



- 003 Wastewater treatment plant, contact cooling water from a continuous cast furnace\* and filter backwash water\*
- 004 Non-contact cooling water from old and new annealing furnaces\*
- 006 Stormwater from roof drains and parking lots

The Tube Mill Ponds were built prior to 1966 by rerouting and damming a natural waterway. The Tube Mill Ponds serve as a source of process and cooling water. They have a total area of 5 to 10 acres at the maximum (Resp. Ex. 7).

At the hearing Revere's witness, who had no personal knowledge of the drainage basin, testified that a previous employee had determined that 5000 acres drained to the Tube Mill Ponds (R. 24).

Respondents Exhibits 7 and 8 are the 7.5 minute Clinton Quadrangle (1979) topographic map published by the U.S.G.S. and the General Drainage Map of Clinton County published by the Illinois Division of Waterways. From these it is possible to infer that the drainage area is around 640 acres, consisting of the N 1/2 of Section 2, T19N, R2E and the S 1/4 of Section 35, T20N, R2E of the 3rd Principal Meridian, together with some adjacent land.

In response to a request for more information from the Board, Revere reviewed its files and determined that the employee had estimated 300 acres of surface drainage and 1000 acres of field tiles, instead of the 5000 acres testified to at the hearing (Petitioner's submission of July 11, 1983). This estimate of 1300 acres is still too high, based on the topographic and drainage maps, and on the expected flow.

The Agency has indicated that it estimates the surface drainage area as 742 acres, a figure which the Board will accept as the correct surface drainage (Agency's Supplemental Information of July 8, 1983).

The Agency suggests that a vast network of subterranean field tiles is capable of encompassing a much larger drainage area than the surface drainage pattern. Such a reversal of the surface drainage does not appear on the drainage map, which is primarily designed to show drainage districts.

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\*Discontinued by closing of tube mill

Normal precipitation for the area is 38.7 inches per year. Based on 50% runoff, 742 acres would yield an average flow of about 1,000,000 gallons per day. This is on the high side of Revere's estimate of the upstream flow as 380,000 to 640,000 gallons per day, which would be more consistent with a drainage area of 370 acres.

Prior to closing of the tube mill, Revere discharged 260,000 to 280,000 gallons per day to the ponds. The current discharge is 60,000 to 80,000 gallons per day (R. 21, 24).

#### DILUTION

Of the issues raised by the petition for review, only the question of the designation of tributary outfalls 003 through 006 in place of 001 remains to be decided. Revere has framed the issue in terms of whether the Tube Mill Ponds are waters of the state. However, it is not necessary for the Board to reach this issue to determine the correctness of the designation of outfalls. 35 Ill. Adm. Code 304.102 provides as follows:

#### Section 304.102 Dilution

- a) Dilution of the effluent from a treatment works or from any wastewater source is not acceptable as a method of treatment of wastes in order to meet the standards set forth in this Part. Rather, it shall be the obligation of any person discharging contaminants of any kind to the waters of the state to provide the best degree of treatment of wastewater consistent with technological feasibility, economic reasonableness and sound engineering judgment. In making determinations as to what kind of treatment is the "best degree of treatment" within the meaning of this paragraph, any person shall consider the following:
  - 1) What degree of waste reduction can be achieved by process change, improved housekeeping and recovery of individual waste components for reuse; and
  - 2) Whether individual process wastewater streams should be segregated or combined.
- b) In any case, measurement of contaminant concentrations to determine compliance with the effluent standards shall be made at the point immediately following the final treatment process and before mixture with other waters, unless another point is

designated by the Agency in an individual permit, after consideration of the elements contained in this section. If necessary the concentrations so measured shall be recomputed to exclude the effect of any dilution that is improper under this Section.

Measurement of contaminant concentrations to determine compliance with the effluent standards is to be made at the point "immediately following the final treatment process." This is to be before mixture with other waters, regardless of whether the waters are waters of the state. Revere has not identified the Tube Mill Ponds as treatment works in the application; nor has it made a showing that combining the wastewater sources in the Tube Mill Ponds is the "best degree of treatment", as opposed to segregation and separate treatment of each prior to discharge to the ponds. Furthermore, the effluent is being diluted by upstream sources between 003 through 006 and 001. The Board therefore holds that the Agency was correct in designating outfalls 003 through 006 as the points for determining compliance with effluent limitations.

#### WATERS OF THE STATE

It is not necessary for the Board to determine whether the Tube Mill Ponds are waters of the State in order to decide the issue in this appeal. However, since the parties have fully briefed the question, the Board will address it in order to give future guidance.

The definition of waters of the State serves two important purposes: It sets the downstream limit for application of the effluent standards; and, it determines the point of application of the water quality standards, subject to the mixing zone (§302.102).

The Environmental Protection Act (Act) defines "waters" as follows:

"Waters" means all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this State.

The Tube Mill Ponds clearly fall within this definition. The fact that they are on plant property is specifically addressed by the inclusion of "public and private". The fact that the waterway has been rerouted from the natural flow is specifically addressed by the inclusion of "natural, and artificial".

There are two major exceptions which operate to move the point of application of the water quality standards downstream: the treatment works exception stated in Section 301.440 (CIPS v. IEPA, PCB 73-384, 11 PCB 677, March 28, 1974; Commonwealth Edison v. IEPA, PCB 73-248, 13 PCB 69, July 18, 1974; Amax (Sunspot) v. IEPA, PCB 80-63,-64, 40 PCB 175, 505, December 19, 1980, February 19, 1981) and the industrial ditch exception created by Board case law (Allied Chemical Corp. v. IEPA, PCB 73-382, 11 PCB 379, February 28, 1973; Armak Co. v. IEPA, PCB 79-153, 37 PCB 543, March 20, 1980).

Even at 742 acres the watershed involved in this case is much larger than the drainage area approved in Allied Chemical, and much larger than the area rejected in Armak. The industrial ditch exception is clearly inapplicable.

Revere relies primarily on the treatment works exception, claiming that the ponds allow an increased retention time in which additional metal hydroxide precipitation is accomplished. In addition, when the tube mills were operating, the ponds were part of a process water recycling operation. However, Revere did not specifically identify the ponds as treatment works in any permit application. Section 12(b) of the Act prohibits the construction or operation of any facility designed to prevent water pollution without a permit.

Natural depressions in the ground are often utilized in the construction of a treatment lagoon; often there is some small watershed which is tributary to the lagoon. However, there is a limit to the size of a waterway which can be dammed to form a treatment lagoon. With 742 acres tributary to them, Revere's 5 - 10 acre lagoon system is clearly waters of the State. The lagoons must be reconfigured in some way to be permittable under the treatment works exception.

#### CHANGE OF CLASSIFICATION

Revere also complains that the Agency has changed the designation with no change in the facts or Board regulations. It should be noted that Revere recognized that the lagoons were waters of the State when it requested a variance in PCB 76-246. The Agency can correct errors it has made in previous permits, and it certainly cannot dictate the law to the Board through its errors (Amax, supra). Revere has not shown the type of reliance found by the Board in Dupont v. IEPA, PCB 79-106, 39 PCB 348, August 21, 1980. Dupont had completed a costly and highly successful upgrading of its treatment works, in close association with the Agency, which would have been useless if the works were reclassified.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

The Board has reviewed the conditions of NPDES Permit No. IL0002356 and affirms the permit as issued by the Agency.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 23<sup>RD</sup> day of September, 1983 by a vote of 5-0.

  
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Christan L. Moffett, Clerk  
Illinois Pollution Control Board