



in the Champaign case, above. We do not find the complaint impermissibly vague; it alleged specific dates and places along with the specific provisions of the law and regulations claimed to have been violated; discovery was available to provide any desirable particulars. Cf. the Champaign case, above. The constitutional challenges to the Board's statutory authority to determine violations of the law and regulations and to the water pollution standard itself we rejected in Champaign and in earlier decisions and reject here for the same reasons.

#### The Alleged Permit Violation.

The facts respecting one of the alleged violations are uncontested. About July 1, 1971, the City constructed a lift station to carry dry-weather flow in one of its storm sewers into an interceptor tributary to the Sanitary District's sewage treatment plant without obtaining a permit. See, e.g., July 7, pp. 137-40. EPA contends that a permit was required under section 12(b) of the Environmental Protection Act because the lift station was "designed to prevent water pollution" and of a "type designated by Board regulations," and under section 12(c) because its installation would "increase the quantity or strength" of a "discharge of contaminants into the waters."

The City inconsistently argues that although the purpose of the installation was "to prevent the constituents in the dry weather flow of an urban storm drain from eventually entering the Boneyard Ditch," it was not "designed to prevent water pollution" because there is no proof that the flow pumped by the lift station "contains constituents which would cause pollution." (Brief, p. 9). The basis for this position appears to be that no permit is required for the construction of pollution control equipment unless there is actual proof that the discharge to be controlled itself violates the law. We do not so read the requirement. Equipment "designed to prevent water pollution" means pollution control equipment, plainly and simply; it includes any device meant to limit the discharge of contaminants. Any other reading would destroy the purpose of the law to subject such equipment to prior Agency scrutiny in order to assure that it will accomplish its purposes without causing countervailing problems of its own.

But it is not enough for liability under section 12(b) that pollution control equipment was installed without a permit; it must also be shown that the equipment was of a type designated by Board regulations. The Board was given discretion to limit the workload on the Agency and on those installing such equipment by denominating those classes of equipment for which a permit would be required. The Agency

points to Rules and Regulations SWB-1, preserved in effect by section 49(c) of the statute, which prescribe design criteria for certain pollution control facilities and require the submission of plan documents for their construction in connection with the permit function. It was the clear implication of this regulation (see SWB-1's Statement of Policy) that permits were required, as the statute then made quite clear (Ill. Rev. Stat. ch. 19, section 145.11 (1969)), for the classes of equipment there described, which included such items as sewers, sewage treatment works, and sewage pumping stations.

The City does not dispute that this regulation adequately designated the types of equipment for which permits were required under section 12(b) of the present statute, but contends that the pump in question is not a pumping station within the meaning of SWB-1, on the ground that the prescribed specifications for pumping stations are inapplicable to the type of pump here in question: "The City is incapable of constructing a pump station to comply with the present regulations affecting sewage lift station." Plainly the rule was drafted with other types of pumps in mind, but the Introduction expressly contemplates the possible need for "deviations" in particular unforeseen cases; we think the regulation is broad enough to indicate that the pump here installed required a permit. This makes it unnecessary for us to pass upon the EPA's further contention, to which the City does not respond, that a permit was required because the pump increased the flow to the sewage treatment plant and therefore to the water to which the plant discharges. The importance of these questions for the future is greatly minimized by the new regulations specifying with somewhat greater clarity those classes of facilities for which permits are now required. PCB Regs. Ch. 4, Rule 901.

In sum, we find the City violated section 12(b) of the statute by installing the pump without a permit. Because a municipality is involved, because from the record it appears the City acted in complete good faith, because of the uncertainty of the old rules, and because the intent of the installation was to reduce pollution, we see no need to impose money penalties for this offense. We shall order the City to apply now for the permit in order that the Agency may determine whether or not to allow the installation to remain.

#### Allegations of Pollution.

The more central allegations of the complaint relate to polluted conditions in the Boneyard itself. Paragraph 5 alleges that on August 3, 1971 the City allowed the discharge of wastes from its Broadway Avenue sewer, causing water

pollution in violation of section 12(a) of the statute. Paragraph 6 alleges the same thing with regard to the Coler St. Arch on July 21, 1972. Paragraph 3 charges that discharges from the Coler St. Arch on July 8 and August 3, 1971 violated both § 12(a) and Rule 1.05(d) of Rules and Regulations SWB-14, which forbids concentrations in streams of toxic substances in concentrations exceeding "one-tenth of the 48-hour median tolerance limit, for fish," except in areas "immediately adjacent to outfalls" and in streams or segments designated by the Sanitary Water Board (or by its successor, the EPA) "to be unsuitable for sustaining fish and aquatic life." No such designation has been made for the Boneyard so far as the record reveals.

There are a number of questions that must be answered in order to determine the City's liability under these charges.

The Existence of Pollution: Bacteria.

Pollution and violation of the fish-related water quality standard the Agency bases upon evidence of two types of contamination in the Boneyard and traceable to the sewers in question: bacteria and ammonia. With regard to the former the exhibits establish, as recited in the Agency's brief, that on August 3 the Coler St. discharge contained 2,030,000 fecal coliforms per 100 ml, clearly indicating a potential for pollution, but a rather low downstream bacterial level attributed by the Agency to the favorable effects of "a subsequent chlorine discharge." Since the violation alleged has to do not with an effluent standard prescribing maximum discharge limits but with conditions in the receiving stream, we cannot find a violation on this basis unless we take the position that a discharge of this strength would "tend" to cause pollution. A related issue is presented by evidence of an extremely high discharge level of Broadway on August 3 (11,750,000), downstream 130,000, and upstream 200,000, indicating the stream was already polluted before it received the additional bacteria (EPA exs. 9, 11, 12).

We do not find it necessary to resolve these questions, however, since a considerable actual adverse effect on the stream as the result of July 8 fecal coliform discharges from the sewer in question was amply proved. See EPA Exhibits 1, 2, and 3, showing a discharge of 3,260,000 f. coli per 100 ml; upstream concentrations of 56,000; and downstream of 148,000. Similar results were obtained on July 21, at Coler Street.<sup>1</sup> As indicated by EPA witness

1. Discharge 870,000, upstream 14,300, downstream 91,000 (EPA Exs. 13, 14, 15, 16).

Hutton, fecal coliforms are the standard indicator of fecal contamination; such high fecal coliform counts suggest the presence of harmful bacteria constituting a hazard to human health (July 7, p. 120). We think bacterial pollution of the Boneyard as a result of discharges from Coler St. sewer has been shown.

#### Ammonia

The ammonia violations alleged present a more difficult question. The exhibits are clear that on both July 8 and August 3 stream concentrations of ammonia were significantly raised by discharges from the sewers in question. On the former date upstream ammonia was 1.2 mg/l, downstream 3.2, and the discharge 21 (Ex. 1, 2, 3); on the latter the respective values were 0.45, 6.5 to 7.6, and 11 to 20 (Exs. 4-8). The City asks us to hold that the downstream samples were taken too near the outfall to qualify under the exception in Rule 1.08 for areas immediately adjacent to the outfall; the Agency disagrees. To the extent that the violation is based upon the statutory prohibition of water pollution, as we held in Champaign this defense is inapplicable; the mixing zone concept applied only to certain regulations, as no regulation can repeal the statutory ban on causing actual water pollution. See EPA v. City of Champaign, above.

The City further points out that the only proof as to the harmful nature of the observed ammonia concentrations--the key to both the statutory and rule violations--was that such levels would be toxic to fish if they persisted for 48 hours (July 7, pp, 86-99), whereas the samples taken showed only that the levels were present at the instant the samples were taken. Statutory water pollution, for present purposes, is defined as rendering the waters "harmful . . . to fish" (section 3(n)). It is arguable, and the City contends, that this requires a showing that the concentration complained of existed for long enough to be harmful. There is some force to this argument, although in the context of this case it might impose a very considerable impediment to the establishment of the Agency's case since it would suggest continuous sampling for a period of 48 hours. Perhaps proof that such a high concentration existed should be taken, consistent with the statutory purpose, either to establish that the discharge causing such levels tended to cause pollution, or to shift the burden of proof to the respondent to show the condition did not persist. One purpose of the "tend to cause" provision clearly was to allow incipient pollution to be abated before it actually causes harm.

Similarly, while EPA urges that it is sufficient under Rule 1.05 to show that a concentration one tenth of that which would be toxic if it lasted 48 hours existed for a single instant, the City attacks such a construction on the ground that it would impose an unreasonably strict standard that could not have been contemplated in drafting the provision. The City's position is that sampling must continue long enough to show that the time-concentration relationship is such to expose a fish over 48 hours to as great a weight of the toxic material as would be represented by one tenth of a tolerance limit held steady over the entire period. Once again such a construction would present significant proof problems for the Agency.

These questions of interpretation are presented to us for the first time in this case, in which they compete for our attention and that of the parties with a multitude of other difficult and important questions. We are hesitant to attempt their resolution, which would have precedential import going far beyond this case, without the opportunity for further argument and consideration. We do not think in view of our resolution of other issues here presented, that it is necessary for us to decide them today, since we would enter the same order on the basis of bacterial pollution regardless of our decision with respect to ammonia.

We specifically call the Agency's attention to the question of the relation between concentration and time both under the statutory water pollution section and under the provision respecting 48-hour tolerance limits in Rule 1.05, which has been carried forward in our new regulations (PCB Regs. Ch. 3, Rule 203(h)). We invite the proposal of a clarifying amendment to the regulations that would to the extent possible both permit surveillance and enforcement without undue sampling burdens and at the same time tailor the prohibition of toxic materials to some percentage of the actual dose required to cause harm.

#### Protected Nature of the Boneyard

One of the City's prime contentions is that, whatever the condition of the Boneyard, the law does not cover it because the Boneyard is not a "water" of the State as defined in section 3(o) of the Act and because only "waters" are protected against pollution. The language of the Act is of no help to this position, since it defines waters as "all accumulations of water, surface and underground, natural and artificial, public and private." The legislative purpose evidently was to sweep very broadly in defining the waters subject to statutory protection. We have recognized, of course that the statute does not intend to prevent pollution in sewers whose function it is to carry wastes to the point of treatment, and we have insisted upon proof in cases involving

borderline situations that the alleged stream is really that and not a part of the sewer system. EPA v. Koppers, Inc., #71-41 (June 23, 1971).

In the present case the City's argument that the Boneyard is not protected is based not upon any facts indicating that it was created as a part of a waste-carrying system but on evidence that man has altered the channel so as to improve its ability to carry off stormwater (July 8, pp. 193-95, 222-32). It is quite clear that at one time the Boneyard was an ordinary creek, providing natural drainage for rainwater in the Champaign-Urbana area. We do not think the law allows a stream to be deprived of all protection against pollution simply by the construction of concrete beds, intermittent covers, and sheet pilings. If it did the law would provide no protection against the transformation of fine streams into festering open sewers. We see no indication that a result so wholly out of line with the statutory purpose of the Environmental Protection Act was intended. And, needless to say, as we said in Champaign, the fact that the Boneyard is already polluted is a reason for cleaning it up, not for declaring it devoid of statutory protection. We hold the Boneyard is a "water" protected by section 12(a) against pollution.

#### The City's Ownership.

That the City owns and controls the Broadway sewer it essentially concedes (July 7, p. 133). Much is made, though, of the fact that the actual outlet through which the Coler Arch discharge takes place seems to be owned by the Sanitary District (July 7, p. 135). We do not see how this in any sense exonerates the City. For the City acknowledges that it owns the sewers that bring waste into the Arch for discharge to the Boneyard (id., p. 136); no evidence is there to suggest any plausible alternative source for the materials discharged from the Arch other than the City's sewers. Exfiltration from a Sanitary District interceptor into the Boneyard, given as a possibility by the City (July 8, pp. 235-36), would not explain the clearly shown discharge from the arch itself. And the Champaign case made clear, as Urbana itself contends in its pleadings against the third parties it brought into this case, that those who discharge contaminants into someone else's storm sewers can be held liable for pollution caused when those contaminants reach the stream.

The Contract with the Sanitary District.

The City relies by way of further defense upon a court-approved contract vesting the Sanitary District with plenary authority over the Boneyard. The operative paragraph indicates that the Sanitary District "accepts full and complete responsibility for the improvements and maintenance of the the boneyard and its existing open tributaries, and it agrees to provide and keep in repair an adequate system of storm water drainage therein and to correct any unsanitary and unhealthful conditions existing therein." (City Ex. 5, p. 3). At first glance we thought it was the City's contention that by this contract it had arranged for the District to police discharges into its sewers and therefore shifted responsibility for any pollution in this case to the District. We held in Champaign that the owner of storm sewers has the obligation to police them to prevent the controllable discharge of improper materials into them, but we can conceive of the possibility that a municipality might wish to contract for someone else to provide this service and that such an arrangement might be conducive to more efficient division of functions among various municipal governments. But upon oral argument Urbana disclaimed any such contention here. The evidence is clear that nobody but the City polices its sewers (July 7, p. 137; July 8, pp. 191-92); the agreement relates to maintenance of the Boneyard itself, and the City remains responsible, by its own admission before the Board, for policing its sewers.

The City's Obligations.

Urbana argues, as did Champaign, that because it did not generate any of the wastes that may have caused pollution but only transported them it cannot be held responsible for anything that might have come through its sewers. We held to the contrary in Champaign and reaffirm that holding here. The City's fears that we may be imposing an impossible standard of assuring the absolute purity of discharges that it cannot completely control are refuted by the language of the Champaign case, spelling out the scope of an owner's responsibility:

To hold that the City has an obligation to take affirmative action to limit the pollution attributable to material flowing through its sewers, however, does not necessarily make the City an "insurer" that no such pollution will ever occur. . . . We think the City, by undertaking to carry storm waters from lands within its borders, assumed a certain duty to avoid unnecessary pollution as a result. . . . We believe this principle is embodied in the statutory term "allow" (citing cases). . . . It is the City's obligation to do what

it can to prevent others from discharging inappropriate materials into its sewers. . . . It is not enough to take action after an instance of creek pollution has been brought to the City's attention; the City must not only correct what it knows about, it must also make an effort to find out what needs correction. It must police the creek itself to determine its condition; it must police the sewers to determine any illegal sources of pollution; it must then take corrective action, which may include the filing of complaints with this Board as well as local remedies.

Urbana, like Champaign, has taken certain steps to eliminate improper discharges to its storm sewers tributary to the Boneyard and has achieved some significant success. It is reported that dry weather flow at the Coler St. arch has been reduced 75% in a year; that Broadway has no illegal connections and a leak there has been repaired a broken sanitary tile and disconnected horticultural drains that contributed contaminants to the storm sewer (July 7, pp. 141-48; July 8, pp. 237-53, 263-64, 284). As in the case of Champaign, however, we find no sufficient explanation of the sources of the pollution found in the present case and no indication as to whether or not the bacterial contamination found in 1971 has been eliminated. We therefore hold Urbana has not fully satisfied its obligation to trace and to eliminate if practicable all sources of pollution through its sewers. As in Champaign, we think no purpose would be served by a money penalty against the City at this time.

#### ORDER

1. The City of Urbana shall, by March 6, 1973, submit to the Board and to the Agency a report containing the following:
  - (a) A description of the condition of the Boneyard and, to the extent reasonably determinable, the sources of its pollution;
  - (b) A description of steps taken by the City in the intervening period to deal with cases of pollution of the Boneyard;
  - (c) A detailed program designed to clean up and improve the quality of the water in the Boneyard within a reasonable but fixed period of time, to the extent practicable and to the extent adverse conditions are caused by discharges through the City's storm sewers.

2. The third-party complaints against the University of Illinois, the Urbana-Champaign Sanitary District and the Saline Branch Drainage District are hereby dismissed.
3. The City of Urbana shall promptly apply for a permit for the installation of the lift station at Sewer No. 4689.
4. Upon receipt of the report required by paragraph 1 of this order the Board shall take such further proceedings as may be appropriate.

I, Christan Moffett, Clerk of the Pollution Control Board, certify that the Board adopted the above Opinion this 6<sup>th</sup> day of September, 1972 by a vote of 4-0.

Christan F. Moffett