

ILLINOIS POLLUTION CONTROL BOARD
December 19, 1980

AMAX COAL COMPANY, a division)
of AMAX, INC.,)
)
Petitioner,)
)
v.) PCB 80-63, -64
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

MESSRS. ROBERT L. TRIERWEILER AND STEPHEN HANSELL, ATTORNEYS AT LAW, AMAX COAL COMPANY, APPEARED ON BEHALF OF THE PETITIONER.

MS. MARY E. DRAKE, ASSISTANT ATTORNEY GENERAL, AND MR. SCOTT O. PHILLIPS, ATTORNEY AT LAW, APPEARED ON BEHALF OF THE RESPONDENT.

OPINION OF THE BOARD (by D. Satchell):

This matter comes before the Board upon two petitions for review filed by Amax Coal Company (Amax) on April 7, 1980. The petitions seek review of denials by the Illinois Environmental Protection Agency (Agency) of permits required under the old Chapter 4: Mine Related Pollution. Four hearings have been held. Since the transcripts are not numbered sequentially it will be necessary to preface page numbers with a Roman numeral indicating the day on which the hearing occurred. For example, (I:141) means page 141 of the transcript of the hearing held on the first day. The following are the dates and locations of the hearings:

- I August 5, 1980, Lewiston, pp. 1-202
- II August 6, 1980, Lewiston, pp. 203-241
- III August 8, 1980, Springfield, pp. 2-113
- IV August 9, 1980, Springfield, pp. 113-254

The first two hearings were held in Fulton County where the subject facility is located [Section 40(a), Environmental Protection Act (Act)]. The third and fourth hearings were held in Springfield for the convenience of the parties and the Hearing Officer. The public was offered an opportunity to appear and testify. Few members appeared, none testified and there was no demand on the part of the public that the hearing be continued in Lewiston (III:3).

Amax received permit denial letters on February 21 and March 10, 1980 (Resp. Ex. 1, 2). The denials involve supplemental permits required by Rule 201 of Chapter 4: Mine Related Pollution, effective May 23, 1972. The Board has since adopted a new Chapter 4 which supersedes the old Chapter 4 (R76-20; R77-10; Orders of May 15 and July 24, 1980; effective date August 7, 1980).

Amax possesses NPDES permits for the subject facility. It will therefore be exempt from the state permit requirement. Chapter 4 requirements will be written into an NPDES permit (Rules 302 and 402). Under Rule 703, outstanding Chapter 4 permits will expire upon expiration of any NPDES permit for the facility or upon issuance of any permit under the new Chapter 4.

Whether the Agency erred in denying the permit is governed by the old Chapter 4. However, since the permit in question is no longer required this case is moot. The Board will therefore remand the permit to the Agency for reconsideration based upon the new Chapter 4. Since it appears that an NPDES permit modification will be required, Amax will be authorized to submit such additional application forms as may be necessary.

The issue in this case centers upon the construction of sedimentation basins by damming streams which may be waters of the State. Since the parties have invested considerable effort in arguing this question, the Board will consider it to give guidance on remand. The Board will address the question as a matter of interpretation of the new Chapter 4, since that is now the applicable regulation.

This permit appeal concerns applications for Chapter 4 mining permits for the Sunspot surface coal mine operated by Amax in Fulton County. The facility is contained within T. 3, 4 and 5 N., R. 1 E., and T. 3 and 4 N., R. 2 E., 4 PM (Pet. Ex. 1). The facility comprises three areas lying along a north-south line about eight miles long. Active mining takes place in the northern and central areas. The southern contains at least two inactive pits. Coal is transported from the northern and central mining areas to a preparation plant located in the southern area (Resp. Ex. 1, Ex. B, Review Sheet). Drainage has historically been alkaline (Resp. Ex. 1, Ex. B, IV.3.G.4.).

Drainage from the northern area enters Francis Creek and that from the central and southern areas, Otter Creek. Francis Creek is tributary to the Spoon River approximately three miles northwest of the Ipava field. Otter Creek is tributary to the Illinois River approximately sixteen miles southwest of the preparation plant area.

IPAVA FIELD

The northern area is called the "Ipava Field." It is largely contained within Secs. 27, 28, 29, 32, 33 and 34 of T. 5 N., R. 1 E. in Sec. 4, T. 4 N., R. 1 E. (Pet. Ex. 1).

Water in the Ipava Field is collected to the "Ipava basin," or "Francis Creek Basin," a thirty-two acre sediment basin formed by damming Francis Creek (I:10, 36). The Ipava basin discharges via discharge point 003 to Francis Creek. Discharge point 003 is situated in the NE $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 27, T. 5 N., R. 1 E. (Pet. Ex. 1).

Amax possesses an NPDES permit for 003. The location of the discharge point in the permit is erroneous (I:141). On September 28, 1976 the Agency issued permit 1972-MD-1673-OP-1. This permit added the Ipava field to the Sunspot mine. PCB 80-63 involves an application to modify this permit to add new areas to the east and west and the existing sediment basin in Francis Creek to the permit area (Resp. Ex. 1, Ex. A, Log 8022-79, p. 4).

The watershed draining to 003 is about 4500 acres, of which 1100 is affected by mining and 1600 by row crops (I:36). Amax has presented discharge data which shows that its effluent from the Francis Creek basin is within applicable effluent standards. In addition the sediment basin reduces levels of some constituents from those found upstream of the mining area (I:81).

| | <u>Upstream</u> | <u>Downstream</u> |
|---------|-----------------|-------------------|
| Sulfate | 133 mg/l | 111 mg/l |
| TDS | 495 mg/l | 385 mg/l |
| pH | 8.0 | 8.1 |
| Iron | 2.9 mg/l | 2 mg/l |
| TSS | 57.6 mg/l | 28.4 mg/l |

NORTHEAST FIELD

The central area of the Sunspot mine is referred to as the "Northeast Field." The Northeast Field is largely contained within Secs. 9, 10, 11, 14, 15, 16, 21 and 22 of T. 4 N, R. 1 E. (Pet. Ex. 1). The Northeast Field is associated with existing discharge points 002 and 004. In addition, there is a proposed discharge point 004.

Most of the Northeast Field lies between the East and West Branches of Otter Creek which flow south and merge near the southern edge of the Northeast Field (Pet. Ex. 1). Other areas

of the field also lie to the east and west of the eastern and western branches, respectively. Discharge point 002 is associated with the West Branch and discharge points 004 are associated with the East Branch.

The drainage control system associated with 002 consists of a series of three basins: the first or upstream basin is located directly north of the pit in the N $\frac{1}{2}$, Sec. 9, T. 4 N., R. 1 E.; this discharges to a second basin directly west of the active pit in the S $\frac{1}{2}$, Sec. 9; this discharges to the third, an abandoned incline directly south of the existing pit (I:23). The third basin discharges via 002 to the western branch of Otter Creek in the SE $\frac{1}{4}$, Sec. 16, T. 4 N., R. 1 E. (I:23). The coal under the Western Branch has been mined in the vicinity of 002 (Pet. Ex. 1; Resp. Ex. 1, Ex. C, map 7903).

Mining in the Northeast Field is proceeding from south to north. Natural drainage flows from the north toward the active mining in the south. An upstream diversion collects runoff from the unaffected area before it reaches the active mining area. The system of basins associated with 002 collect this upstream runoff and route it around the western side of the Northeast Field toward discharge point 002 (I:103, 134).

Amax has no Chapter 4 permit for the Northeast Field (I:156). Discharge point 002 is authorized under a current NPDES permit. PCB 80-63 involves a request for a supplemental Chapter 4 permit for the Northeast Field and for the treatment works associated with discharge point 002.

Situated on the eastern edge of the Northeast Field is existing discharge point 004 which discharges to the East Branch of Otter Creek in the SE $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 11, T. 4 N., R. 1 E. This is a small settling basin which collects drainage from the unaffected area in the Northeast Field (I:46, Pet. Ex. 1). Existing discharge 004 was constructed in response to negotiations with the Agency concerning permits for the Northeast Field (I:43). Existing discharge 004 is apparently authorized by a current NPDES permit (Pet. Ex. 1).

If the sedimentation basin associated with proposed discharge 004 is constructed, the existing 004 will discharge to the new larger basin. PCB 80-64 deals with the proposed new sediment basin referred to as the "Otter Creek Basin." This is to be formed by constructing a dam across the eastern branch of Otter Creek. The resulting sediment basin will discharge via 004 to the eastern branch of Otter Creek in the NE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Sec. 22, T. 4 N., R. 1 E. (I:11, 40, 43, 94; Pet. Ex. 1). This is apparently already covered by an NPDES permit (Resp. Ex. 2, SD-1, IV. 6. G. b).

The proposed Otter Creek basin will last the life of the proposed mining activity on the east side of the Northeast Field and will collect runoff from the affected area, pit pumpage and a portion of the unaffected drainage (I:95). In addition to collecting drainage from the present active area between the East and West Branches, the Otter Creek Basin will collect drainage from the proposed mining activities to the east of the East Branch of Otter Creek (I:44).

The watershed above 002 is about 4000 acres. Twelve hundred acres are affected by mining and 2000 acres by row crops (I:23). At 002 Otter Creek is an intermittent stream (I:23, 103, 105, 151). The watershed draining to 004 is approximately 2900 acres. Fourteen hundred acres are affected by mining and 1300 by row crop cultivation (I:41, 102).

The Agency has objected to these figures as being inconsistent with the data presented in the application which recites that the total disturbed area tributary to 002 is 187 acres (Resp. Ex. 1, Ex. C, Table 2.1). However, this figure refers to the area to be mined during the first one to two years. The figures cited by Amax refer to the area to be ultimately mined in the watershed. These areas seem to be roughly those indicated on the map (Pet. Ex. 1).

Amax has a long historical record of the composition of discharge 002. It anticipates that the discharge from 004 will be similar (I:97). Background levels of 121 mg/l sulfate and 465 mg/l total dissolved solids (TDS) are unaffected by the sediment pond. pH is about 8.1 which is about the same as the upstream pH. Iron and total suspended solids are around 1.0 and 30 mg/l, respectively. These are about the same as the levels in the water entering the sediment basin from upstream (I:97, 103, 105).

PREPARATION PLANT AREA

The southern area of the Sunspot mine contains the preparation plant area (I:73; Pet. Ex. 1). The preparation plant includes the inactive Vermont and Williams pits (Pet. Ex. 1). On the maps the preparation plant area appears to be mined out. It is not clear if active mining presently takes place there. The preparation plant area is largely contained within Secs. 32, 33, 34, 35 and 36 of T. 4 N., R. 1 E.; Sec. 31 of T. 4 N., R. 2 E.; Secs. 6 and 7 of T. 3 N., R. 2 E.; and Secs. 1, 2, 3, 4, 5, 9, 10, 11 and 12 of T. 3 N., R. 1 E.

Slurry from the preparation plant is piped to the slurry pond along with discharge from ancillary areas. The slurry pond apparently consists of an old incline and last cut pit. This over-

flows to the "freshwater lake." Makeup water is drawn from the freshwater lake. This discharges to a third pond prior to discharge into the South Branch of Otter Creek via discharge point 001 in the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Sec. 3, T. 3 N., R. 1 E. (Pet. Ex. 1; I:74). Discharge 001 is an intermittent discharge which occurs only in response to large precipitation events (Resp. Ex. 1, Ex. A, Schedule ME).

On December 22, 1972 the Agency issued permit 1972-MD-1673-OP to cover active mining in the Vermont pit and Williams pit. On the same date the Agency issued a one year permit 1972-EA-1674-OP to cover the processing plant and related water circuit. This permit was renewed and replaced by permit 1976-EB-1382-OP, issued September 22, 1976, which expired September 22, 1979. An issue in PCB 80-63 involves renewal of this latter permit (Resp. Ex. 1, Ex. A, Log number 8022-79, p. 1).

PERMIT DENIAL LETTERS

On February 21, 1980 the Agency issued "permit denial B" from which Amax appeals in PCB 80-63 (Resp. Ex. 1, Ex. A, last two pages). This permit denial resulted from the consolidation of three previous permit applications which had previously been denied. Amax then submitted additional information which led up to permit denial B.

One reason for the denial of February 21, 1980 was the "information must also be provided to indicate that the discharge from the slurry pond will meet the applicable Chapter 3 effluent standards prior to entrance into the freshwater lake." This refers to the water circulation circuit in connection with the preparation plant. At the hearing the Agency agreed that Amax has now submitted sufficient information to satisfy this objection by reference to a previous variance (Amax v. IEPA, PCB 78-99; 30 PCB 553; June 22, 1978).

On March 10, 1980 the Agency issued a denial letter concerning the proposed discharge 004 on the eastern branch of Otter Creek. This is a subject of PCB 80-64 (Resp. Ex. 2, last two pages). One reason for this denial concerns the failure of Amax to waive the Agency decision period provided by Section 39(a)(4) of the Act. The parties have resolved this difference.

The principal reason for denial as cited in both letters is essentially the same. The following is quoted from PCB 80-63:

Part VI of Chapter 4 requires that discharges meet the effluent standards before entrance to or mixture with the waters of Illinois. This Agency is of the opinion that

the use of Francis Creek and Otter Creek as sedimentation ponds is prohibited by the Illinois Pollution Control Board. Information must be provided to indicate all discharges will meet the effluent standards of Chapter 4 prior to discharge into Francis Creek and Otter Creek.

Section 39(a) of the Act requires that the Agency transmit to the applicant a specific detailed statement as to the reasons the permit application was denied. The effect of Section 39(a) is to limit the Agency to those grounds which are cited in the letter of denial (Environmental Site Developers v. IEPA, PCB 80-15; 38 PCB 443; June 12, 1980).

A fair reading of the denial letter is as follows: Amax must either submit additional information to convince the Agency that the proposed sediment ponds were not located within waters of the State or must submit additional information to indicate that discharges to the basins would meet the effluent standards prior to discharge. The Agency cannot expand the scope of the denial letter before the Board by offering additional reasons for denial. The Agency did not contend that the effluent standards will not be met at the discharge from Amax's sedimentation basins or that there will be violations of the water quality standards downstream.

ISSUE ON APPEAL

Amax has spent considerable time seeking to demonstrate that the Agency in the past has issued permits for sediment basins located in natural waterways, in connection both with the Sunspot Mine and other facilities. In an appeal of a permit denial the issue is whether or not the permit applicant presented sufficient facts to the Agency to show that the facility in question will be constructed or operated so that there will be no violation of the Act or Rules [Oscar Mayer v. IEPA, PCB 78-14, 30 PCB 397; 32 PCB 243; June 8 and December 14, 1978; Peabody Coal Co. v. IEPA, PCB 78-296, 38 PCB 131, May 1, 1980; Environmental Site Developers v. IEPA (supra)]. Section 39(a) does not allow issuance of permits in violation of the Act or Board rules. The fact that the Agency may have issued other permits based on erroneous interpretations of the law does not prevent the Agency from correcting its error and certainly does not control the Board's interpretation of the law. However, the previous permit history for the facility in question is usually relevant.

Amax has constructed the facilities involved in PCB 80-63 without resorting to the permit applications required by Board rules. Amax cannot claim reliance on previous Agency interpretations such as that which the Board found in DuPont v. IEPA, PCB 79-106, August 21, 1980.

At some points Amax sought to introduce evidence which was not before the Agency when it considered the application. The

Board has long held that the issue on appeal of a permit denial is whether the Agency erred and not whether new material which was not before the Agency persuades the Board that a permit should be granted [Soil Enrichment Materials v. IEPA, PCB 72-264, 5 PCB 715 (1972); Oscar Mayer, Environmental Site Developers, (supra)].

EXEMPTION FOR WASTE

Amax has contended that mine runoff is beyond the Board's jurisdiction because of language added to Section 3(ff) of the Act by PA 81-856, the definition of "waste":

Any garbage, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining and agricultural operations, and from community activities, but does not include . . . any solid or dissolved material from a facility subject to the Federal Surface Mining Control and Reclamation Act of 1977 PL95-87 or the rules and regulations adopted by the State of Illinois pursuant thereto. [Emphasis added]

This definition speaks of "garbage," "sludge" and "other discarded material" which are regulated for the most part pursuant to Title V: Land Pollution and Refuse Disposal. Section 13(a)(3) of Title III of the Act authorizes the Board to adopt regulations prescribing "standards for issuance of permits for construction, installation, or operation of any equipment (or) facility . . . capable of causing or contributing to water pollution or designed to prevent water pollution or for the construction or installation of any sewer or sewage treatment facility or any new outlet for contaminants into the waters of this State." The term "waste" is not used in the grant of authority under Title III, which speaks of "contaminants," regardless of whether they are "waste."

Board regulation under old Chapter 4 is based in part on statutory authority from Title III: Water Pollution. The new Chapter 4, effective August 7, 1980 is based exclusively on statutory authority pursuant to Title III. The Board has acknowledged that coal mines may no longer be subject to regulation under Title V: Land Pollution and Refuse Disposal. Board regulation of coal mine refuse disposal practices is now based solely on Title III (R76-20, R77-10, Rule 101, Opinion of July 24, 1980, p. 8). In this particular case the sedimentation basins which are in dispute are treatment facilities which expressly fall under Section 13 of the Act.

WATERS OF THE STATE

Definitions of "waters" are found both in Section 3 of the Act and in Rule 104 of Chapter 3. These are incorporated by reference

into both the old and new versions of Chapter 4. In Chapter 3 the underlined language has been added to the definition found in the Act:

"Waters" means all the accumulations of waters, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specifically mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable.

As used in the Act and Chapter 3 the definition of waters is broad. Francis Creek and Otter Creek are waters of the State upstream of the points where Amax has or will dam them. Furthermore, they are waters of the State even upstream of the points where the Agency itself has suggested creating smaller impoundments.

The Agency denied the permit in part because it believed definition of "waters" in Chapter 3 includes language forbidding the use of waters of the State as a treatment works. Amax contends that the Board is without authority to modify the statutory definition of "waters."

The definition of "waters" found in the Act includes waters contained within sewers and treatment works. The Act authorizes the Board to impose water quality standards on waters found therein. However, the Board in adopting the water quality standards of Part II of Chapter 3 elected not to impose water quality standards on sewers and treatment works. Accordingly sewers and treatment works were excepted from the definition of "waters" used in Chapter 3. This exception is not a modification of the statutory definition, but rather is a limitation defining what portion of its jurisdiction over waters the Board is exercising in Chapter 3 (CIPS v. IEPA, PCB 73-384; 11 PCB 677; March 28, 1974; 36 Ill. App. 3rd 397, 344 NE 2d 229; Commonwealth Edison Co. v. IEPA; PCB 73-248; 13 PCB 69, July 18, 1974).

"Waters" as defined in the Act comprises the following components: "waters" as defined in Chapter 3 and waters found in sewers or treatment works. All of these waters are within the Board's jurisdiction. The question as to whether the water is a Chapter 3 water or, alternatively, water found in a sewer or treatment works does not go to the question of the Board's jurisdiction. It determines whether the water quality standards of Part II are applicable and determines the downstream limit for monitoring and application of the effluent standards to Part IV of Chapter 3.

The Agency contends that the Board has previously construed the definition of waters as a direct prohibition against placement

of the treatment works within waters of the State (League of Women Voters v. North Shore Sanitary District, PCB 71-7, 12, 13 and 14, 1 PCB 369). This case actually involved application of Sanitary Water Board rules rather than Chapter 3. The Board in later cases declined to find such a prohibition in Chapter 3 in cases involving use as cooling ponds of artificial lakes formed by damming streams [CIPS v. IEPA, Commonwealth Edison Co. v. IEPA, (supra)].

The denial letters state in addition that Amax failed to demonstrate compliance with the effluent standards prior to discharge to waters of the State. Rule 605 of new Chapter 4 requires that mine discharges not cause violation of water quality standards. Rule 602 requires that samples to determine compliance with the effluent standards be taken prior to mixing with waters of the State.

Amax has demonstrated that various federal and state regulations require or encourage the use of sedimentation basins. Rule 608 of the new Chapter 4, which became effective August 7, 1980, requires the use of sedimentation ponds. As the term sedimentation pond was used by regulatory authorities and the coal mining industry at the time of adoption of Chapter 4, it included basins formed by damming a stream or ravine (Pet. Ex. 5). In requiring sedimentation ponds in Rule 608 of new Chapter 4, the Board did not expressly intend that they be limited to perched ponds or other facilities which are not formed by damming a stream or ravine. These particular sedimentation ponds in intermittent streams fall within the exception for treatment works in Rule 104 of Chapter 3 and are not "waters of the State."

In adopting this holding the Board does not intend that there should be no limit on the acceptable size of streams which may be dammed or the amount of upstream drainage from unaffected areas which they may receive. The Board will decide this on a case-by-case basis. The Board notes that the effluent standards of Rule 606 of new Chapter 4 contain an exception for discharges resulting from 10-year, 24-hour precipitation events. This effectively requires sedimentation ponds to be designed to contain the runoff from a slightly smaller precipitation event. For larger streams it will be impracticable to contain such a rainfall and meet the effluent standards.


In various meetings held before the permit denials, the Agency suggested diversion of upstream drainage and the construction of smaller sediment basins further upstream than those proposed by Amax (I:24, 30, 40, 42). Amax objected to the expense and loss of reserves this would entail (I:32, 40, 44). The Agency's proposals would involve more disturbance and would not last the life of the proposed mining activity (I:44, 93). Small settling basins have insufficient detention time to be effective for sediment control (I:93). Amax cannot consistently meet the effluent standards with small basins (I:100). Amax believes its proposal is more effective in improving water quality (I:94). The Board has not addressed the alternative methods of compliance.

The Agency has authority to regulate surface drainage by permit condition under Rule 505 of the new Chapter 4. Rule 604 prohibits dilution of effluents, provides for recomputation of concentrations to correct for dilution and authorizes the Agency to require segregation of wastestreams. Similar authority exists in old Chapter 4 and in Rule 401 of Chapter 3. This holding in no way limits the Agency's authority to review the permit application and impose such permit conditions as may be necessary or required to accomplish the purposes of the Act. On remand the parties may be able to agree to an acceptable combination of upstream diversion, small and large basins, and pretreatment of aggressive waters. If not, any issued permit will be appealable to the Board.

On November 6, 1980 the Illinois Coal Association (ICA) filed an amicus brief supporting reversal of the permit denial. On November 12, 1980 the Agency filed a motion to strike the brief. On November 20, 1980 the ICA filed a motion for leave to file the amicus brief and a supporting memorandum. The motion to strike is granted. On December 15, 1980 the Agency filed a motion for extension of time, until thirty-five days after the date of this Opinion, in which to file a motion for reconsideration of the Board's December 4, 1980 Order. The motion is granted.

This Opinion, supplementing the Board's Order of December 4, 1980, constitutes the Board's findings of fact and conclusions of law in this matter.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion was adopted on the 19th day of December, 1980 by a vote of 5-0.


Christan L. Moffett, Clerk
Illinois Pollution Control Board