

**State of Illinois
Pollution Control Board**

ANNUAL REPORT

by David P. Currie, Chairman
August, 1972



**Richard B. Ogilvie, Governor
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On July 1, 1972, the Illinois Pollution Control Board completed its second full year of operations. Our work during the first five months of operations was summarized in a report issued in January, 1971, and a second, more comprehensive report was issued on June 28, 1971. This report attempts to summarize the recent work of the Board in order to encourage a public evaluation of the program.

The Board is one of three administrative agencies created by Governor Ogilvie's Environmental Protection Act of 1970, which represented a complete overhauling of the State's machinery for combatting pollution. The Environmental Protection Agency is the eyes and ears of the new program, collecting information as to polluted conditions and their causes and, with legal assistance provided by the Attorney General, prosecuting complaints against individual polluters before the Board. The Institute for Environmental Quality is the bridge between scholars who know the facts about pollution's causes and cures and policy makers who need to know, and it is the Institute's job, among other things, to propose new regulations for Board consideration and to present evidence in support of its recommendations. The Board itself resembles both a legislature and a court: In rule-making proceedings it adopts regulations of general applicability prescribing limits on pollution discharges of various kinds, and in individual complaint and variance cases it acts as a tribunal to determine whether violations have occurred and what remedy to impose when a violation is found.

In order to assure all persons a fair hearing, the three agencies are separate from and independent of one another. Board Members are chosen for their judgment and technical expertise; they do not represent special interest groups, do not participate in partisan politics, devote full time to their jobs, and are independent of the administration. All matters before the Board are decided strictly on their merits on the basis of the record.

I. RULE-MAKING

a) Early Efforts: The Board inherited from its predecessors a body of rules and regulations defining forbidden pollution levels and set as its principal task in its first two years the complete re-examination and updating of these regulations. We began with a series of relatively

narrow and specific new standards to deal with immediate problem situations; for example: accelerating the date for secondary sewage treatment on the Mississippi River (#R 70-3); requiring removal of phosphates from wastes discharged to Lake Michigan (#R 70-6); revising the rules for control of air pollution episodes (#R 70-7); and providing for strict control of mercury discharged to the water (#R 70-5). The episode rules we have not had to rely on so far, except for occasional air pollution watches in which adverse weather conditions created a risk of serious pollution that failed to materialize. We have been spared serious air pollution emergencies by the fortuities of the weather, but the Agency has secured and approved episode action plans from large numbers of potential emission sources and is prepared to put them into force whenever the need arises. The Mississippi regulation should result in as much as nine years' advancement in cleaning up discharges that now are given quite inadequate treatment. The mercury regulation has been quite successful: The single chlor-alkali plant in the State, a mercury user of the type that gave rise to the notorious Lake St. Clair affair, has drastically reduced its discharges (Monsanto, PCB 71-110); and a number of paint manufacturers have wholly terminated their discharges of contaminated waste water while pressing the search for safe and adequate mercury substitutes (e.g., Sherwin-Williams, PCB 71-111). The phosphate regulation, which is of utmost importance in preventing Lake Michigan from becoming another Lake Erie, has resulted in phosphate removal at the largest sewage treatment plant on the Lake in Illinois. At the Lake Michigan Enforcement Conference, in September, 1972, the District announced that all of its plants, including the smaller ones scheduled to be abandoned, either are or would be in compliance with the phosphate requirements shortly (North Shore Sanitary District v. EPA, # 71-36).

b) Effluent Standards: The second phase of the Board's rule-making activities consisted of a sweeping overhaul of the air and water regulations. We began this process on our own initiative with a proposed set of effluent standards for a large number of water pollutants not covered by the old regulations, ranging from such toxic materials as arsenic, cadmium, and lead to nuisance substances like oil and phenols (#R 70-8). Numerous hearings on the proposal showed the need for accurate information as to what treatment was available at reasonable cost. The Institute gave us an exemplary report that summarized what was known about the available technology and, with this summary and a few more hearings, we were able in January, 1972 to adopt a set of standards that we believe will result in a massive reduction of offensive discharges by the employment of standard, well-established treatment methods that are already in use at well-run plants in Illinois and elsewhere. Among other things the experience with the effluent standards has taught

us the critical importance of solid input from the Institute in rule-making proceedings.

c) Water Quality Standards. In March, 1972, we adopted, after quite extensive hearings, a greatly revised set of water quality standards (#R 71-14) which, together with the effluent standards form the heart of our water pollution regulations. There are two basic principles of this scheme: First, dischargers everywhere should employ a certain base level of treatment, indicated by the effluent standards, that will suffice to prevent pollution and leave room for new industry and population in most places. Second, in some places the concentration of sources will be such that additional control measures are necessary in order to achieve acceptable conditions in the receiving waters as prescribed by the water quality standards.

Some of the highlights of the new regulations are:

- . A two-year acceleration from 1977 to 1975 of the deadline in most communities for control of pollution from combined sewer overflows, one of the State's most serious water pollution problems;
- . a requirement that sewage or similar wastes discharged to Lake Michigan receive the highest degree of treatment;
- . the designation of additional waters, including the remaining portion of the Illinois River, to be protected for aquatic life and bodily contact;
- . a requirement that additional communities go beyond traditional secondary treatment;
- . a more stringent dissolved-oxygen requirement to better protect aquatic life;
- . limited relief from the highest degree of tertiary treatment for communities that can prove a more economical means of tertiary treatment sufficient to assure satisfactory water quality;
- . year-round disinfection of sewage treatment plant effluents; and
- . a comprehensive permit requirement for new and existing sources.

On May 31, 1972, the Federal Environmental Protection Agency announced approval of Illinois' Water Quality and Effluent Standards, noting that the standards were among the "finest and most comprehensive in the country." Federal approval was withheld from only three aspects of the standards proposed by the State. The exceptions to the approved plan related to thermal standards for Lake Michigan, a "restricted use concept" for certain waters in Northeastern Illinois, and the lack of a comprehensive implementation plan that includes interim accomplishment dates for protecting stream use designations. The federal authorities pointed out that these exceptions would not prevent Illinois municipalities from receiving the maximum amount of Federal monies for construction of pollution abatement facilities, and that approval of the major portions of the plan meant that the Illinois standards would be federally enforceable for the interstate waters of Illinois under the Water Quality Act of 1965. The Illinois EPA is preparing the requested implementation plan, and we have agreed to reexamine the necessity for restricted waters in the light of future changing conditions. Our thermal standard, adopted after quite extensive hearings, forbids large new uncontrolled heat sources such as power plants on Lake Michigan but does not require backfitting of those under construction, which the Board thought not justified in terms of costs and benefits. This question will be further pursued at the federal-state Lake Michigan Conference reconvening in September.

d) Air Pollution Standards: The third comprehensive rule-making effort is in a procedural sense our most successful to date, because for the first time we were able to sit back and listen as someone else made proposals and presented evidence to support them. This is the program for implementation of the federal air quality standards, which entails a thorough rewriting and tightening of the existing emission standards for particulate matter, together with brand-new standards for the first time limiting emissions of sulfur dioxide, carbon monoxide, nitrogen oxides, and organic materials (#R 71-23). The Agency, with Institute financial support, undertook to prepare a proposed regulation and to make a case for its adoption. A great deal of additional information came out of testimony at the hearings and, on April 13, 1972, the Board adopted the new standards. This comprehensive package of air pollution regulations, together with earlier adopted controls on episodes (#R 70-7) and open burning (#R 70-11) and the federal controls on motor vehicle emissions, should enable Illinois to achieve compliance by 1975 with the federal

air quality standards for these five air contaminants, provided something can be done about residential and commercial coal-burning in the Chicago area.

The Board had proposed an effective ban on coal for residential and commercial use in the Chicago region by May 30, 1975 - on the basis of impressive scientific evidence that without such a measure the air quality standards cannot be met. However, this provision cannot presently be made applicable because of a temporary restraining order issued by the Circuit Court of Cook County in Roth-Adam Fuel Co. v. Pollution Control Board, which has been appealed.

Highlighting the adopted regulations are provisions which:

- . significantly tighten the limits on the emission of particulate matter from such operations as steel mills, oil refineries, electric power plants, cement plants and corn wet milling facilities;
- . for the first time require sophisticated new equipment to control emissions from coke ovens;
- . greatly strengthen existing standards for emissions from incinerators;
- . for the first time limit emissions of sulfur dioxide in the Chicago, East St. Louis and Peoria regions to the equivalent of 1% sulfur coal, and impose a series of limitations designed to assure compliance with ambient air quality standards for sulfur dioxide elsewhere;
- . require the control of dust escaping from stockpiles;
- . limit the emissions of sulfur dioxide and sulfuric acid from industrial processes;
- . require such practices as floating roof tanks, submerged loading pipes, tight seals, and waste-heat boilers to prevent offensive hydrocarbon emissions from oil refineries;
- . restrict the emission of photochemically reactive organic materials from such activities as painting and printing in order to prevent Los Angeles-type smog conditions, and further limit emissions of organic materials where local nuisances would result;

- . for the first time require the control of carbon monoxide emissions from stationary sources such as incinerators, iron and steel processes, and oil refineries.
- . for the first time impose limits on the emission of nitrogen oxides from power plants in the Chicago and East St. Louis areas, and from other industrial processes throughout the State.
- . adopt a statewide nondegradation standard to prevent the unnecessary deterioration of air that is now clean, and to prevent new pollution sources from being located in areas where they will do the most damage;
- . prohibit any emissions that cause a violation of the air quality standards established to protect the public health and welfare;
- . institute a statewide requirement of operating permits for all pollution sources as an aid to enforcement;
- . require sources to monitor their emissions, to keep detailed records, to adequately maintain their equipment, and to make regular reports to the State.

e) Other Matters: The pattern of Institute-funded studies resulting in proposals made to the Board and proved by outside experts characterizes what I think of as our third group of rule-making proceedings. Hearings scheduled on an Institute proposal to require deposits on bottles and cans (#R 71-24) were held up by an injunction that has recently been set aside on appeal, and hearings will be rescheduled. We are conducting hearings on comprehensive regulatory proposals from the Institute and Agency regarding sanitary landfills (#R 72-5) and stationary noise sources (#R72-2). We considered a proposal of our own dealing with agricultural water pollution and plant nutrients (#R 71-15), which after hearings we referred to the Institute for additional study and information; after lengthy public hearings, we rejected a proposal to ban all phosphate detergents statewide at this time due to a lack of evidence regarding the detrimental environmental effects of phosphates on flowing midwestern streams (#R 71-10), and we adopted detailed regulations governing the use and application of asbestos and asbestos products in Illinois (#R 71-16). These latter regulations are designed to limit or prevent emissions into the atmosphere from operations utilizing asbestos in order to alleviate the disastrous pathological consequences which often result from the ingestion or inhalation of this mineral. The new regulations imposed a statewide ban on spraying asbestos as fireproofing material, established

numerical emission standards for manufacturers, defined necessary procedural safeguards for construction activities employing asbestos products, and set the requirements for asbestos waste disposal. Indicative of the technological feasibility of the regulations as well as the swiftness with which compliance could be obtained, the Board approved programs that would bring two major asbestos-handling factories into compliance within four months of the effective date of the new rules (Crane Packing Co., PCB 72-131, 132). But, in a later case (Anning-Johnson, PCB 72-60), the Board denied a requested variance from the asbestos regulations sought to allow completion of asbestos spray fireproofing of a building located in the heart of Chicago's downtown area, reasoning that a variance would create an unacceptable danger to a great many people in the area since the company had adequate time before starting construction to obtain less dangerous substitutes.

The Board also adopted a comprehensive set of regulations dealing with mine-related pollution (#R 71-25). The new rules require a state permit for opening, operating or abandoning a mine or mine refuse area, require operational safeguards for the control of air and water pollution attributable to mining activities, and require that drainage from mined areas meet prescribed effluent standards. A proposal to adopt for state purposes the federal air-quality standards for particulates, sulfur dioxide, oxidants, nitrogen dioxide, and carbon monoxide is pending (#R 72-7), as is a proposal to make certain modifications in the new water quality standards (#R 72-4). Finally, we have recently received from the Institute documents relating to hazardous levels of beryllium, cadmium, and lead for purposes of possible air quality standards, and the Institute has also promised to examine hydrogen sulfide, hydrogen fluoride, chlorine gas, mercury and hydrogen chloride with a view towards proposing new air quality standards for these pollutants in the future.

II. ENFORCEMENT

a) Complaints and Variances: The adoption of regulations, no matter how stringent, is not in itself a guarantee that pollution problems will be corrected. Vigorous enforcement is the key to that. There are some good citizens who obey a law because it is on the books; there are others who have to be dragged into compliance kicking and screaming.

Enforcement is accomplished in part through the filing of complaints by the Agency, or by an individual citizen--for the Act allows any citizen to file a complaint against anyone allegedly polluting. When a complaint is filed, we hold a hearing and decide whether or not there has been a

violation. If there has been, we make whatever order is appropriate to bring an end to the pollution as rapidly as practicable, and to deter future violations. These orders typically set a schedule for compliance and often include money penalties as well. The provision for citizen participation has served a very useful purpose. Several of our most important cases have been based on citizen complaints, which often have the salutary effect of precipitating the Agency's participation.

A good deal of enforcement has also been accomplished through variance cases. This may seem odd, since a variance is permission to do what the law otherwise forbids. But the great bulk of variance cases are requests for approval of control programs, and the net result in a variance case is often the same as if a complaint had been filed: A timetable is set for compliance, and in cases of unjustified delay a penalty must be paid as a condition of the variance. Unreasonable delay must be made unprofitable. But an immediate shutdown would often have such adverse effects upon innocent people such as employees and customers that it is better to allow continued operation during correction of the problem. Our answer in most such cases, absent an absolutely intolerable pollution situation, has been to allow operation while work is done with all reasonable speed to cure the problem, and to impose a money penalty.

When we have taken more severe action, as by denying a variance of this type or by ordering an immediate shutdown, it has generally been because of the absence of any acceptable control program. We have had rather good results with this practice. In several cases we were confronted with people who not only had missed their compliance deadlines for no acceptable reason but who still refused to commit themselves to any meaningful plan of control (see GAF Corp., #71-11 and Incinerator, Inc., #71-69). In each case our order either directed a shutdown or exposed the company to the risk of shutdown, and also called for the payment of substantial money penalties, thereby enabling the company to overcome previously insuperable difficulties and to present almost at once a truly exemplary program. Once the program was being pursued, operation could again be permitted.

b) Specific Cases: Since formation of the Pollution Control Board over two years ago, we have received more than 600 pollution enforcement, variance, permit appeal and regulation cases, and have rendered decisions in nearly 400 to date. During the past year, many of our decisions were based upon precedents and principles established in earlier cases, although a substantial number of matters involved new issues and unique factual and legal questions.

1. New Precedents:

In a landmark decision involving the City of Champaign, the University of Illinois and a private corporation (# 71-51C) the Board ordered all respondents to take steps designed to control the pollution of Boneyard Creek, a small waterway which meanders through the cities of Champaign and Urbana. The important principle established by this case is, in essence, that once a municipality has undertaken the task of operating and maintaining storm sewer conduits, it assumes the further duty of instituting a program of policing and enforcement to prevent undue pollution from flowing through its sewers and into a waterway of the State. In rejecting the University's contention that it, as a State agency, should not be subject to the provisions of the Environmental Protection Act, the Board said, "it was clearly the intent of the Legislature to ensure that all state agencies would comply with all provisions of the Act. . . The state should ensure that its own hands are clean before penalizing others for soiling the environment."

The notion that certain agencies or governmental entities should be immune and exempt from the application of the State pollution laws recurred several times during the past year, and the Board was consistent in its holdings that the Act expressly created a "unified, statewide" program, abolishing all local exemptions. In January, 1972, the Board stated that it was serving a "final notice" that state permits are required for new installations in such formerly exempted areas as Chicago. The caveat came in a case in which a Chicago firm had installed an afterburner to control emissions pursuant to a City permit, but had not received a permit from the State (American Generator and Armature Co., PCB 71-329).

In April the Board imposed a \$200 money penalty against the Chicago Housing Authority for air pollution violations caused by the operation of incinerators at the Bridgeport Homes development in Chicago and also ordered that the incineration of refuse at the site cease immediately (PCB 71-320). While expressly recognizing the undesirability of imposing steep money penalties against a governmental entity, the Board stressed that "government officials, like everyone else, must pay attention to the pollution laws and must exercise diligent efforts to achieve compliance."

In May the Board clarified an important constitutional question that had arisen regarding the liability of local governmental units under the Act (James McHugh Construction Co., PCB 71-291). The case held that even though the City of Chicago is responsible for violation of state pollution

laws by its contractors, violations were not proven in connection with a specific construction project which was the subject of the suit. On the important jurisdictional question, however, the Board rejected the City's argument that it was immune from Board jurisdiction because it is a home rule unit under the new Illinois Constitution. The Board said that "even a cursory examination of the Constitution reveals that its purpose is to confer governmental authority on local governments, not to limit state authority or to exempt local governments from complying with State law."

Spelling out the basis for statutory responsibility, the Board stressed that "liability for pollution or for violation of the regulations does not depend upon affirmative proof of negligence. The statute simply makes it illegal to 'cause or allow' pollution or to exceed standards set by the regulations. . . . To require proof of negligence would greatly impede the enforcement process and fail to achieve the goals of the pollution control program." The Board pointed out, however, that mitigating evidence in terms of the arbitrary or unreasonable hardship of compliance, or the technical feasibility or economic reasonableness of meeting the regulations in question would be considered by way of defense. (Y.E.S. v. Milwaukee Road, #71-254).

The Board had occasion to note the limits of its jurisdiction in dismissing a citizen complaint opposing the extension of the East-West Tollway from Aurora to the Rock River (PCB 71-306, 327). The Board observed that it had no general land-use planning jurisdiction and added that "we will not find air or water pollution simply on the basis that every highway causes the discharge of contaminants or that the highway in question may not be in our view essential." The complainants in this case had also argued that Section 47 of the Environmental Protection Act required the submission of an environmental impact assessment to the Agency as a precondition to construction of the highway, drawing an analogy to the federal Environmental Policy Act. But while acknowledging the "appealing" qualities of the federal act, the Board noted that present state law does not make the filing of environmental assessments or impact statements a condition precedent to commencement of a project.

2. Air Pollution:

Cases involving air pollution constituted a large percentage of the matters presented to the Board for adjudication during the past year. In a significant number

of these cases, programs to abate serious air pollution violations were presented to and approved by the Board (Westclox, PCB 71-145; American Distilling, PCB 71-168; A. E. Staley, PCB 71-174; National Gray Iron Foundry, PCB 71-178; Buckler Foundry, PCB 71-189; U.S. Industrial Chemicals, PCB 71-44; Texaco, PCB 71-235; Beloit Foundry, PCB 71-101; Merlan, Inc., PCB 71-292; Witco, PCB 71-250; Minerva, PCB 71-265; Scott Air Force Base, PCB 71-232; Deere, PCB 71-353; Imperial Smelting, PCB 71-393; Chicago Vitreous, PCB 71-241, PCB 71-372) indicating that many severe pockets of pollution were well on their way to being cleaned up within the shortest practicable time. In a number of other cases, however, the Board approved similar programs to abate pollution, but also imposed money penalties for inexcusable past delays in instituting such programs in the first place. (\$5,000 penalty, 90 days to install equipment - Roesch, PCB 71-62, -294; \$7,500 penalty, complete installation of electric induction furnace by Dec. 31, 1972 - State Line Foundries, PCB 71-86; \$5,000 penalty, operation of boiler in violation of regulations to cease by Oct. 15, 1971 - Central Soya, PCB 71-163; \$2,000 penalty, excessive particulate emissions from five brass melting furnaces to cease by Aug. 31, 1972 - Clayton Mark, PCB 71-176; \$3,000 penalty, May 12, 1972 compliance - Chicago-Dubuque Foundry Corp., PCB 71-309; \$2,000 penalty, six months to control hydrogen sulfide odors - Monmouth, PCB 71-121; \$1,000 penalty, installation of abatement equipment before further incineration of wastes-Solid Waste Disposal, PCB 71-236; \$3,500 penalty, control cupola emissions by Aug. 31, 1972 - Mattison, PCB 71-330; \$1,500 penalty, correct pollution problem by July 31, 1972 - General Iron, PCB 71-297, 335, 72-308, \$5,000 penalty, correct air cleaning table pollution by Oct. 27, 1972 or within such time thereafter as shall be granted in a subsequent variance request - Freeman Coal Mine, PCB 71-78; \$1,000 penalty, cease violative emissions from an East St. Louis chemical plant - Pfizer, PCB 71-230; \$10,000 penalty, correct pollution problems by May 22, 1972, Molex, Inc. PCB 71-200; \$10,000 penalty, correct pollution problems by July 1, 1972 - Agrico, PCB 71-211).

For the first time the Board ordered a polluter to close down his operations, imposing a \$25,000 money penalty for past violations and stating that the company would "not be permitted to operate its facility until it (had) made adequate showing to the Board and the Agency that the nuisance control equipment is installed and ready for operation." (Incinerator, Inc., PCB 71-69). The shutdown was

brief, as noted above; the plant was allowed to reopen after reduction of the nuisance and submission of an adequate control program. Within two weeks of the decision in the Incinerator case the Board penalized the Lloyd A. Fry Roofing Company of Summit, Illinois (PCB 71-4, 33) \$50,000 for violations of the particulate emission standards and for having failed to file an Air Contaminant Emission Reduction Program with the State, as the law had required since 1967. Fry was also ordered to cease and desist its emissions until pollution abatement equipment had been installed, which the company's own schedule promised would be done by the date of the order.

On October 14, 1971, in a hotly contested case, the Board granted U.S. Industrial Chemicals Co. of Tuscola a variance to operate four coal-fired boilers pending the installation of electrostatic precipitators to reduce excessive particulate emissions. The company was also allowed to operate its sulfuric acid plant in excess of the particulate limits pending the completion and operation of a direct hydration alcohol plant to correct the problem. In both respects, the Board found, USI was adhering to a particulate control program approved by the Air Pollution Control Board, and there was no indication the program could be accelerated at the time of decision. U.S.I. was however ordered to post a \$500,000 bond to assure ultimate compliance with applicable pollution regulations. The company was required to monitor ambient sulfur dioxide levels after shutdown of the acid plant and to reduce SO₂ emissions from its boilers if a problem was found to remain.

On April 25, 1972 the Board ratified a consent order worked out between the Illinois E.P.A. and Granite City Steel Company (PCB 70-34) that should serve as a model for other producers of iron, steel, and coke. The company agreed, among other things, to install a negative pressure system to limit emissions during the charging of coke ovens, utilizing new technology to solve a problem the industry had until then maintained could not be controlled. As a result of the new program, Granite City Steel's total emissions are expected to be reduced by 90% and ambient particulate levels in Granite City by 50% or 90 micrograms per cubic meter. Finally, the company agreed to establish a \$150,000 scholarship fund for environmental education at the University of Illinois as part of the agreed order.

Particulate violations at many power stations throughout Illinois were the subject of numerous cases before the Board during the past year. In Commonwealth Edison (PCB 71-219), the Board imposed stringent operating restrictions on four generating units at the Powerton Station near Pekin and ordered them shut down as soon as the necessary transmission lines are completed in 1974. A variance was granted to Illinois Power Co. (PCB 71-193, 195, 196, 197, 198) for the Vermilion, Havana and Wood River Stations upon the condition that the utility would limit coal-burning at Wood River Units 1 and 3 and would minimize the use of Units 1-8. at Havana. The dates for compliance embodied in the Board's order accelerate the deadlines previously set by the Air Pollution Control Board. In Iowa-Illinois Gas and Electric Co. (PCB 71-165), the Board granted the utility a variance allowing it to exceed particulate emission regulations as a consequence of coal burning at the Moline generating station pending completion of the Quad-Cities Nuclear Power Plant. But the Board's order specified that coal burning was permissible only when the utility could not meet its load requirements by the use of its other facilities, could not obtain gas or oil to burn in its boilers, and was incapable of purchasing additional electric power from outside sources. In Electric Energy, Inc. (PCB 71-170), the Board granted a variance to allow completion of electrostatic precipitators on its Joppa generating units in accordance with a program approved by the Air Pollution Control Board. In Mt. Carmel Public Utility Co. (PCB 71-15), the Board at first denied the utility's request for a variance from the particulate emission standards to permit the continued use of coal-fired boilers pending the installation of control equipment, on the ground that the program itself was inadequate and in addition would take ten years to complete. Subsequently, the utility returned with a revised plan which the Board approved and which significantly shortened the time within which compliance could be achieved to June 30, 1974. And in Central Illinois Public Service Company (PCB 71-261, 262, 263, 264), the Board granted variances from the particulate regulations for certain units at the utility's Coffeen, Hutsonville, Meredosia and Grand Tower generating stations to permit completion of compliance programs approved by the Air Pollution Control Board in the shortest practicable time.

Citizen complaints resulted in an order requiring abatement of tarry asphalt plant emissions by January 31, 1972 (Moody v. Flinkote Co., PCB 70-36, 71-67), and in an order to abate odors from two municipal sewage treatment lagoons (Quad City Area Regional Air Pollution Control Board v. Village of Cordova, PCB 71-97).

In its early days the Board passed upon a great many variance petitions involving open burning. Most involving training in firefighting techniques (e.g., Amoco, PCB 71-124) or the destruction of explosive wastes (e.g., Consolidated Aluminum Corp., PCB 71-383) were granted, the former because there is no substitute for fire for instructional purposes and the latter upon proof that safe alternative disposal means did not exist. Explosives variances were conditioned on a continued search for less polluting alternatives, with some striking successes (e.g., Consolidated Aluminum Co., PCB 71-383). Variances to burn trees and other landscape wastes were commonly granted only with regard to diseased trees, which the evidence suggested should be burned to avoid contagion (e.g., Ravinia Park Festival Ass'n., PCB 71-135). Most other wood-burning variances were denied or dismissed for failure to prove or to allege the unavailability of satisfactory alternatives (e.g., City of Rochelle, PCB 71-143) (But see Decker Sawmill, PCB 71-73, allowing eight months to bring a remote sawmill into compliance, and Hardwick Bros. Co., PCB 71-17, allowing burning of wastes cleared from a remote waterways project upon proof that the high water table precluded burial or the use of an air curtain destructor and that the costs of hauling the wood out were prohibitive). Finally, burning of prairies was authorized for naturalistic purposes (Illinois Natural History Survey, PCB 71-94).

In early September, 1971, the Board adopted a comprehensive set of regulations dealing with open burning (R 70-11). The regulations prohibit the burning of landscape wastes within the boundaries of any Illinois municipality or within one mile of those having a population of 1,000 or more except in an air curtain destructor but exempt certain activities such as fires, the burning of fuels for campfires or fireplaces, and safety flares. The Board noted that there were many alternative methods of disposing of leaves and other landscape wastes, including municipal incineration, sanitary landfills, mulching and composting. The Board added that "the open burning of refuse dumps and open burning for salvage purposes have been illegal since 1965, and we reaffirm the prohibition with conviction." Permit systems were set up for firefighting, for prairie burning, and for the burning of landscape wastes in accord with regulations. Hearings are soon to be held on an Agency proposal to relax the ban on burning landscape wastes such as leaves in towns of under 1000 population (R 72-11).

Adoption of the new regulations considerably reduced the burden of open burning petitions on the Board, but some petitions continue to be received. The Cook County Forest Preserve District (PCB 71-304) was given additional time to install further air-curtain destructors at an established burning site. The Board dismissed petitions by several

Chicago-area cemeteries to burn diseased trees because there was no allegation that air-curtain destructors could not practicably be used as required, but an appellate court summarily ordered the variances granted without proof and without opinion (Glen Oak, Forest Home, Cedar Park, and Oak Ridge Cemeteries, PCB 72-117, 72-118, 72-119, 72-120).

Enforcement cases resulted in orders against the burning of railroad cars for salvage (e.g., Lipsett Steel Prods., PCB 71-43) and in money penalties for the illegal burning of trade wastes (e.g., Miller Lumber, PCB 71-227 (\$500); Knight, PCB 72-44 (\$250)).

3. Water Pollution:

A number of Board decisions during the second year concerned accidental spills of hazardous materials. For example, in Rex Chainbelt, Inc. (PCB 72-86), the Board approved a stipulation penalizing a Downers Grove bearing manufacturing facility \$2,000 for discharging cyanide and heavy metals, and ordered the offensive discharges to cease immediately. In a case once again underlining the seriousness of cyanide discharge violations, the Board approved a stipulation penalizing a Rock Falls manufacturing plant \$40,000 for allowing the discharge of massive amounts of cyanide to the Rock River, and an additional \$13,449.96 for the estimated 98,945 fish killed in the incident (Russel, et al, PCB 71-369). The penalty provisions were combined with a cease and desist order and, most importantly, the company was ordered and agreed to take all necessary steps to prevent a recurrence of such an accident in the future. In SEMCO (PCB 71-289), a \$2,000 penalty was imposed for allowing sewage sludge to escape from a diked land disposal area. In Ayrshire (PCB 71-323), the Board approved the company's Plan of Abatement for Delta Mine Drainage, but also imposed a \$1,000 penalty for past water pollution violations. Airtex Products, Inc. (PCB 71-325) was penalized \$11,000 for discharging cyanide into municipal storm sewers, and the City of Fairfield \$1,100 for allowing the discharge to reach and pollute the Little Wabash River. The City of Jacksonville (PCB 71-355) was ordered to pay \$1,000 and to control its discharge of lime sludge from a water purification plant, and a hearing was authorized to determine the practicability of removing sludge deposits from the affected creek. In Yetter Oil Co. (PCB 71-246), the company had allowed the dumping of oil into a tributary of the aptly named Troublesome Creek. The Board issued a cease and desist order and imposed a \$500 penalty for this offense; in Valley Line (PCB 71-289), the company was penalized \$1,000 for allowing its barge to discharge oil to the Illinois River; and in Custom Farm (PCB 71-312) a plant engaged in the manufacture and storage of chemical fertilizers in

Leverett, Illinois was penalized \$2,000 and ordered to construct such facilities as were necessary to prevent further spillage.

A significant number of water pollution cases presented to the Board during the past year involved companies that had committed certain violations but were embarking upon entirely adequate, albeit tardy, improvement programs: In National Starch (PCB 71-83), the Board approved a program to complete the design and construction of adequate treatment facilities by December, 1972, granted the company a variance from the BOD and suspended solids standards during implementation of the program, but also imposed a \$2,000 penalty for past delays as a condition of the variance; in Libby (PCB 71-153), the Board ordered the company, which sought to discharge approximately 40,000,000 gallons of partially digested vegetable wastes held over from a previous year to a small stream, to take steps to avoid unnecessary pollution, and to achieve full compliance by January 1, 1972; in Dearborn (PCB 71-205), the Board granted a 120-day variance from the requirements of SWB-14 relating to effluent quality to allow the company to connect to the Lake Zurich municipal treatment system; in Holland Ice Cream & Custard Co. (PCB 71-319), the company was ordered to submit a control program for its dairy wastes by Aug. 31, 1972; the program provides for disposal of the wastes on land.

In Flintkote Co. (PCB 71-68) the Board denied a petition seeking additional time to control wastewater from a Mt. Carmel felt mill, leaving the company open to prosecution because there was no assurance that a municipal facility on which Flintkote relied would be completed as predicted, because the timetable proposed was too long, because no adequate interim measures were contemplated, and because past delays were not satisfactorily explained. The company has not, however, been brought back before us.

Generally speaking, the greatest single water pollution problem faced by the Board during its first two years of operations involved municipal sewage treatment facilities.

In an enforcement action brought against the City of Marion (PCB 71-25, 225) for failing to meet the SWB-14 deadlines for submission of plans and award of construction contracts to improve the municipality's treatment facilities, the Board reaffirmed its holding that the failure of the federal government to keep its promises of construction grants was no excuse for continued pollution. A part of Marion's delay, the Board held, was attributable to revisions in applicable state requirements and therefore

excusable. For the rest of the delay the Board imposed a nominal \$100 penalty commending the municipality for its exemplary response to the Agency's complaint and issuing a strong warning to other Illinois municipalities in similar situations: "We sincerely trust that others...will follow Marion's example immediately without waiting to be prosecuted. Any substantial delay in cleaning up our waters resulting from the failure of municipal officials to obey the law would be a tragedy... Without condoning past lapses, we think it appropriate to encourage those who have fallen behind to make every effort to make up for it. We shall therefore look with some indulgence upon local governments that file programs in a short time after the ultimate deadline... (but) for those whose violations will substantially prolong pollution and who even now fail to come forward with as expeditious a program as is practicable, the penalties may be quite severe."

The Water Quality Standards adopted by the Board on March 7, 1972 (R 71-14) recognized the practical difficulties municipalities and sanitary districts were encountering in their efforts to meet a July, 1972 deadline date for advanced treatment of their wastes. The Board said:

We have allowed until December 31, 1973 for compliance with most existing requirements for treatment beyond secondary. In many cases the original deadline was July, 1972, but according to Director Blaser of the Agency most communities have fallen behind that schedule, in large part because of the unavailability of federal aid funds. We have held that the absence of federal money is no excuse for disobeying the law, and we would not extend the deadline merely because people have missed it. But we have already had several occasions, e.g., EPA v. City of Marion, #71-25 (Oct. 28, 1971), to observe that a new EPA technical release issued in the summer of 1971, just as a number of communities had prepared their plans for supplemental treatment, took many people by surprise in requiring the removal of algae from polishing lagoon effluent in order to assure meeting the effluent standards. On the basis of this surprise we have granted variances permitting six months' to a year's extension of the 1972 deadline for communities forced to draft new plans in midstream by this new policy, as in the Marion case itself. Moreover, our acceptance of the effluent standard permitting individual evaluation of the need to go beyond 10 mg/l of BOD and 12 of

solids, if it is to be meaningful, must include a brief period of time in which communities affected may find out and demonstrate whether or not they can take advantage of the revised standard. We therefore allow until Sept. 1, 1972 for the submission of a program for achieving compliance, which must be approved by the Agency, and until the end of 1973 to complete construction.

While adopting the new standards and relaxing the deadline dates, the Board stressed that "slippage in this program is a cause for grave concern, and it must not be permitted to happen again. We have set new dates because we have set new requirements, not because local officials have chosen to disobey the law. We will not tolerate a similar slippage under the revised program. Substantial money penalties, as well as prohibition of additional connections are a distinct possibility for communities that do not make diligent efforts to meet the new deadlines."

During the past year the Board dealt with many other cases involving sewage treatment plant problems: In East St. Louis (PCB 71-26), the Board imposed a \$200 penalty for improper operation of its primary treatment plant and for having operated the facility without a properly certified plant operator in charge. The order also included a cease and desist provision, and directions to repair a broken sedimentation tank in order to assure that the violations would cease. The Village of Lake Zurich was ordered to abate discharges from its Northwest Waste Treatment Plant which were polluting Grassy Lake, Flint Creek and the Fox River, and to comply with a detailed improvement program (PCB 72-26). In Citizen Utilities (PCB 71-125), the Board, in ordering the cleaning of an overloaded lagoon, imposed a \$1,000 penalty and noted that such facilities should be constructed in such a manner as to be susceptible to repair without at the same time causing inordinate pollution. In Warren (PCB 71-177), the Board granted a 120-day variance from the BOD and suspended solids limitations contained in SWB-14 relating to sewage treatment plant effluent in order to allow the petitioner time to acquire property needed to expand and upgrade its treatment facilities, imposing a \$200 penalty for past violations. In Sauget (PCB 71-287), the Board allowed an additional year for the construction of secondary treatment facilities on finding that the extension was required by special circumstances relating to the complex combination of industrial wastes to be treated. In York Center (PCB 72-7), the Board

dismissed an "open-ended" request for variance from the requirements of treatment beyond secondary as they pertained to a DuPage County facility which served 73 single-family residences. The petitioner had maintained that the additional facilities would cost an extra \$39,000 and would no doubt ultimately be replaced by a larger central plant, but no plan for constructing such a plant was suggested. The Board said, "the nub of the difficulty we have with this petition is the open-ended nature of the request. 'Progress' is promised, but there is no suggestion as to what the petitioner is to do to achieve progress, or what progress means in this context. The essence of a variance in cases of this nature, as we have said many times, is a program for achieving compliance. . . . But there is no such program here, only a vague hope that some day soon somebody--apparently not this petitioner--will bring about some regional program whose outlines either in substance or in time are not even suggested. We cannot grant a variance without a control program, for to do so is simply to give a permanent license to pollute."

The Metropolitan Sanitary District of Greater Chicago, the largest sanitary district in the State, appeared before us a number of times during the past year. In PCB 71-183, the District sought a variance for the continued operation of its seriously overloaded Streamwood sewage treatment plant until such time as it could be abandoned in favor of the proposed Poplar Creek regional sewage treatment facility. Finding no commitment to construct Poplar Creek or any other long-term program for compliance, no adequate justification for the delay in meeting the standards, and an inadequate interim program, the Board denied the variance request. In PCB 72-111, 135, the Board penalized the District \$6,000 for past violations and approved an amended Streamwood proposal, requiring not only secondary treatment proposed by the District but also the installation of tertiary treatment filters pending the rather deferred availability of the Poplar Creek plant. The Board said that "the record graphically demonstrates the adverse effect of additional connections on a plant that has reached its hydraulic capacity, even to the point of rendering interim chemical treatment useless." In two other cases, however, the District was authorized to make interim improvements short of the required advanced treatment pending abandonment of the facilities (at Orland Park and East Chicago Heights) in a relatively short time (PCB 71-166, 72-110).

The Board has taken a number of steps designed to stem the proliferation of small and inefficient sewage treatment plants. In two cases the Board refused to approve the construction of small plants, ordering additional municipalities joined as parties and additional hearings held looking toward regional solutions (Silvis, PCB 71-157; Gages Lake, PCB 71-104).

Furthermore, the Board has adopted regulations (R 70-17) endorsing in principle the nine service-area concept for DuPage County treatment facilities as previously proposed by the Northeastern Illinois Planning Commission. A series of regional plants would significantly reduce the cost of sewage treatment and would lead to improved treatment in compliance with State pollution laws and regulations. Each of the nine designated regions will submit programs leading to a Regional Wastewater Treatment Program within a short time.

There is one remedy that we have found quite useful in promoting at least interim solutions to the municipal treatment problem, and that is the highly controversial device of forbidding new connections to sewers serving overloaded or otherwise inadequate treatment facilities. The sewer connection ban not only prevents the situation from becoming worse before it gets better, but it also puts considerable pressure on local officials, from within their own community, to get on the ball and do whatever is necessary to make additional connections possible. When local officials really try their best to find ways of improving their treatment in a hurry, we have found that they come up with pretty successful programs.

Early in 1972 the Board noted the beneficial effect of interim improvements made by the North Shore Sanitary District in response to the Board's earlier sewer-connection ban order (League of Women Voters v. NSSD, PCB 70-7), and as a result, authorized 5000 new connections to the improved plants under strict conditions. (North Shore Sanitary District, PCB 71-343). Use of an effluent polishing lagoon at Clavey Road, the Board found, had reduced the organic content of the discharge by the equivalent of about 10,500 persons, and the addition of ferric chloride at Waukegan had achieved an equivalent reduction of about 24,000 persons. Additional capacity had in effect been created by improved treatment. Similarly, progress in constructing new treatment facilities resulted in lifting of the Mattoon sewer ban (PCB 72-64), and the Danville ban was lifted after the interim use of chemicals reduced both BOD and suspended solids from a grossly overloaded plant to less than 20 mg/l, well within the applicable standards (PCB 72-161).

Sewer bans in the North Shore Sanitary District and elsewhere also produced a raft of individual variance petitions during the past year. Variances were generally granted where construction had already begun, or where substantial steps towards completion had been taken before imposition of the ban (Wachta, PCB 71-77; Tauber, PCB 71-171; Park Manor Nursing Home, PCB 71-180) or in cases of extreme individual

hardship, such as low-income housing development partially under contract at the time the ban had been imposed (Patricia, PCB 71-161), or a family of modest means which had qualified for federal mortgage assistance under the FHA program but which might lose the financing if the variance were denied (McAdams, PCB 71-113). But a number of other petitions were denied because construction had not begun prior to the entry of the sewer-ban order and detrimental reliance on the ability to connect had not been adequately established (Piroyan, PCB 71-103; Wickstrom, PCB 71-105; Seegren, PCB 71-106; Weinstein, PCB 71-107; Scott Volkswagon, Inc., PCB 71-112; Charles, PCB 71-122). And in a disturbing case, resulting from a citizen complaint, the North Shore Sanitary District's allowance of several hookups in the Lake Bluff area in direct violation of the Board's earlier sewer-connection ban order resulted in the imposition of a \$5,000 monetary penalty (Glovka v. NSSD, PCB 71-269).

The Board has held extensive inquiry hearings into the entire question of sewer-connection bans as a remedial measure, and has proposed a detailed regulation dealing with the issue (R 71-19) on which further hearings will later be held. But it is abundantly clear that pollution problems relating to sewage involve not only inadequate sewage treatment plants, but also insufficient sewers transporting the wastes to the plants to be treated in the first place. In one case (School Building Commission, PCB 71-247), a variance was granted allowing the connection of a new high school in Flossmoor to the local sewage system, notwithstanding the fact that the Agency had previously denied a permit on the ground that the sewer system was inadequate and unable to carry even existing loads. The variance was granted in view of the hardship which would be suffered by the many students desirous of using the new facilities in the event of denial, and since the new school building and the old one were on the same sewer line and a grant of the variance would not, therefore, aggravate the existing pollution problem.

4. Public Water Supplies:

Only a few cases before the Board have so far dealt with drinking water supply problems. The Board penalized Claremont Hills Water and Sewer Co. (PCB 71-87) \$1,000 for constructing and operating a well which supplied forty homes without acquiring an Agency permit. Another \$1,000 penalty was imposed upon Mildred Krawczyk (PCB 71-305) of Collinsville for failure to supply residents of the Holiday Hills subdivision with an adequate supply of water

for the past six years, and for not obtaining an Agency permit. In Reeves (PCB 71-237), the operators of a public water supply system serving the Timber Lakes Estates in Monroe County were charged with constructing and operating the system without state permission and with failing to maintain the water supply to such an extent that the water was not assuredly safe in quality, was not clean was not adequate in quantity, and was not of satisfactory mineral content for ordinary domestic consumption. The Board penalized the respondents \$3,000 for the violations, and ordered that the facility be improved and brought into compliance. Finally, finding that the iron content in the water being supplied by a small public water supply system in McHenry County was excessive, the Board penalized the company \$3,000, and demanded that "a firm and specific program for construction of improvements sufficient to achieve compliance... in the shortest practicable time" be filed within two weeks after entry of the Board's order (McHenry Shores Water Co., PCB 72-137).

5. Landfills:

A number of complaints filed by the Agency during the past year concerned the improper or illegal operation of landfills and refuse disposal sites. In many of these cases the Board found that an assortment of serious violations had been committed, ranging from open burning to open dumping, to the failure to properly spread, compact or cover the refuse, to supervise unloading or to prevent unsanitary scavenging, to fence the premises or to prevent air, land and water pollution hazards. Except where the record indicated an inability to pay (Logan, PCB 71-283), the Board has included money penalties in its orders establishing compliance timetables or requiring the immediate cessation of violations (\$1,000 - Denny, PCB 71-32; \$100 - City of Golconda, PCB 71-48; \$2,000 - Ashbaugh, PCB 71-49; \$1,000 - Ford, PCB 71-307; \$200 - Central Illinois Landfill, Inc., PCB 71-339; \$250 - Knight, PCB 72-44; \$1,000 - Kruse, PCB 72-45; \$200 - Young, PCB 72-46; \$2,000 - Smistic, PCB 72-47; \$1,000 - Waukegan, PCB 71-298).

In other significant cases, the Board denied a landfill operator's request for a variance to dump acid sludge at a Springfield site because a less hazardous alternative was found practicable (Buerkett, PCB 71-303); granted the City of Rockford a variance to permit the continued use of the Sahlstrom pit for 120 days upon strict conditions while finding an ultimate solution to its disposal problem, and warning that further delays would not be tolerated (PCB 71-311); and granted Danville a variance permitting it to continue using its old landfill site in Vermilion County until June 9, 1972, noting that upon receipt by the

City of notice that its landfill did not meet legal requirements, it ceased operating the site and contracted to have a new site developed while simultaneously taking steps to close-out and cover the pre-existing landfill location (PCB 71-282).

Increasingly, cases involving violations of the Refuse Rules or other pollution offenses at landfills and refuse disposal sites have been presented to the Board in the form of stipulations of fact and proposed settlements. This is an encouraging trend since it means that these kinds of cases, containing relatively simple and undisputed factual questions, can be resolved without the need for lengthy and costly hearings on the merits.

The Institute has proposed a detailed set of statewide rules and regulations governing solid waste disposal and landfill sites (R 72-5), and the Board expects to begin hearings on the proposal early this fall.

6. Radiation:

Title VI-A of the Environmental Protection Act required Board permits for the construction and operation of new nuclear facilities such as power plants. As described in earlier reports, the Board first applied this provision in a case involving Commonwealth Edison Company's Dresden Unit 3, near Morris on the Illinois River. After lengthy hearings the Board upheld its authority to impose radiation limits and established emission limits for radioactive emissions far stricter than those prescribed by the AEC (Commonwealth Edison Co., PCB 70-21). At present, Dresden Unit 3 is operating and has installed spray canals to meet Illinois River thermal standards. Most significantly, stringent radioactive standards such as those adopted by the Board for Dresden #3 were subsequently proposed by the Atomic Energy Commission for federal adoption.

On November 15, 1971, the Board granted a partial operating permit to Commonwealth Edison and Iowa-Illinois Gas & Electric Company to operate a nuclear power plant on the Mississippi River in the Quad-Cities area near Cordova (PCB 71-20). The Board reaffirmed the policy it had applied with regard to Edison's Dresden Plant requiring employment of the best practicable technology in controlling radioactive emissions, and once again rejected the argument that the federal government had pre-empted the field of atomic power plant radiation control. The Board's order required the companies to add a recombiner and eight charcoal beds to the facility, thereby reducing gaseous radioactive emissions by a factor of 30 below what the

companies had originally sought to discharge. A "maximum recycle" system was ordered to reduce liquid radioactive discharges, and the companies were told to install a diffuser pipe to distribute heated wastes more equally throughout the River, thereby greatly reducing the thermal pollution hazard. Finally, the companies were told to study the feasibility of installing spray modules at Quad-Cities similar to those employed at Dresden.

On November 23, 1972, the Dresden permit was modified to conform with that issued in Quad-Cities (PCB 70-21).

Recently the United States Supreme Court (Northern States Power Co. Minnesota, 40 U.S.L. Week 3479, 1972) held that the Atomic Energy Commission (AEC) possesses sole jurisdiction to regulate radioactive emissions from nuclear installations. In view of this holding, the Board was required to vacate the permits which had already been issued for the operation of the Dresden and Quad-Cities plants, and to dismiss the applications for permits to operate General Electric's Midwest Fuel Recovery Plant (PCB 71-238) and Edison's Zion and LaSalle County plants (PCB 71-328, 71-354). The Board held that without the power to regulate radiation the basic purposes of Title VI(a) of the Act had been defeated, and that the Title was consequently totally invalid. The Board added that "Title VI(a) was a useful and innovative experiment. We regret that its central features have been invalidated by the Supreme Court but we believe its short existence was a productive one with considerable benefits for the public welfare. We have been assured by Edison that the radiation controls we had required beyond those set by the AEC will be installed. We further suspect that our decisions have had some influence in persuading the AEC to tighten its own standards. The experiment has ended, but it was not in vain."

III. ADMINISTRATIVE

At the end of both the past two fiscal years, the Board has had to return to the Legislature and seek additional funding. During the most recent fiscal year, our volume of business far exceeded all preliminary expectations, and as a result, we exhausted the limited funds appropriated to us, particularly with regard to the cost of recording our hearings. For want of the money for this purpose, our entire program virtually came to a halt.

Our FY 1972 budget (excluding Board members' salaries) was \$673,000. This appropriation was broken down into line items, among which were \$305,000 for contractual services, \$30,000 for printing and \$7,500 for telecommunications. These

are the categories in which our needs exceeded expectations and which resulted in our requesting and receiving an emergency supplemental appropriation at the end of the fiscal year.

The total amount of the deficiency appropriation which the Board obtained was \$140,000: of this amount, \$100,000 was devoted to contractual services (including \$77,000 to meet existing court reporting debts and to enable us to continue hearing cases and having them reported through the end of the fiscal year) and \$40,000 to printing.

a) Court Reporting

The Board conducts hearings on enforcement, variance, permit and regulatory matters throughout the State. Decisions in these cases are made strictly on the basis of a review of the record in the case by the five Board members. The record includes written submissions, exhibits and testimony received at the hearings and transcribed by a professional court reporter. Since Board members need not and cannot attend all hearings, absolute accuracy in the reported transcripts is imperative. Due to the technical nature of the material involved, the reporter must be highly skilled, and thoroughly dependable.

The Board requires seven copies of all transcripts (one for each Board member and two for the permanent file) in order to enable each member to render an independent decision in each case based solely upon the record. The law requires that variance cases be resolved by the Board within 90 days after they are filed, and if not so resolved within that period, that they be granted. Therefore, it is essential that the Board receive speedy service from its court reporter so as not to default in rendering its decision.

By the end of February, 1971, we had spent or committed \$52,100 for court reporting services, most of it in the last three preceding months, as our case load increased. We predicted the need for an additional \$45,000 for this purpose for the remaining four months of fiscal 1971. Board members examined the figures with considerable care, corrected a number of errors in calculations, but relied on the completeness of the figures. In fact, however, there were additional unpaid bills for \$76,507 incurred in FY 1971, of which the Board was not informed until after the supplemental appropriation had been obtained and expended and the General Assembly adjourned. Consequently, we began fiscal 1972 with the expenditure of over \$76,000 that we had not anticipated spending.

Our budget allocation for court reporting in fiscal 1972 was \$194,500. This request was based on an estimate of 300 days of hearings, which in turn was derived from

the fact that over 220 cases, including 31 rule-making proceedings, had been filed with the Board during its first eleven months; from an estimate of the number of days of hearings for each case filed; and from the knowledge that our caseload was constantly increasing. As we said at the time, we have no control over the number of cases filed, since that is dependent upon the needs of the Environmental Protection Agency, of private complainants, and of applicants for variances. Our estimate was a rough one based on very limited experience and subject to inherent uncertainties.

This estimate of 300 hearing days proved too low. By March 6, 1972, even after suspending many hearings for want of funds, the Board had conducted 303 days of hearings, surpassing in eight months the estimate for the entire fiscal year. This averages out to 45 days of hearings per month, so that, if the Board had not run out of funds when it did, it would have conducted at least 540 days of hearings in fiscal 1972.

Thus, the reasons we have spent beyond our expectations are two. While our appropriation was based on the rates we actually paid for court reporting, we underestimated the caseload by at least 45%, and we did not anticipate the expenditure of \$76,000 for back bills. The nub of the matter is that our actual volume of business far outstripped our predictions, both for the supplemental FY 1971 appropriation and for FY 1972. Because we had more business than anyone expected, we exhausted our appropriation.

Other areas of contractual services for which the Board requested and received a deficiency appropriation were utilities, newsletter postage, legal notices, motor vehicle rental, office equipment rental, and ordinary postage.

As a direct result of the money crisis, the Board has since requested and received bids from other court reporting firms who are willing to do the work at a lower rate. At present, hearings are being reported by two firms, both of which charge substantially less than the rates we had been paying. In addition, we are xeroxing copies of transcripts in our own offices to avoid the necessity of paying a firm high rates merely to duplicate pages of the record. We are quite hopeful that our efforts to reduce court reporting expenditures will enable us to avoid a similar monetary shortage in this area during the coming fiscal year.

b) Printing

Most of our printing budget has been used for the distribution of a newsletter to persons on our mailing list.

The newsletter contains a brief summary of significant Board actions taken. More important, it contains notices of coming hearings and meetings, and copies of proposed regulations, which we are required by law to make available to all who request them.

Newsletter costs, like court reporting costs, have been difficult for us to predict. They have grown both with the growth of our mailing list, which at one time exceeded 8,000, and with the increase in complex rule-making proposals from the Institute and the Agency. We estimated for fiscal 1972 total printing expenses of \$30,000, of which all but \$500 were for the newsletter. In fact, the increases in our mailing list and in our rule-making activity caused our newsletter printing costs to average \$4,000 per month.

We therefore requested additional funds for printing the newsletter for the balance of FY 1972.

We have instituted several measures designed to reduce newsletter costs. We have asked subscribers to indicate whether they still wish to receive the newsletter and on the basis of the responses, we have been able to cut the mailing list approximately in half. We have also cut mailing costs by more than 50% by shifting from first-class to third-class mail, at the risk that some notices may be delayed and hearings may have to be rescheduled. And, we have also lengthened somewhat the usual two-week interval between newsletters.

We also sought, and received additional funds to enable us to print and bind copies of all Board decisions for the first two years of our operations, and are presently selling the opinions at \$50.00 per set, and returning the proceeds to the State Treasury.

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In both the regulatory and enforcement spheres, our first two years have indeed been busy ones. Yet the job is far from done. As discussed above, a number of rule-making matters are still pending, including the all-important subject of noise regulations, which are necessary before any attempt at noise abatement can begin. Some two hundred cases also are pending, and more will be filed at an increasing rate as Agency surveillance is stepped up and as new regulations become effective.

We have tried in all our proceedings to convey the idea that we mean business about pollution control; that we will listen to whatever anyone has to say; that we are willing to modify our proposals on the basis of evidence in the record; that we will allow a reasonable time for people of good faith to bring themselves into compliance with new

requirements; and that we will not countenance unjustified delay. I believe that pollution is a serious problem; that we have allowed the environment to deteriorate far more than was at all desirable or necessary; that significant improvements in the air and the water can be achieved by the employment of standard technologies at reasonable costs; and that pollution control cannot be considered in a vacuum without reflecting upon the effects of control measures upon other important goals of our society. There is a need for continued scientific research into abstract or future pollution issues that are as yet poorly understood, but that is not the immediate task of this Board. Our first job is to see to it that the many things we do know how to do at reasonable cost get done as quickly as is practicable in order to reduce some of the gross pollution problems we suffer today.

A final word about the institutional framework created by the Environmental Protection Act. I do think the present setup gets us away from a number of the specific difficulties of the earlier law. I do not think it is without its own problems. After we have experimented with the present system I hope we can devise a better one. But no institutional system is people-proof. At least as important as a good system is to assure that it does not become a refuge for political hacks, or a captive of special interest groups, or a complacent nest of incompetents. Too many well-intentioned administrative programs have declined to impotence or worse over the course of the years. Nothing short of continued public pressure can keep this from happening to an administrative program. People often want to know what they as individuals can do to fight pollution. I think the most important thing is to keep up the pressure on government to provide a serious pollution control program. It may not have the romance of walking to work or putting bricks in the toilet, but I think it will pay off in the long run.