing. Tr. at 26-27

Prairie Rivers maintains that WET monitoring should be required because coal mines are capable of producing a large variety of pollutants with a potentially unknown toxicity. Prairie Rivers Br. at 25. At hearing, Moore testified that WET monitoring is frequently required, "it seems to be an accepted methodology of - - USEPA, Illinois EPA requires whole effluent toxicity testing in permits on a routine basis, and whole effluent toxicity testing has been required around the country for mines of various types." Tr. at 34. However, upon cross examination, Moore conceded that the only NPDES permit of which he was aware in which WET monitoring was required was a permit issued in the State of Alaska; he was not aware of any Illinois NPDES permits requiring WET monitoring. Tr. at 62-63.

Regarding biological monitoring, Prairie Rivers testified that although at least three protected species reside in the Little Vermilion River near the mine, no biological inventories of the unnamed tributary have been done. Tr. at 35. Prairie Rivers contends that biological monitoring should have been done prior to the issuance of the permit. *Id.* Furthermore, Prairie Rivers maintains that DNR shares similar concerns regarding the potential harm from mine discharge on aquatic life in the receiving stream. Prairie Rivers Resp. Br. at 24-25. Prairie Rivers notes that DNR refers to the Little Vermilion River as one of the ten most outstanding aquatic ecosystems in the state (Tr. at 27) and is therefore deserving of protection.

IEPA's Response. IEPA rejects Prairie Rivers' contention that WET monitoring would be beneficial for the Black Beauty discharge. Specifically, IEPA testified that WET monitoring is less reliable than other types of monitoring for evaluating water quality and effluent characteristics during short-term wet weather discharges. Tr. at 122. During oral argument, IEPA clarified a statement in its brief by stating that WET monitoring and other forms of biological monitoring are not typically applied to discharges that occur during wet weather conditions only. IEPA Br. at 21; Oral Arg. Tr. at 16. IEPA testified that WET monitoring is typically used for continuous or non-episodic discharges. Tr. at 120. IEPA noted that it utilizes WET testing as a screening mechanism in conjunction with other types of monitoring. Tr. at 119-20. IEPA maintained that chemical monitoring, of the type required in Black Beauty's NPDES permit, is more appropriate for intermittent and infrequent discharges than WET monitoring would be. Tr. at 122.

Furthermore, regarding biological monitoring, IEPA maintains that the broad range chemical monitoring required by the permit is more proven and appropriate for intermittent and infrequent discharges. Tr. at 122. Moreover, IEPA clarified that the permit does require Black Beauty to perform "introductory or preliminary biological inventories" to help maintain the integrity of the receiving stream

Tr. at 123. IEPA explained that supplemental biological monitoring would be required if, through monitoring, exceedences of certain specified conservative triggers are detected. *Id.* Special Condition 12 of the final NPDES permit (*supra* at pp.14-17) contains the biological monitoring requirements and the trigger levels that, if exceeded, would require further monitoring by Black Beauty. According to IEPA, Special Conditions 11 and 12 were specifically added to the NPDES permit in response to the concerns raised by DNR regarding the need to protect aquatic life within the receiving stream. Tr. at 190-191. In fact, IEPA testified that Special Conditions 11 and 12 were developed in collaboration with DNR. *Id.*

Black Beauty's Response. Black Beauty argues that issues concerning WET monitoring and biological monitoring should not be terms of the permit itself, but rather relate only to how it will comply with the permit and how IEPA (or a third party) can enforce the permit. Black Beauty Br. at 26. Additionally, Black Beauty contends that these issues were fully addressed by IEPA's testimony at hearing and were shown to be without merit. Black Beauty Br. at 27.

Board's Finding. As an initial matter, the Board notes the differences between WET monitoring and biological monitoring. Specifically, while WET monitoring involves the evaluation of the effluent impact on aquatic organisms before it reaches the receiving waters, biological monitoring is concerned with the assessment of the actual impact of the effluent on aquatic life after entering the receiving stream.

The Board also notes that USEPA regulations require NPDES permits to include a limit for whole effluent toxicity only if the permitting authority determines that there exists a reasonable potential for causing or contributing to a violation of a state's effluent toxicity criterion. See 40 C.F.R. 122.44(d)(1). Prairie Rivers has produced no evidence in this proceeding to show that such a potential exists.

As for biological monitoring, the Board observes that Special Conditions 11 and 12 provide a balanced approach for addressing any potential concerns regarding the biological integrity of the receiving stream. Considering both the infrequent nature of Black Beauty's discharges, and the nature of the anticipated contaminants, the Board finds that the permit's comprehensive chemical monitoring scheme, coupled with the conservative "warning" triggers, afford sufficient protection from any potential threat to the biological integrity of the receiving stream.

The Board further finds that a permit condition requiring Black Beauty to perform WET monitoring is not appropriate given the infrequent nature of the discharge. Further, the Board finds that Prairie Rivers has produced no evidence in the record that would demonstrate that the permit, as issued, would cause a violation of any water quality standard. Finally, the Board finds that the biological monitoring requirements specified at Special Conditions 11 and 12 provide sufficient protection from any potential threat to the biological integrity of the receiving stream.

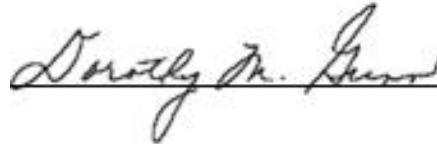
## CONCLUSION

For the reasons expressed herein, the Board concludes that Prairie Rivers has failed to show that the NPDES permit as issued by IEPA to Black Beauty on December 27, 2000, would violate the Act or Board regulations. Therefore, the permit is upheld.

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (2000)) provides for the appeal of final Board orders to the Illinois Appellate Court within 35 days of the date of service of this order. Illinois Supreme Court Rule 335 establishes such filing requirements. See 172 Ill. 2d R. 335; see also 35 Ill. Adm. Code 101.520, Motions for Reconsideration.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 9th day of August 2001 by a vote of 6-0.

A handwritten signature in cursive script that reads "Dorothy M. Gunn". The signature is written in black ink and is positioned above a horizontal line.

Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board