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Robert Broughton

Thomas A. Koza

Gary F. Selway

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Acid Mine Drainage and the Pennsylvania Courts

Robert Broughton, Thomas A Koza,**
and Gary F Selway****

On March 16, 1973, the Supreme Court of Pennsylvania issued two landmark decisions relating to coal mine drainage in Pennsylvania—*Commonwealth v. Harmar Coal Co.* and *Commonwealth v. Pittsburgh Coal Co.*¹ One month later, on April 16, 1973, a third major acid mine drainage case, *Commonwealth v. Barnes & Tucker Co.*,² was decided by the Commonwealth Court of Pennsylvania. Since these cases deal with major federal constitutional issues, as well as with some of the most critical technical and philosophical problems of any mine acid pollution control program, this seems an appropriate moment to review the entire problem of acid mine drainage and to assess the state of the law relating to that problem in light of *Harmar and Pittsburgh* and *Barnes & Tucker*

We will briefly review first, the nature of the acid mine drainage problem. Then we will trace the history of the law in Pennsylvania as it relates and has related to that problem. Finally, analysis of *Harmar and Pittsburgh* and *Barnes & Tucker* will be undertaken. Specific attention will be focused upon what these three cases say and what they do not say and an attempt will be made to assess their impact on the way the problem may be dealt with in the future.

THE NATURE OF THE PROBLEM

Mine drainage, for our purposes, is any drainage from a coal mine, whether surface or underground. When coal is removed from an under-

B.A., Haverford College, 1956; J.D., Harvard Law School, 1959; M.A. (Economics), University of Pittsburgh, 1970; Professor of Law, Duquesne University School of Law; Chairman, Pennsylvania Environmental Hearing Board.

** B.S. (Mining Engineering), The Pennsylvania State University, 1969; 4th year evening student, Duquesne University School of Law. Mr. Koza is the Book Review Editor of the *Duquesne Law Review*.

*** B.S., Indiana University of Pennsylvania, 1970; 3d year evening student, Duquesne University School of Law.

1. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90 (Pa., Mar. 16, 1973). These cases were decided separately by the Pennsylvania Commonwealth Court as *Harmar Coal Co. v. Sanitary Water Board*, 4 Pa. Comm. Ct. 435, 285 A.2d 898 (1972), and *Pittsburgh Coal Co. v. Sanitary Water Board*, 4 Pa. Comm. Ct. 407, 286 A.2d 459 (1972). They were consolidated on appeal and hereinafter will be referred to as *Harmar and Pittsburgh* when referring to the opinion for both cases.

2. No. 896-A Transfer Docket 1970 (Pa. Comm. Ct., Apr. 16, 1973).

ground seam that is below the top of the area water table, then water will flow into the newly formed cavity from surface streams or underground sources, unless blocked by dams or impermeable rock layers. When coal is mined by stripping, rainfall will contact the coal or adjacent layers.

Such water picks up various constituents in the coal, and these constituents undergo chemical alteration in solution. In nature, this would be a process of chemical weathering of coal layers that normally would occur at a relatively slow rate, and would not affect any substantial proportion of the streams in an area at the same time.³ Mining activity concentrates the effects of those normal processes so that they can become serious statewide and regional problems. Mine drainage pollution affects, for example, approximately 10,500 miles of streams in the Appalachian region, primarily in the northern section.⁴ Of that 10,500 miles, 5,700 miles are affected by acid mine drainage; and three-fourths of those 5,700 miles are in the Monongahela, Allegheny, Susquehanna, Potomac, and Delaware River basins in Pennsylvania, West Virginia and Maryland.⁵ Even more striking, of the total miles of streams in the Appalachian Regional Commission area affected by acid mine drainage, 29% are in the Monongahela River watershed, 18.4% are in the Allegheny River watershed, and 18% are in the West Branch Susquehanna River watershed, over 65% within about 150 miles of the "home" of this Law Review.⁶ Acid mine drainage is thus a surprisingly local problem; at the same time, its very geographic concentration indicates its seriousness to the economy and environment of Western Pennsylvania and Northern West Virginia.

The coal mine drainage problem is largely the result of the formation of acid and iron pollutants when the pyrite and marcasite (iron disulfides) associated with coalbeds are exposed to the atmosphere and water.⁷ Simply stated, when coal is extracted, the pyrites in the mine

3. APPALACHIAN REGIONAL COMMISSION, *ACID MINE DRAINAGE IN APPALACHIA* 15 (1969) [hereinafter cited as *APPALACHIA STUDY*].

4. *Id.* at iii, 6.

5. *Id.* at 6. See also U.S. Army Corps of Engineers, *The Incidence and Formation of Mine Drainage Pollution in Appalachia*, in *ACID MINE DRAINAGE IN APPALACHIA* app. C (1969) (detailed, basin by basin analysis) [hereinafter cited as *APPALACHIA STUDY*].

6. *Id.* at 27 (Table 5).

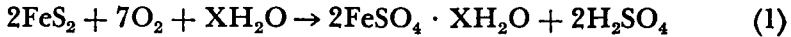
7. Caruccio, *An Evaluation of Factors Affecting Acid Mine Drainage Production and the Ground Water Interactions in Selected Areas of Western Pennsylvania*, in *SECOND SYMPOSIUM ON COAL MINE DRAINAGE RESEARCH* 107 (G. Barthauer chairman 1968) [hereinafter cited as *Caruccio*]. See also *APPALACHIA STUDY*, *supra* note 5, at C-20 to -24.

8. The natural contamination of underground pools is described as follows:

It is generally agreed that pollution occurs in mine water as a result of iron and acid salts being dissolved in the water. The iron and acid salts are formed on the

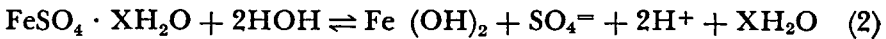
Acid Mine Drainage

are exposed to air and water.⁸ A chemical reaction takes place and the pyrite is oxidized to form ferrous sulfate and sulfuric acid. This reaction can be represented by the following equation:⁹



The ferrous sulfate and sulfuric acid thus formed are washed or seep off the coal mine walls into the ground water flowing through the mine where further hydrolizing or oxidizing takes place, and ferric iron and additional acids are formed.

The ferrous sulfate is then hydrolized according to the following equation to form ferrous iron:¹⁰



Next, the ferrous iron produced in equation (2) is oxidized to the ferric state and additional acidity results, as in equation (3):¹¹



The end result of the above reactions is that the receiving stream is loaded with sulfates, acid and iron hydroxides, as well as such dissolved minerals as aluminum, calcium, magnesium, manganese, and ferrous iron.¹² The iron hydroxides (ferrous and ferric) produced in equations (2) and (3) impart the red color which is characteristic of acid mine drainage. The most frequently observed product of acid mine drainage is "yellowboy," a slightly soluble iron hydroxide which precipitates out into the streambeds.¹³

The gravity of the acid mine drainage problem is dependent upon several factors. First, it depends upon the amount of sulfuritic material (pyrites), oxygen, and water available for the reactive process described

surface of coal measures exposed to the mine atmosphere by the oxidation of pyritic material in the exposed coal. The salts are then washed into the mine water, causing pollution. Thus, underground pools of water are continually being polluted and will continue to be so for perhaps hundreds of years, unless the mine workings are completely flooded, eliminating the air required for oxidation.

4 Pa. Comm. Ct. at 418-19 n.6, 286 A.2d at 465 n.6 (quoted from Brief for Sanitary Water Board).

9. Caruccio, *supra* note 7, at 107; App. C APPALACHIA STUDY, *supra* note 5, at C-20.

10. Caruccio, *supra* note 7, at 107; App. C APPALACHIA STUDY, *supra* note 5, at C-20 to -22.

11. *Id.*

12. *Id.*

13. Caruccio, *supra* note 7, at 107-08.

above.¹⁴ The initial reaction is seldom limited by a lack of water or oxygen, as both of these elements are readily available. The water is supplied as vapor in the air or by the ground water flowing through the mine, and the oxygen comes from the air. The amount of oxygen can be eliminated or reduced substantially by flooding the mine to submerge the pyrites in water or by sealing the mine to shut off air flow. (These are control techniques that will be discussed below.) In general, however, the greater the amount of pyrites available, the greater the acidity of the mine drainage.

Second, the gravity of the mine drainage problem depends upon the type of mine involved.¹⁵ Auger mines and mines which leave pillars of coal continually expose new pyrites to the water and air as the roof and mine walls cave in after the mine has been abandoned. Furthermore, self-draining underground mines have a seemingly inexhaustible supply of water flowing through them which can react with the pyrites.

Third, the severity of the acid mine drainage problem depends upon the alkalinity of the surrounding strata and receiving waters.¹⁶ If the surrounding strata contains limestone, the acid mine drainage may be neutralized or may even be made alkaline. The same will happen if the receiving stream contains alkalines supplied by nature or by industries discharging into the stream.

It is interesting, and relevant for analysis of the potential impact of *Harmar and Pittsburgh* and *Barnes & Tucker*, to note the distribution of sources. Underground mines produce 71.3% of all mine acid drainage, although they constitute only 58% of the number of individual sources.¹⁷ Inactive underground mines, constituting 53% of the sources, contribute 52.5% of the total acid mine drainage.¹⁸ Active underground mines, on the other hand, contribute 18.8% of total acid mine drainage, although they constitute only 5% of the total sources.¹⁹ Thus, not

14. UNIVERSITY OF MARYLAND SCHOOL OF LAW, LEGAL PROBLEMS OF COAL MINE RECLAMATION: A STUDY IN MARYLAND, OHIO, PENNSYLVANIA AND WEST VIRGINIA 27-29 (1972) (Grant No. 14010 FZU from the Environmental Protection Agency) [hereinafter cited as LEGAL PROBLEMS OF COAL MINE RECLAMATION].

15. *Id.*

16. Limestone beds are present in the surrounding strata of the bituminous coal fields in Western Pennsylvania and are responsible for alkaline discharges from the Pittsburgh and Sewickley coal seams. Emrich & Thompson, *Some Characteristics of Drainage from Deep Bituminous Mines in Western Pennsylvania*, in SECOND SYMPOSIUM ON COAL MINE DRAINAGE RESEARCH 190, 222 (G. Barthauer chairman 1968).

17. APPALACHIA STUDY, *supra* note 3, at 36, 41 (Table 5).

18. *Id.* at 36 (Table 5).

19. See also Charnbury, Buscavage & Manevil, *Pennsylvania's Abandoned Mine Drainage Pollution Abatement Program*, in SECOND SYMPOSIUM ON COAL MINE DRAINAGE RESEARCH 319 (G. Barthauer chairman 1968) (estimated that in Pennsylvania, approximately

only is the acid mine drainage problem concentrated geographically, it is also concentrated in one segment of the mining industry.

Failure to treat the problem will have a concentrated effect on economic development in Western Pennsylvania and Northern West Virginia. The billions of gallons of acid mine drainage which enter Pennsylvania's streams and waters have far reaching and detrimental effects. Municipal water supplies are impaired and the water companies incur additional costs in treating water polluted with mine drainage. Industrial users who need water for boilers or cooling purposes must first treat such water or face higher maintenance costs and reduced equipment life because of corrosion.²⁰ Barges, boats, bridge piers, dam structures, etc. also are affected by the corrosion from such mine waters. Fish and other aquatic life are either killed or diminished. The recreational value of a stream polluted with acid mine drainage is reduced substantially. Fishermen, boaters, swimmers, and water skiers do not enjoy and thus will not use waters with a high acidity and streambeds covered with "yellowboy."²¹ Furthermore, a red-brown stream filled with an eyesore such as "yellowboy"—a sight that is probably familiar to all Pennsylvanians and West Virginians—has far less aesthetic value.

TREATMENT AND CONTROL OF ACID MINE DRAINAGE

The acid mine drainage problem need not go unattended. Millions of dollars have been expended by federal and state agencies, private research institutions, and various industrial firms in researching methods for reducing or eliminating the effects of acid mine drainage. Today, there are four basic methods for dealing with the problem. They are: (1) treatment to remove mine acid; (2) abatement at the

15 billion gallons of acid mine drainage is discharged each day, of which over 1.0 billion gallons comes from abandoned mines) [hereinafter cited as Charmbury].

20. Battelle Memorial Institute, *The Impact of Mine Drainage Pollution on Industrial Water Users in Appalachia*, in ACID MINE DRAINAGE IN APPALACHIA: app. A (1969) [hereinafter cited as App. A APPALACHIA STUDY]. The following total annual savings to all industries from reductions in mine drainage pollution in Appalachia (1) by reduction at the mine source (e.g., by sealing the mine) or (2) by lime neutralization was estimated:

Degree of Reduction	Estimated Annual Savings	
	Reduction at Source	Lime Neutralization
30 percent	\$ 530,000	\$370,000
60 percent	990,000	410,000
90 percent	1,230,000	490,000

Id. at 1.

21. LEGAL PROBLEMS OF COAL MINE RECLAMATION, *supra* note 14, at 30-31; see text accompanying note 13 *supra*.

source; (3) deep well disposal; and (4) dilution.²² Before any method is chosen, however, the specific source of drainage, the nature of the drainage, the character and use of the land and receiving waters, the amount of money available, and the legal requirements all must be taken into consideration.

Treatment to Remove Mine Acid

The various treatment techniques available include: neutralization, distillation, reverse osmosis, ion exchange, freezing, and electro dialysis.²³ Neutralization is probably the most widely tested and used treatment technique. Basically, neutralization involves reducing the acidity of the mine water drainage and the removal of iron and other dissolved minerals. It is accomplished by treating the acid mine water with lime, limestone, or limestone followed with lime.²⁴ Because treatment with limestone is cheaper than lime, provides a more compact precipitated sludge, has no deleterious effects if overtreated with water, and has relatively low operating and maintenance costs, it appears to be the best of the known methods for acid mine water neutralization.²⁵

A flowsheet of the process for treating mine water with limestone is shown in Figure 1.²⁶ The main features of a limestone treatment plant are a holding pond for water pumped from the mine, a tubemill or grinder for mixing the mine water with limestone, an aeration pond, and settling ponds for the resulting sludge. The treated effluent which flows from the settling ponds can be discharged into a stream or river.

Although the neutralization process seems to be a solution to the mine drainage problem, it has two disadvantages. First, a large volume

22. LEGAL PROBLEMS OF COAL MINE RECLAMATION, *supra* note 14, at 31; see Cyrus W. Rice & Co., *Engineering Economic Study of Mine Drainage Control Techniques*, in ACID MINE DRAINAGE IN APPALACHIA app. B, at 4-15 (1969) [hereinafter cited as App. B APPALACHIA STUDY].

23. App. B APPALACHIA STUDY, *supra* note 22 *passim*; Martin & Hill, *Mine Drainage Research Program of the Federal Water Pollution Control Administration*, in SECOND SYMPOSIUM ON COAL MINE DRAINAGE RESEARCH 52 (G. Barthauer chairman 1968) [hereinafter cited as Martin & Hill].

24. See M. DEUL & E. MIHOK, MINE WATER RESEARCH: NEUTRALIZATION (1967) (Bureau of Mines Report of Investigations 6987); E. MIHOK, M. DEUL, C. CHAMBERLAIN & J. SELMECZI, MINE WATER RESEARCH: THE LIMESTONE NEUTRALIZATION PROCESS (1968) (Bureau of Mines Report of Investigations 7191); Charnbury, *supra* note 19; App. B APPALACHIA STUDY, *supra* note 22, at 17-30.

25. App. B APPALACHIA STUDY, *supra* note 22, at 25-28; Address by Maurice Deul, Seventy-Second National Western Mining Conference, Colorado Mining Association, Denver, Colorado, Jan. 30, 1969.

26. Figure 1 was taken from E. MIHOK, MINE WATER RESEARCH: PLANT DESIGN AND COST ESTIMATES FOR LIMESTONE TREATMENT 2 (1970) (Bureau of Mine Report of Investigations 7368).

Acid Mine Drainage

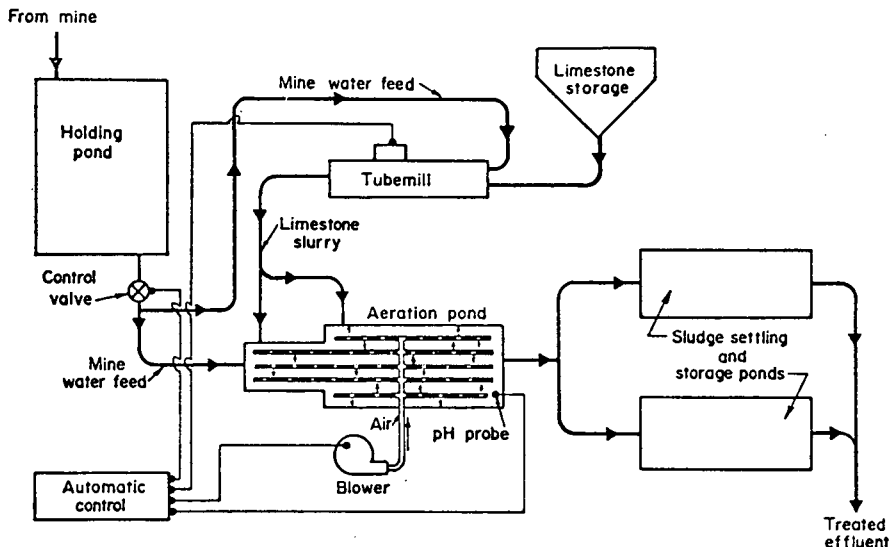


FIGURE 1. FLOWSHEET FOR LIMESTONE TREATMENT PROCESS

of sludge is produced which is difficult to dispose.²⁷ One possible remedy for this problem is to pump the sludge back into abandoned sections of the mine. Second, the treated water has an increased hardness which may make it undesirable for domestic use and may require treatment for certain industrial uses.²⁸

Abatement at the Source

Abatement at the source is another method for reducing or eliminating acid mine drainage. The ultimate objective of this control method is to reduce or eliminate either the oxygen or water or pyrites required for the formation of acid mine water. The techniques which have been tried include mine flooding, water diversion, mine air sealing, surface restoration, and revegetation.²⁹

The purpose of mine flooding is to submerge the pyrites so that oxygen cannot react with them to form acid. This technique is effective in strip mines and in underground mines which do not have openings to the surface. For mines with openings above surface water levels,

27. LEGAL PROBLEMS OF COAL MINE RECLAMATION, *supra* note 14, at 32.

28. *Id.*; App. B APPALACHIA STUDY, *supra* note 22, at 22-24, 27.

29. Martin & Hill, *supra* note 23, at 52. See also LEGAL PROBLEMS OF COAL MINE RECLAMATION, *supra* note 14, at 32; App. B APPALACHIA STUDY, *supra* note 22, at 97, 115, 130, 136 *passim*.

mine seals have to be constructed at the openings; sometimes these can be successful if air is prevented from contacting the coal in the mine.

The theory of water diversion is that water diverted from a mine will not become polluted.³⁰ Pumps, flumes, barrels, and various other devices are required.

Mine air sealing is a technique which has proved effective for controlling mine drainage.³¹ The objective of air sealing is to exclude oxygen from a mine to prevent the oxidation of pyrites found in the coal and adjacent strata. The main difficulty with this technique is that cracks and crevices caused by subsidence are frequently formed and allow the mine to breathe.

Surface restoration and revegetation are primarily used for controlling acid formation in strip mines and surface refuse piles.³² By stripping the coal and reclaiming the surface the pyritic materials are covered over and oxygen is excluded. A growth of vegetation over a spoil pile or refuse bank prevents erosion and the exposure of new pyritic materials. Also, vegetation will live on the oxygen available in the upper layer of the pile.

Some other techniques still to be researched include active and inert gas replacement of mine atmospheres (similar to mine flooding), grouting, inundation by sealing or surface water control, and biological control methods.³³

Deep Well Disposal

Deep well disposal is a relatively new technique that has been contemplated for doing away with acid mine drainage.³⁴ This would involve treating the water, removing suspended solids, and injecting the liquid wastes into geological formations underground.

Dilution

The effects of acid mine drainage are reduced by dilution in the receiving stream.³⁵ A disadvantage of this technique is that it only

30. Martin & Hill, *supra* note 23, at 52; App. B APPALACHIA STUDY, *supra* note 22, at 130.

31. Moebis, *Mine Air Sealing: A Progress Report*, in SECOND SYMPOSIUM ON COAL MINE DRAINAGE RESEARCH 255 (G. Barthauer chairman 1968); App. B APPALACHIA STUDY, *supra* note 22, at 136.

32. App. B APPALACHIA STUDY, *supra* note 22, at 97, 115.

33. Martin & Hill, *supra* note 23, at 53.

34. LEGAL PROBLEMS OF COAL MINE RECLAMATION, *supra* note 14, at 36; see App. B APPALACHIA STUDY, *supra* note 22, at 90.

35. App. B APPALACHIA STUDY, *supra* note 22, at 71.

reduces the problem and does not prevent or eliminate the formation of acid mine drainage.

From the foregoing, it is clear that effective methods for treating and controlling mine drainage are available. The big question is, "Who is responsible for such treatment or control?" This question is dealt with in the remainder of the article.

THE RESPONSE OF THE LAW TO THE PROBLEM

Common Law

The history of the law's response to coal mine acid drainage in Pennsylvania³⁶ logically starts with *Pennsylvania Coal Co. v. Sanderson*,³⁷ a private nuisance case decided in 1886. In that case acid mine drainage had the effect of preventing plaintiff, a downstream riparian landowner, from using water from Meadow Brook, a small tributary of the Lackawanna River, for domestic purposes or a fountain she had earlier constructed. The pipes corroded, the fish in the brook were killed, and "the entire apparatus for the utilization of the water" was abandoned.³⁸

A private nuisance is an unreasonable interference with another's use and enjoyment of real property.³⁹ The unreasonableness of the interference depends, under the test outlined in the Restatement of Torts, on whether the utility of the defendant's conduct outweighs the gravity of the harm to the plaintiff.⁴⁰ The court in *Sanderson*, emphasizing in its opinion the value of coal mining to the development of the region, decided that there was no liability:

The right to mine coal is not a nuisance in itself: It is, as we have said, a right incident to the ownership of coal property, and when exercised in the ordinary manner, and with due care the owner cannot be held for permitting the natural flow of mine water over his own land, into the water course, by means of which the natural drainage of the country is effected.⁴¹

36. From this point on, although (as noted above, text accompanying notes 3-5) the acid mine drainage problem affects all of northern Appalachia, we will be confining our analysis solely to Pennsylvania.

37. 113 Pa. 126 (1886).

38. *Id.* at 143.

39. 6-A AMERICAN LAW OF PROPERTY §§ 28.22-34 (A.J. Casner ed. 1954) (Clyde O. Martz, author of Private Nuisance Section); W. PROSSER, LAW OF TORTS § 89 (4th ed. 1971) [hereinafter cited as PROSSER].

40. RESTATEMENT OF TORTS §§ 827-28 (1939).

41. 113 Pa. at 146. Contrast the doctrine in New York espoused in *Whalen v. Union*

Sanderson was cited as the law in Pennsylvania with regard to acid mine drainage, and with regard to the limits of private nuisance law, for many years.⁴² Acid mine drainage as a possible public nuisance was dealt with in 1924 in *Pennsylvania R.R. v. Sagamore Coal Co.*⁴³

There the discharge of acid mine water into Indian Creek in Westmoreland County, upstream from a reservoir used to supply water to the locomotives of the Pennsylvania Railroad and as municipal water supply for several communities with a combined population of 75,000, was enjoined as a public nuisance. The court distinguished *Sanderson* on the ground that:

Such an injury as was shown in the *Sanderson* case was held to be unredressable where the public is not involved. The rule there laid down is in consonance with that applied in many instances, where a condition is not held to be a nuisance which annoys or offends a single individual but which would be outlawed if the public were complaining.⁴⁴

The *Sagamore* court argued strenuously against the point that a mine owner has a property right to discharge acid mine water,⁴⁵ and attempted to limit *Sanderson* to holding that the defendant's act in that case was not a nuisance, because of "the exceptional situation there existing."⁴⁶

Case law with respect to acid mine drainage, and water pollution generally, has long since been overshadowed by Legislative enactments. The case law is not unimportant, but at this point serves primarily as a backdrop, as the context, in which statutory provisions must be interpreted.

Bag & Paper Co., 208 N.Y. 1, 101 N.E. 805 (1913), that there is no balancing of interests possible even in granting an injunction against a private nuisance—if a wrong is being committed, it must be enjoined. This doctrine may have been abandoned, with respect to the granting of an injunction but not with respect to the awarding of damages, in *Boomer v. Atlantic Cement Co.*, 26 N.Y.2d 219, 257 N.E.2d 870, 309 N.Y.S.2d 312 (1970).

42. See, e.g., *Waschak v. Moffat*, 379 Pa. 441, 109 A.2d 310 (1954); *Evans v. Moffat*, 192 Pa. Super. 204, 160 A.2d 465 (1960). It is interesting to contrast the *Sanderson* approach to acid mine drainage with the Pennsylvania common law approach to mine subsidence. In *Jones v. Wagner*, 66 Pa. 429 (1870), the Pennsylvania Supreme Court adopted the view that the owner of the surface estate is entitled as an absolute right to support from the owner of subsurface minerals. In *Coleman v. Chadwick*, 80 Pa. 81 (1875), the court went so far as to hold that it was no defense that the mining was conducted in accordance with the custom prevailing in the industry; lack of fault was nearly irrelevant. This has long since, of course, been substantially modified by statute. See PA. STAT. ANN. tit. 52, §§ 67.1-10 (1966); PA. STAT. ANN. tit. 52, §§ 1406.1-19 (Supp. 1973).

43. 281 Pa. 233, 126 A. 386 (1924).

44. *Id.* at 247, 126 A. at 391.

45. *Id.* at 248-50, 126 A. at 391-92.

46. *Id.* at 249, 126 A. at 391.

Legislation

The Purity of Waters Act⁴⁷ was enacted in 1905 and was the first legislation in Pennsylvania that pertained to clean streams. The Purity of Waters Act regulated the discharge of sewage into the Commonwealth's waters but specifically excluded coal mine drainage.⁴⁸

In 1923, the Act of June 14, 1923⁴⁹ was enacted by the Pennsylvania legislature which empowered the Advisory Board of the Department of Health to promulgate orders and regulations to protect the water supplies from pollution and contamination. As in the case of the Purity of Waters Act, coal mine drainage was specifically excluded from the coverage of this legislation although the 1923 Act went further and excluded water used in the preparation of coal.⁵⁰ These two acts remained in effect until 1937 when they were repealed by the original Clean Streams Law.⁵¹

The Clean Streams Law of 1937 was the first major legislative enactment for dealing with water pollution in Pennsylvania. Section 3 of the Act declared it a public nuisance to discharge sewage, industrial wastes, or any other noxious or deleterious substances which were or which may become "inimical and injurious to the public health, or to animal or aquatic life, or to the uses of such waters for domestic or industrial consumption, or for recreation."⁵² Although the discharge of sewage and industrial waste was not completely prohibited, such discharges became subject to the administrative regulation of the Sanitary Water Board.⁵³

One of the primary concerns of the Pennsylvania legislature in 1937

47. Act of Apr. 22, 1905, Pa. P.L. 260 (repealed 1937).

48. Section 4 of the Purity of Waters Act provided in part:

No person, corporation, or municipality shall place, or permit to be placed, or discharge, or permit to flow into any of the waters of the State, any sewage, except as hereinafter provided. *But this act shall not apply to waters pumped or flowing from coal mines . . .*

Act of Apr. 22, 1905, § 4, Pa. P.L. 260 (repealed 1937) (emphasis added).

49. Pa. P.L. 793 (repealed 1937).

50. Section 1 of the 1923 Act provided in part:

And further provided: That this Act shall not apply to any pollution or contamination caused by or resulting from water pumped or flowing from coal mines or water used in the preparation of coal.

Act of June 14, 1923, § 1, Pa. P.L. 793 (repealed 1937).

51. Act of June 22, 1937, Pa. P.L. 1987, as amended, PA. STAT. ANN. tit. 35, §§ 691.1-1001 (Supp. 1973).

52. Act of June 22, 1937, § 3, Pa. P.L. 1989, as amended, PA. STAT. ANN. tit. 35, § 691.3 (Supp. 1973).

53. Act of June 22, 1937, §§ 201-02, 301-02, Pa. P.L. 1989-90, 1994-95, as amended, PA. STAT. ANN. tit. 35, §§ 691.201-202, 691.301 (Supp. 1973).

was to protect the "clean waters" of the Commonwealth from pollution by sewage or industrial wastes.⁵⁴

The discharge of acid mine drainage was not included in the definition of industrial waste in section 1 of the Act⁵⁵ and, once again, was specifically excluded from regulation in section 310.⁵⁶ The General Assembly recognized in section 310 that there was no known practical means for removing the polluting properties produced by coal mine drainage:

Acid Mine Drainage and Silt.—The provisions of this article *shall not apply to acid mine drainage* and silt from coal mines until such time as, in the opinion of the Sanitary Water Board, practical means for the removal of polluting properties of such drainage shall become known.⁵⁷

It was not until 1945, when the Clean Streams Law was amended,⁵⁸ that coal mine drainage became subject to legislative proscription. Section 310 of the 1937 Act was amended to regulate the discharge of mine drainage into the "clean waters" of the Commonwealth. That section of the 1945 amendments specifically allowed the discharge of acid mine drainage into "clean waters" of the Commonwealth which were not devoted to public use and into waters of the Commonwealth which were already polluted.⁵⁹ The 1945 amendments prohibited only the discharge of acid mine drainage into "clean waters" of the Commonwealth which were devoted or put to public use.

In addition, three new sections, sections 311, 312 and 313, were added to the Clean Streams Law in 1945.⁶⁰ Section 311 authorized the Sanitary Water Board to acquire easements and rights of ways by condemnation, purchase or otherwise,⁶¹ for the purpose of transporting or diverting discharges of acid mine drainage into already polluted or un-

54. Section 306 of the Clean Streams Law defined "clean waters" as:

[W]aters which are, at the effective date of this Act, unpolluted and free from any discharge or drainage of industrial waste and from any authorized discharge or drainage of sewage

Act of June 22, 1937, § 306, Pa. P.L. 1996 (repealed 1970).

55. "Industrial waste" was defined to include "any liquid, gaseous or solid substance, not sewage, resulting from any manufacturing or industry." Act of June 22, 1937, § 1, Pa. P.L. 1988, *as amended*, PA. STAT. ANN. tit. 35, § 691.1 (Supp. 1973).

56. Act of June 22, 1937, § 310, Pa. P.L. 1998 (repealed 1965).

57. *Id.* (emphasis added).

58. Act of May 8, 1945, Pa. P.L. 435, *as amended*, PA. STAT. ANN. tit. 35, §§ 691.1-1001, *amending* Act of June 22, 1937, Pa. P.L. 1987.

59. Act of May 8, 1945, § 6, Pa. P.L. 439, *amending* Act of June 22, 1937, § 310, Pa. P.L. 1998 (repealed 1965).

60. Act of May 8, 1945, § 7, Pa. P.L. 440-43 (repealed 1965).

61. *Id.*

clean waters, and section 312 set forth the condemnation procedures to be followed.⁶² The most significant amendment was section 313 which required that a mine operator submit a drainage plan to and obtain a permit from the Sanitary Water Board before a coal mine could be opened, reopened, or continued in operation.⁶³ Thus, a mine operator was required to plan acid mine drainage control before and implement such measures while he mined.

The 1945 amendments to the Clean Streams Law clearly indicate that the Pennsylvania legislature still recognized the special problems of acid mine drainage confronting the coal mining industry and continued to permit the discharge of acid mine drainage into certain waters of the Commonwealth. No attempt was made by the Pennsylvania legislature in 1945 to clean up any previously polluted waters. The legislative purpose at that time was to protect waters which were "clean waters" on or subsequent to January 1, 1944. To accomplish this objective, the legislature in section 311 placed on the Commonwealth the cost of the acquisition of easements and rights of ways and the equipment necessary to transport and divert acid mine water from clean waters to already polluted or unclean streams.⁶⁴

In 1965 new amendments were enacted to the Clean Streams Law which represented a significant departure from the previous legislation.⁶⁵ A new provision, section 4, was added which set forth the findings and declarations of policy of the General Assembly:

Findings and Declarations of Policy.—It is hereby determined by the General Assembly of Pennsylvania and declared as a matter of legislative findings that:

(1) The Clean Streams Law as presently written has failed to prevent an increase in the miles of polluted water in Pennsylvania.

(2) *The present Clean Streams Law contains special provisions for mine drainage that discriminate against the public interest.*

(3) *Mine drainage is the major cause of stream pollution in Pennsylvania and is doing immense damage to the waters of the Commonwealth.*

(4) *Pennsylvania, having more miles of water polluted by mine drainage than any state in the nation, has an intolerable situation*

62. *Id.*

63. *Id.*

64. *Id.*

65. Act of Aug. 23, 1965, Pa. P.L. 372, as amended, PA. STAT. ANN. tit. 35, §§ 691.1-.1001 (Supp. 1973), amending Act of June, 1937, Pa. P.L. 1987.

which seriously jeopardized the economic future of the Commonwealth.

(5) Clean, unpolluted streams are absolutely essential if Pennsylvania is to attract new manufacturing industries and to develop Pennsylvania's full share of the tourist industry, and

(6) Clean, unpolluted water is absolutely essential if Pennsylvanians are to have adequate out of door recreational facilities in the decades ahead.

The General Assembly of Pennsylvania therefore declares it to be the policy of the Commonwealth of Pennsylvania that:

(1) *It is the objective of the Clean Streams Law not only to prevent further pollution of the waters of the Commonwealth, but also to reclaim and restore to a clean, unpolluted condition every stream in Pennsylvania that is presently polluted, and*

(2) The prevention and the elimination of water pollution is recognized as being directly related to the economic future of the Commonwealth.⁶⁶

Thus, the General Assembly confessed that coal mine drainage had received special treatment in the past and announced that the new policy of the Commonwealth was not only to prevent further stream pollution, but also to restore every polluted stream in Pennsylvania to a clean and unpolluted condition.

To help accomplish that objective, the 1965 Act brought acid mine drainage within the definition of industrial waste.⁶⁷ As a result, discharges of acid mine drainage became subject to section 307 of the Clean Streams Law. Section 307 provided in part:

No person shall hereafter . . . operate any establishment, which, *in its operation*, results in a discharge of *industrial waste* which would flow or be discharged into *any of the waters* of the Commonwealth and thereby cause the pollution of the same . . .⁶⁸

66. Act of Aug. 23, 1965, § 2, Pa. P.L. 374, as amended, PA. STAT. ANN. tit. 35, § 691.4 (Supp. 1973), amending Act of June 22, 1937, Pa. P.L. 1987 (emphasis added).

67. Section 1 of the Clean Streams Law as amended in 1965 defined industrial waste as follows:

"Industrial waste" shall be construed to mean any liquid, gaseous or solid substance, not sewage, resulting from any manufacturing or industry, or from any establishment, as herein defined, and *mine drainage*, silt, coal mine solids, rock, debris, dirt and clay from coal mines, coal collieries, breakers or other coal processing operations.

Act of Aug. 23, 1965, § 1, Pa. P.L. 374, as amended, PA. STAT. ANN. tit. 35, § 691.1 (Supp. 1973), amending Act of June 22, 1937, § 1, Pa. P.L. 1988 (emphasis added).

68. Act of June 22, 1937, § 307, Pa. P.L. 1996, as amended, PA. STAT. ANN. tit. 35, § 691.307 (Supp. 1973) (emphasis added). Section 307 of the 1937 Act was not changed by the 1965 amendments but remained in the form in which it was originally enacted in 1937.

Acid Mine Drainage

Thus, for the first time, the discharge of acid mine drainage into already polluted waters was prohibited in Pennsylvania.

Another important amendment to the Clean Streams Law in 1965 was the addition of section 315.⁶⁹ This section required that permits be obtained from the Sanitary Water Board before a coal mine could be opened, reopened, or continued in operation. More specifically, section 315(a) required that an application for a permit approving the proposed plan for drainage and industrial waste be filed with the Sanitary Water Board; section 315(b) made it unlawful to open, reopen, or continue the operation of any coal mine without a permit and also set forth the conditions and circumstances upon which permits were to be issued by the Sanitary Water Board; and section 315(c) provided certain circumstances under which the Sanitary Water Board could modify, suspend or revoke any permit which had been issued.⁷⁰

The 1965 amendments to the Clean Streams Law are still in effect, except as they were amended by the Pennsylvania legislature in July 1970.⁷¹

The 1970 amendments to the Clean Streams Law include a number of important changes. The amended versions of sections 307 and 315 give the Sanitary Water Board greater control over the discharge of industrial wastes and mine operations and make it a nuisance to discharge any mine drainage or industrial waste or to operate any mine without a permit or contrary to the terms of the Sanitary Water Board.⁷²

Most significantly, however, the legislature clearly spelled out in the 1970 amended version of section 315 what it meant by operation of a mine and discharge from a mine.

Operation of a mine includes "any preparatory work in connection with opening or reopening a mine, backfilling, sealing, and other closing procedures and any other work done on land or water in connection with the mine."⁷³

Discharge from a mine includes, with one limitation, a discharge which occurs *after mining operations have ceased*.⁷⁴ The limitation is

69. Act of Aug. 23, 1965, § 5, Pa. P.L. 376, as amended, PA. STAT. ANN. tit. 35, § 691.315 (Supp. 1973), amending Act of June 22, 1937, Pa. P.L. 1987.

70. Act of Aug. 23, 1965, § 5, Pa. P.L. 376, as amended, PA. STAT. ANN. tit. 35, §§ 691.315 (a)-(c) (Supp. 1973), amending Act of June 22, 1937, Pa. P.L. 1987.

71. PA. STAT. ANN. tit. 35, §§ 691.1-1001 (Supp. 1973), amending Act of June 22, 1937, Pa. P.L. 1987.

72. *Id.* §§ 691.307, 691.315, amending Act of June 22, 1937, Pa. P.L. 1987.

73. *Id.* § 691.315(a), amending Act of June 22, 1937, Pa. P.L. 1987.

74. *Id.*

that the mining operations must have been conducted subsequent to January 1, 1966, under circumstances which required a permit from the Sanitary Water Board under the provisions of section 315(b) of the Clean Streams Law as it existed under the 1965 amendments. This proviso leaves no doubt that mine operators now must insure that no polluting discharge will occur after mining operations have ceased.

The 1970 amendments to the Clean Streams Law also provide flexibility in the legal remedies available to the enforcement agency. They make one who violates any of its provisions or any rule or regulation of the Sanitary Water Board⁷⁵ subject to civil and criminal penalties as well as various other enforcement remedies. Under section 601,⁷⁶ an injunction may be issued where the public health is endangered or where the circumstances require it. Section 602⁷⁷ provides that any person who violates any provision of the Clean Streams Law or any rule, regulation, or order issued pursuant to the Act shall be fined not less than \$100 nor more than \$1000 for each separate offense and may be imprisoned for sixty days. And, any person who commits a second offense within two years shall be fined not less than \$100 nor more than \$5,000 for each separate offense and may also be imprisoned for not more than one year. Each day of continued violation is a separate offense. A violator may also be assessed a civil penalty up to \$10,000 under section 605⁷⁸ or may have his permit revoked, modified, or suspended under section 610.⁷⁹ In addition, an applicant may be refused a permit under section 609⁸⁰ if he is found to be in violation of any provision of the Clean Streams Law or any administrative rule or regulation and if such violation "demonstrates a lack of ability or intention on the part of the applicant to comply with the law or with the conditions of the permit sought."⁸¹

75. The Department of Natural Resources was established in Pennsylvania in 1971 by PA. STAT. ANN. tit. 71, § 158 (Supp. 1973). This department assumed the functions which were previously exercised by the Department of Mines and Mineral Industries and the Sanitary Water Board.

76. PA. STAT. ANN. tit. 35, § 691.601 (Supp. 1973), *amending* Act of June 22, 1937, § 601, Pa. P.L. 2000.

77. *Id.* § 691.602, *amending* Act of June 22, 1937, § 602, Pa. P.L. 2000.

78. *Id.* § 691.605, *amending* Act of June 22, 1937, § 605, Pa. P.L. 2001.

79. *Id.* § 691.610, *amending* Act of June 22, 1937, § 610, Pa. P.L. 1987.

80. *Id.* § 691.609, *amending* Act of June 22, 1937, § 609, Pa. P.L. 2002.

81. The enactment of section 609 with its grant of authority to withhold a permit was sparked by a lower court decision in *Sanitary Water Board v. Sunbeam Coal Corp.*, 47 Pa. D. & C.2d 378 (C.P. Dauph. Co. 1969). The court in that case reversed an order of the Sanitary Water Board refusing to issue a permit to an applicant because of alleged violations of mine permits that had been previously issued to the applicant for other coal mines. The Clean Streams Law in effect at that time did not provide that existing violations could be the basis for refusing to issue a permit.

Another important addition to the Clean Streams Law in 1970 was the bonding requirements. An operator holding a permit or an applicant seeking a permit can be required under section 315(b) to post a bond which would insure compliance with the law, rules or regulations, and the provisions and conditions of a permit.⁸² The General Assembly was particularly seeking to insure that there will be no polluting discharge after mining operations have ceased. The Department is given authority to establish the amount of bond, and liability under any bond is to continue "until such time as the department determines that there is no further significant risk of a polluttional discharge."⁸³ If an operator refuses to post bond, the Department may withhold the issuance of a permit or revoke an existing permit.

A "Clean Water Fund" to be used in the elimination of pollution also was established by the Pennsylvania legislature when the Clean Streams Law was amended in 1970.⁸⁴ The Department of Health was authorized to accept payments into the fund in lieu of requiring the holder of a permit to construct or operate a treatment facility. The payments received into the fund are to be used for abatement programs or the construction of consolidated treatment plants. Presumably, this latter provision was enacted to cope with the problems of small operators who cannot afford to build treatment facilities; or perhaps in some cases to provide an institutional mechanism for constructing joint or consolidated treatment facilities.

Mine operators are not the only ones responsible under the Clean Streams Law for preventing stream pollution from mine drainage. Section 316, in addition to giving the mine operator or the Commonwealth access to lands which cause or may cause pollution, imposes liability on the landowner or occupier of such lands.⁸⁵ This provision is intended to deal with pollution resulting from abandoned and inactive mines and refuse piles. The constitutionality of section 316 can be challenged inasmuch as a landowner or occupier may not have had any responsibility for conditions created by mining operations that took place before the enactment of this provision in 1970.

From the foregoing discussion, it should be clear that Pennsylvania has a comprehensive Clean Streams Law for dealing with the problems

82. PA. STAT. ANN. tit. 35, § 691.315(b) (Supp. 1973), amending Act of June 22, 1937, § 315, Pa. P.L. 1987.

83. *Id.*

84. *Id.* § 691.8, amending Act of June 22, 1937, § 8, Pa. P.L. 1987.

85. *Id.* § 691.316, amending Act of June 22, 1937, § 316, Pa. P.L. 1987.

of acid mine drainage and stream pollution. Four other enactments by the General Assembly also are relevant to the mine drainage problem.

The Coal Mine Sealing Act of 1947⁸⁶ was a statutory response by the legislature to protect the waters of the Commonwealth from acid mine drainage from abandoned mines. This Act requires that coal mining operators, upon abandonment of a mining operation, seal all openings in the mine through which water may flow into streams of the Commonwealth and through which air may enter the mine.⁸⁷ Once a mine is sealed, the Commonwealth accepts the responsibility for the maintenance of the seals.⁸⁸

Shortly after the Clean Streams Law was amended in 1965, the General Assembly enacted the Act of December 15, 1965⁸⁹ as an additional measure to alleviate the pollution of streams from mine drainage. This Act was aimed at abandoned mines and directed the Secretary of the Department of Mines and Mineral Industries to "initiate an immediate action program to *correct pollution from abandoned deep and strip mines* on each of the watersheds of the Commonwealth of Pennsylvania."⁹⁰ Although this Act may appear to indicate a legislative intent to make the Commonwealth responsible for drainage from abandoned and non-operating mines the Supreme Court of Pennsylvania has, in *Harmar and Pittsburgh*, held that an operator must treat water which flows into his mine from an adjacent abandoned mine and which he pumps as part of his mining operation.⁹¹

On January 19, 1968, the Pennsylvania legislature enacted the Land and Water Conservation and Reclamation Act.⁹² This Act was designed to alleviate the predicament of small mine operators or owners who could not afford to build treatment facilities of their own by helping

86. PA. STAT. ANN. tit. 52, §§ 28.1-8 (1966).

87. Act of June 30, 1947, § 3(a), Pa. P.L. 1178, *as amended*, PA. STAT. ANN. tit. 52, § 28.3(a) (1966).

88. PA. STAT. ANN. tit. 52, § 28.5 (1966).

89. PA. STAT. ANN. tit. 35, §§ 760.1-2 (Supp. 1973).

90. *Id.* § 760.1 (emphasis added).

91. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 23-24 (Pa., Mar. 16, 1973).

92. PA. STAT. ANN. tit. 32, §§ 5101-21 (Supp. 1973). This act was the enabling legislation for the 1967 amendment to the Constitution of Pennsylvania which provided for the creation of a debt and the issuance of bonds in the amount of \$500,000,000.00. This money was to be used:

. . . for a Land and Water Conservation and Reclamation Fund to be used for the conservation and reclamation of land and water resources of the Commonwealth, including the elimination of *acid mine drainage* . . . and other pollution from the streams of the Commonwealth . . .

Id. § 5104 (emphasis added).

Acid Mine Drainage

to provide treatment plants for them. The Act gave the Department of Mines and Mineral Industries the power and authority to build and operate treatment plants and to permit operators and owners to discharge their mine drainage into these plants. The operators and owners are to be charged according to the quantity and quality of their pollutants as well as a proportional share of the capital and operating costs.⁹³

In 1968, the legislature enacted the Coal Refuse Disposal Control Act⁹⁴ to deal with a wide range of conditions created by coal refuse disposal piles. This Act recognized that such disposal piles can cause water pollution, and it gave the Department of Mines and Mineral Industries broad powers of control over coal refuse piles to prevent water pollution and various other effects.

HARMAR *and* PITTSBURGH

In the *Pittsburgh Coal* case the Pittsburgh Coal Co. Division of Consolidation Coal Co. sought, on June 28, 1968, a permit from the Department of Health,⁹⁵ then the administrative agency responsible for enforcing the provisions of the Clean Streams Law,⁹⁶ to discharge acid mine drainage from its Hutchinson Mine.

The Hutchinson Mine is a bituminous coal mine which is located in a large underground coal basin in Westmoreland County, Pennsylvania, known as the Irwin Basin.⁹⁷ This basin is approximately twenty-one miles long and seven miles wide. It is parabolic or dish-shaped and dips from the north to the south. The Hutchinson Mine is situated at the southern tip of the Irwin Basin, at approximately the lowest point in the dip.⁹⁸

The Irwin Basin is completely mined out except for the unmined coal in the Hutchinson Mine. The eighteen major coal mines which have operated in this basin at various times since 1852 are now closed and abandoned. Pittsburgh Coal Co. was never involved in any of those other operations.⁹⁹

A large underground lake or pool, covering 23,780 acres and esti-

93. *Id.* §§ 5116(a)(I)-(II).

94. PA. STAT. ANN. tit. 52, §§ 30.1-.62 (Supp. 1973).

95. 4 Pa. Comm. Ct. at 415, 286 A.2d at 461.

96. Act of June 22, 1937, § 5, Pa. P.L. 1937, *as amended*, PA. STAT. ANN. tit. 35, §§ 691.5(c)-(d) (Supp. 1973).

97. 4 Pa. Comm. Ct. at 409-11, 286 A.2d at 461-62.

98. *Id.*

99. *Id.*

mated to contain from 100 to 350 billion gallons of polluted water, has formed in the Irwin Basin as a result of ground water accumulating in the abandoned mine.¹⁰⁰

The Hutchinson Mine is separated from the adjacent abandoned mines in the Irwin Basin by a barrier-pillar of coal over 100 feet in thickness which acts as a dam to keep water in the pool from flowing into the mine. Approximately 2.17 million gallons of water per day flow over and around and through this barrier-pillar into the Hutchinson Mine.¹⁰¹

Pittsburgh Coal Co. is presently pumping approximately 3.44 million gallons of water per day from the Hutchinson Mine. This amount includes the 2.17 million gallons flowing from the abandoned mines which must be pumped in order to mine the coal in the Hutchinson Mine.¹⁰²

The Department of Health on January 15, 1969 denied a permit on the grounds that Pittsburgh Coal Co. proposed to treat only the 1.27 million gallons per day that originated in the Hutchinson Mine itself.¹⁰³ An appeal to the Sanitary Water Board followed, and after hearings that Board affirmed the action of the Department.¹⁰⁴

On appeal, the commonwealth court reversed, holding (a) the Clean Streams Law does not require the treatment of acid mine drainage from inactive mines under the circumstances of this case;¹⁰⁵ (b) if it did, it would be unconstitutional as "an unreasonable, arbitrary, and oppressive exercise of the police power,"¹⁰⁶ and a denial of due process, in that it imposed on appellant a burden not of its own making and "unrelated to its otherwise lawful operation over the years,"¹⁰⁷ and in that there was no "rational relationship between the evil sought to be cured and the use of property as contributing to that evil";¹⁰⁸ and (c) that the Department of Health had issued and the Sanitary Water Board adopted "Guidelines" which were contrary at least to the spirit of the Board's ruling in this case.¹⁰⁹

100. *Id.*

101. *Id.*

102. *Id.*

103. Brief for Appellant on appeal from *Pittsburgh Coal Co. v. Sanitary Water Board* at 4, *Commonwealth v. Harmar Coal Co.*, Civil No. 90 (Pa., Mar. 16, 1973).

104. The Sanitary Water Board's opinion is summarized in the commonwealth court's opinion, 4 Pa. Comm. Ct. at 416-18, 286 A.2d at 464-65.

105. *Id.* at 421-23, 286 A.2d at 467.

106. *Id.* at 423, 286 A.2d at 468.

107. *Id.* at 424, 286 A.2d at 468.

108. *Id.*

109. *Id.* at 420, 286 A.2d at 465; *see id.* at 428, 286 A.2d at 469 (Mencer, J., dissenting).

Acid Mine Drainage

The *Harmar Coal* case also dealt with the question of the extent to which a mine operator should be responsible under the Clean Streams Law for the treatment of waters from an adjacent inactive mine which the operator pumps to protect his own active operations.

That case involved the company's Harmar Mine, in Allegheny County, which is immediately adjacent to an abandoned mine known as the Indianola Mine.¹¹⁰ The Indianola Mine was abandoned in 1957 and an accumulation of water began forming in the mine behind the barrier-pillar of coal which separated that mine from the Harmar Mine. The Department of Mines and Mineral Industries considered the possible build-up of hydrostatic pressure accumulating adjacent to the barrier-pillar to be a threat to the safety of the miners in the Harmar Mine. Therefore, that department required the Harmar Coal Co. to pump the water from the Indianola Mine. The company began doing this in 1958 under a permit it obtained from the Department of Health.¹¹¹ The water was discharged into Deer Creek. When the Clean Streams Law was amended in 1965, Harmar Coal Co. was required to submit an application for a mine drainage permit. In that application Harmar Coal Co. sought permission to pump 6.48 million gallons of mine drainage per day from the inactive Indianola Mine and to discharge it without treatment into Deer Creek. The Sanitary Water Board refused the application and ordered that the Harmar Mine operations be ceased.¹¹² The Court of Common Pleas of Dauphin County reversed the Board.¹¹³

The commonwealth court affirmed the decision of the Dauphin County court on the basis that (a) the Sanitary Water Board did not offer substantial evidence that the pumping of mine water from the Indianola Mine into Deer Creek would increase the Base Waste Load;¹¹⁴ (b) there was no substantial evidence—specifically, no aquatic study—to support the need for the effluent standards in question as they related to iron content;¹¹⁵ (c) the Clean Streams Law did not require treat-

110. 4 Pa. Comm. Ct. at 437-38, 285 A.2d at 899.

111. *Id.*, 285 A.2d at 900.

112. *Id.* at 438-39, 285 A.2d at 900.

113. *Sanitary Water Bd. v. Harmar Coal Co.*, 50 Pa. D. & C.2d 627 (C.P. Dauph. Co. 1970). The majority in the commonwealth court adopted the opinion of the Dauphin County Court of Common Pleas, which had been written by Judge Wilkinson of the commonwealth court, specially assigned, along with Judge Manderino, to the Dauphin County Court of Common Pleas for the *Harmar Coal* case. Neither Judge Wilkinson nor Judge Manderino participated at the commonwealth court level; Justice Manderino did not participate at the supreme court level.

114. 4 Pa. Comm. Ct. at 441, 285 A.2d at 901.

115. *Id.* at 442, 285 A.2d at 902.

ment of mine drainage other than from the mine being worked;¹¹⁶ and (d) if it did, it would be unconstitutional.¹¹⁷

Base Waste Load is a term peculiar to the Department of Health, defined in the Guidelines published by the Department as follows:

[T]he normal waste load originating without pumping or change in drainage pattern from one or more inactive mines as determined by the Board.¹¹⁸

The Department of Health Guidelines in effect at that time, which the commonwealth court held were binding on the Board, also provided:

The operator(s) will be required to meet Board requirements for drainage from his active mine *as well as the polluttional increment in excess of the estimated Base Waste Load resulting from changes in the drainage pattern in the inactive mine.* The maximum limitation would be the Base Waste Load or the standards set by the Board, whichever is higher.¹¹⁹

Under these guidelines, if a mine operator's pumping of wastes from an adjacent inactive mine did not increase the Base Waste Load, he was not required to treat it. The commonwealth court held that the Board did not prove that the Base Waste Load would be increased.¹²⁰ This, in essence, disposed of the second issue as well. If the mine drainage from the Indianola Mine was going to flow into Deer Creek whether or not it was pumped, then no *excess* pollution was being created by Harmar Coal Co.'s pumping it there.

The commonwealth court's holdings on these two issues raised some interesting questions relative to who has the burden of proof in an environmental case where an administrative agency denies a permit. Must the applicant prove it will not cause pollution, or must the agency prove it will? Furthermore, what is needed to satisfy that burden of proof? The supreme court disposed of the first issue by stating that there was substantial evidence—thus not really saying who had the burden of proof initially, but implicitly requiring that the agency's ultimate conclusion be supported by substantial evidence.¹²¹ On the

116. *Id.* at 441-42, 285 A.2d at 902.

117. *Id.* at 442 n.**. The court seemed to adopt the reasoning it espoused in *Pittsburgh Coal*, see notes 106-08 *supra*.

118. Pennsylvania Department of Health, *Guidelines Regarding Mining in Areas Affected by Inactive Workings*, in MINE DRAINAGE MANUAL IV-1 n.* (2d ed. 1966) [hereinafter cited *Guidelines*].

119. *Id.* at IV-1 (emphasis added); see note 194 *infra* for quotation in full.

120. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 19 (Pa., Mar. 16, 1973).

121. As required by section 44 of the Administrative Agency Law, Act of June 4, 1945, Pa. P.L. 1388, as amended, PA. STAT. ANN. tit. 71, § 1710.44 (1962).

aquatic study issue, the court in essence held that as long as there was evidence to support a particular standard, the court would bow to the expertise of the Sanitary Water Board.¹²²

The significance of the commonwealth court's decisions in *Pittsburgh Coal* and *Harmar Coal* is that in applying these decisions, under no circumstance would a mine operator have been required to treat mine drainage that was not from his mine, even if his mining operations resulted in a substantially greater discharge to a surface stream.

The Pennsylvania Supreme Court reversed on all issues, holding: (a) The Clean Streams Law is applicable to a discharge of acid mine drainage from inactive as well as active mines on the facts of these two cases.¹²³ (b) As so applied, the Clean Streams Law is constitutional.¹²⁴ (c) The Guidelines were not regulations, and the Sanitary Water Board was not bound by them.¹²⁵ (d) There was substantial evidence to support the Sanitary Water Board's findings in *Harmar Coal*.¹²⁶ (e) Aquatic studies are not necessary on each and every stream for which water quality standards are promulgated.¹²⁷

Scope of the Clean Streams Law

The basic approach of the commonwealth court and the supreme court is enlightening. The commonwealth court, reading the all inclusive definition of "waters of the Commonwealth"¹²⁸ from the statute, interpreted that phrase as applying to underground waters in a mine, or abandoned mine,¹²⁹ as well as to surface waters. It therefore stated the issue as follows:

122. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 23 (Pa., Mar. 16, 1973); see text accompanying notes 206-09 *infra*

123. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 10-11 (Pa., Mar. 16, 1973).

124. *Id.* at 14.

125. *Id.* at 20.

126. *Id.* at 21.

127. *Id.* at 22.

128. Section 1 of the Clean Streams Law, Act of June 22, 1937, Pa. P.L. 1987, as amended, PA. STAT. ANN. tit. 35, § 691.1 (Supp. 1973), defines "waters of the Commonwealth" as follows:

"Waters of the Commonwealth" shall be construed to include any and all rivers, streams, creeks, rivulets, impoundments, ditches, water courses, storm sewers, lakes, dammed water, ponds, springs and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

129. The commonwealth court found that "inactive mines" were distinguished in the Clean Streams Law, and in other legislation, from "active mines," that "inactive mines" were not "mines" under the Clean Streams Law, and therefore the acid mine drainage provisions of the Clean Streams Law did not apply to inactive mines. 4 Pa. Comm. Ct. at 421-22, 286 A.2d at 466-67. The supreme court concluded that "inactive mines" were "mines" under the Clean Streams Law. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90

It is the unusual factual situation of this conflict which sets it apart from the clearly enunciated position of the statutory and regulatory law heretofore stated. In this case, "waters of the Commonwealth" contained in a man-made underground lake, and naturally contaminated while therein, are naturally flowing through man-made caverns, not constructed by appellant, onto appellant's land. Appellant seeks to divert this water into a natural, surface body of "water of the Commonwealth," to be able to regain the use and enjoyment of his land. It is the diversion of the Commonwealth's waters from one channel to another which inspires the Board to disallow absent treatment of the diverted water. Clearly, then, this case is not the usual case involving the discharge of acid mine drainage resulting from *that applicant's mining operations*. We must be careful to consider the statutory provisions and the Board's holding in this light.¹³⁰

The supreme court refused to accept this statement of the issue primarily because it insisted on distinguishing between polluted water that remained in a mine, and water that was discharged into a stream.

Water polluted underground can itself pollute the surface water into which it is discharged. Nothing in the Clean Streams Law justified the Court's holding that pollution occurs *only* when polluting substances are "*first discharged into any 'waters of the Commonwealth,'*" in this case the underground pool. Appellant argues, and we agree, that the critical and principal illegal conduct under the Clean Streams Law is the discharge into the surface waters. The Court below, failed to distinguish between pollution of waters, created by mining, which remain underground and those waters which are discharged to the surface. In the Clean Streams Law and the Rules and Regulations thereunder this distinction is crystal clear.¹³¹ Section 315 of the 1965 Amendments states that a permit would not be issued if in the Board's opinion the discharge from the mine would endanger the "public health, animal or aquatic life, or . . . the use of the water for domestic or industrial consumption or recreation." In the 1970 Amendments this language was deleted. Section 315 now prohibits discharges

(Pa., Mar. 16, 1973). In terms of the wording of the statutes, reasonable men could probably differ on this. In terms of the policy reasons for selecting one or the other interpretation, it probably depends on just how much of an evil one thinks the legislature felt acid mine drainage to be. If one concludes the legislature was feeling its way in 1965, only tentatively and partially overruling the outlook of *Pennsylvania Coal Co. v. Sanderson*, 113 Pa. 126 (1886) (see text accompanying notes 41-42 *supra*), then the commonwealth court was right. The supreme court seems to have concluded that the legislature had decided firmly that the problem must be solved, as soon as possible. That outlook, as we will be suggesting in connection with a number of issues, explains much about the *Harmar and Pittsburgh* decision, and suggests much about future decisions.

130. 4 Pa. Comm. Ct. at 418-19, 286 A.2d at 465-66 (footnote omitted).

131. It is difficult to avoid wondering whether a pun was intended here.

from mines unless the discharge is authorized by the Board's Rules and Regulations or the mine operator has first obtained a permit. Section 4, Article 900 of the Board's Rules and Regulations, by requiring plans or methods to "show how a polluttional discharge will be prevented from the mine after mining is completed," anticipates and allows the accumulation of polluted water in mine basins as long as it does not reach the surface waters.¹³²

In a sense this harks back to the *Sagamore* distinction.¹³³ Polluted water that is not put to any public use is not a public nuisance. It may, under some circumstances, be a violation of the Clean Streams Law to pollute waters that are not being put to a public use, as for example in the "potential pollution" provision added by the 1970 amendments.¹³⁴ Even that, however, falls back for its justification on a potentiality for discharge into some stream used by the public. The *purpose* of the Clean Streams Law even after *Harmar and Pittsburgh*, is not simply to protect water,¹³⁵ it is to protect the public. Thus there is a basis for failing to regulate pollution of underground "waters of the Commonwealth" that will not reach the surface, while nevertheless regulating the discharge of that same water.

Once having restated the issue, of course, the answer always falls neatly into place. The only other subsidiary issue regarding whether or not Harmar Coal Co. and Pittsburgh Coal Co. were required by the Clean Streams Law to treat their respective "extra" discharges was whether, under that law, the discharges from adjacent inactive mines were their responsibility.

The supreme court construed the Clean Streams Law broadly, citing the "Environmental Declaration of Rights"¹³⁶ to support the proposition that there is "an overriding public interest in acid mine drainage control,"¹³⁷ and noted that:

132. Commonwealth v. Harmar Coal Co., Civil Nos. 89-90, at 11 (Pa., Mar. 16, 1973).

133. Pennsylvania R.R. v. Sagamore Coal Co., 281 Pa. 233, 126 A. 386 (1924); see text accompanying notes 43-46 *supra*.

134. PA. STAT. ANN. tit. 35, § 691.402 (Supp. 1973).

135. Even though that might be desirable, in the abstract. See, e.g., *Sierra Club v. Morton*, 405 U.S. 727, 741-52 (1972) (Douglas, J., dissenting); Stone, *Should Trees Have Standing?—Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450 (1972).

136. Commonwealth v. Harmar Coal Co., Civil Nos. 89-90, at 16 (Pa., Mar. 16, 1973). Article I, section 27 of the Constitution of Pennsylvania provides:

Section 27. Natural Resources and the Public Estate.—The people have a right to clean air, pure water, and to the preservation of the natural scenic, historic and esthetic values of the environment. Pennsylvania's natural resources, including the air, waters, fish, wildlife, and the public lands and property of the Commonwealth, are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall preserve and maintain them for the benefit of all the people.

137. Commonwealth v. Harmar Coal Co., Civil Nos. 89-90, at 16 (Pa., Mar. 16, 1973).

Section 315, as amended, provides that no one "shall operate a mine or allow a discharge from a mine" without a permit or contrary to the Board's rules and regulations: included in "operation of the mine" is "any other work done on land or water in connection with the mine."¹³⁸

The court went on, in essence, to hold that any acid mine water discharge that occurs in connection with or because of the activity of a present mining operation can be regulated or prohibited under the Clean Streams Law. The conclusion seems to be that a mining company can be required to treat any discharge that would be caused by its mining operation. To determine what is caused by a particular mining operation one looks, under this decision, to the traditional tort law test:¹³⁹ "but for" this particular mining operation, would a given discharge occur?

Constitutionality

Having decided that the commonwealth court had misinterpreted the Clean Streams Law and that these companies would have to conform their activities to meet the standards promulgated by the Sanitary Water Board, the supreme court was compelled to determine whether or not the Clean Streams Law was a valid exercise of the police power, *i.e.*, whether the law as so interpreted was constitutional. In *Pittsburgh Coal* the commonwealth court concluded that the Board's interpretation of the Clean Streams Law "constitutes an unreasonable, arbitrary and oppressive exercise of the police power . . . [because] it imposes upon appellant a burden unrelated to its otherwise lawful operation over the years and not of its making."¹⁴⁰ This conclusion was not shared by the supreme court, which proceeded to analyze, independently, the police power and its application in these circumstances. To lay a foundation for considering the court's analysis of the constitutionality of the Clean Streams Law as applied in these cases it is appropriate to examine briefly the nature of the police power generally.

The term "police power" is used to describe that authority by which a state legislates in the public "good." The police power is inherent

138. *Id.* at 11.

139. PROSSER, *supra* note 39, at 236-41.

140. 4 Pa. Comm. Ct. at 423-24, 286 A.2d at 486. In *Harmar Coal* the commonwealth court made a footnote reference to its *Pittsburgh Coal* decision, apparently adopting that reasoning and conclusion. 4 Pa. Comm. Ct. at 442 n.***, 285 A.2d at 902 n.**.

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in state governments¹⁴¹ and is said to be one of the least limitable of governmental powers.¹⁴² Traditionally, the police power has been employed to regulate in furtherance of the public health, safety, morals, and general welfare, but a precise definition of the scope of power is almost impossible,¹⁴³ other than by a list of examples.¹⁴⁴

A proper exercise of the police power must meet three requirements.¹⁴⁵ First, the end sought to be achieved must be one which the law deems sufficient to justify protection.¹⁴⁶ Historically public health, morals, and safety have been most readily accepted as valid exercises of the power.¹⁴⁷ Second, the regulation must bear a reasonable relationship to the end sought to be achieved.¹⁴⁸ However, the courts have given legislatures wide latitude to determine the kinds of regulations which will achieve a desired result.¹⁴⁹ The third requirement, and the one which presents the most difficulty, is the requirement that the exercise of the police power not be "arbitrary" or "unreasonable." The requirement of "reasonableness" or non-arbitrariness stems from the "due process" and "taking without just compensation" clauses of the fifth and fourteenth amendments to the United States Constitution. No test has been formulated to determine either criteria. The United States Supreme Court has addressed itself to this problem on several occasions. In *Nebbia v. New York*, the Court said:

The Fifth Amendment, in the field of federal activity and the Fourteenth, as respects State action, do not prohibit governmental

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141. But what are the police powers of a State? They are nothing more or less than the powers of government inherent in every sovereignty to the extent of its dominions. And whether a State passes a quarantine law, or a law to punish offenses, or to establish courts of justice, or requiring certain instruments to be recorded, or to regulate commerce within its own limits, in every case it exercises the same power; that is to say, the power of sovereignty, the power to govern men and things within the limits of its dominion. It is by virtue of this power that it legislates
- Thurlow v. Massachusetts, 46 U.S. (5 How.) 504, 583 (1847) (Taney, C.J.) (License Cases).
142. *Queenside Hills Realty Co. v. Saxl*, 328 U.S. 80 (1946); *District of Columbia v. Brooke*, 214 U.S. 138 (1909).
143. *Berman v. Parker*, 348 U.S. 26 (1954); *Stone v. Mississippi*, 101 U.S. 814 (1880).
144. *E.g.*, *Lawton v. Steele*, 152 U.S. 133 (1894).
145. Garton, *Ecology and the Police Power*, 16 S.D.L. REV. 261 (1971).
146. *Id.*
147. *Id.*; *Pierce Oil Corp. v. City of Hope*, 248 U.S. 498 (1919); *Bacon v. Walker*, 204 U.S. 311 (1907).
148. *Goldblatt v. Hempstead*, 369 U.S. 590 (1962); *Nebbia v. New York*, 291 U.S. 502 (1934). In *Adams v. Shannon*, 7 Cal. App. 3d 427, 434, 86 Cal. Rptr. 641, 645 (1970), the California Court of Appeals said:
- In the case of an exercise of the state police power in a fashion designed to protect the natural environment, the test is . . . whether the legislative body could have determined upon any reasonable basis that the legislation is necessary or desirable for its intended purposes.
149. *Reinman v. Little Rock*, 237 U.S. 71 (1915); *Lawton v. Steele*, 152 U.S. 133 (1894).

regulation for the public welfare. They merely condition the exertion of the admitted power, by securing that the end shall be accomplished by methods consistent with due process. And the guaranty of due process, as has often been held, demands only that the law shall not be unreasonable, arbitrary or capricious, and that the means selected shall have a real and substantial relation to the object sought to be attained. It results that a regulation valid for one sort of business, may be invalid for another sort, or for the same business under other circumstances because the reasonableness of each regulation depends upon the relevant facts.

The court has repeatedly sustained curtailment of enjoyment of private property, in the public interest.¹⁵⁰

There are, apparently, three theories employed by the courts to evaluate a factual situation to determine the constitutionality of the imposed regulation.¹⁵¹ First, if a state appropriates property by taking title or possession for public benefit, there seems little doubt that this is an unreasonable exercise of the power and requires compensation.¹⁵² Since "title" to property consists ultimately of the right to use the property in various ways, the prohibition of a sufficient number of uses also, logically, amounts to a taking.¹⁵³ Second, the "noxious use theory" indicates that no compensation is required when the police power is used to destroy or prohibit activities that are noxious, wrongful, or harmful.¹⁵⁴ This might also be referred to as the "public nuisance" theory, since property that is a public nuisance can be destroyed or confiscated without payment.¹⁵⁵ Where this is applied to an already existing enterprise, one sometimes finds reference to the "creation of the harm" test, based on the argument that while in general established economic interests cannot be diminished merely because of a resulting public benefit, that rule does not apply where the individual whose interest is to be diminished himself created the need for public regu-

150. 291 U.S. 502, 525 (1934) (emphasis added). See also *United States v. Caltex*, 344 U.S. 149 (1952) ("No rigid rules can be laid down to distinguish compensable losses from non-compensable losses. Each case must be judged on its own facts."); *Goldblatt v. Hempstead*, 369 U.S. 590 (1962) (again expressed the indecisiveness of the line between valid regulation and takings: "There is no set formula to determine where regulation ends and taking begins.").

151. See *Sax, Takings and the Police Power*, 74 *YALE L.J.* 36 (1964) [hereinafter cited as *Sax*].

152. *Morris County Land Improvement Co. v. Township of Parsippany-Troy Hills*, 40 N.J. 539, 193 A.2d 232 (1963); *Joint Meeting v. Borough of Middlesex*, 69 N.J. Super. 136, 173 A.2d 785 (L. Div. 1961); *Miller v. City of Beaver Falls*, 368 Pa. 189, 82 A.2d 34 (1951).

153. See, e.g., *Miller v. City of Beaver Falls*, 368 Pa. 189, 82 A.2d 34 (1951) (property was zoned for park (open space) purposes, effectively prohibiting any use at all).

154. *Sax, supra* note 151; see *Lawton v. Steele*, 152 U.S. 133 (1894).

155. *Id.*

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lation of his conduct.¹⁵⁶ Third is the diminution in value theory announced by Justice Holmes in the early part of this century in *Pennsylvania Coal Co. v. Mahon*.¹⁵⁷ To Holmes the basic consideration in each instance was the extent to which the property involved lost its economic value:

Government hardly could go on if to some extent values incidental to property could not be diminished without paying for every such change in the general law. As long recognized some values are enjoyed under an implied limitation and must yield to the police power. But obviously the implied limitation must have its limits or the contract and due process clauses are gone. One fact for consideration in determining such limits is the extent of the diminution. When it reaches a certain magnitude, in most if not in all cases there must be an exercise of eminent domain and compensation to sustain the act. So the question depends upon the particular facts. The greatest weight is given to the judgment of the legislature but it always is open to interested parties to contend that the legislature has gone beyond its constitutional power.

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. To make it commercially impracticable to mine certain coal has very nearly the same effect for constitutional purposes as appropriating or destroying it.¹⁵⁸

While this approach seems to indicate that the degree of loss may be controlling the Court has not followed Holmes with any degree of consistency.¹⁵⁹ Later decisions by the Court have distinguished between the relative economic values involved and the intrinsic value of the property remaining if the regulation in question was upheld. In responding to Holmes' opinion in *Pennsylvania Coal* Justice Brandeis said:

It is said that one fact for consideration in determining whether the limits of the police power have been exceeded is the extent of the resulting diminution in value, and that here the restriction destroys existing rights of property and contract. But values are relative. If we are to consider the value of the coal kept in place by the restriction, we should compare it with the value of all

156. *Reinman v. City of Little Rock*, 237 U.S. 71 (1915). See also *Butchers' Benevolent Ass'n v. Crescent City Live-Stock Landing & Slaughter-House Co.*, 83 U.S. 36 (1873) (Slaughter House Cases).

157. 260 U.S. 393 (1922).

158. *Id.* at 413-15.

159. See, e.g., *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926) (75% loss in value); *Hadacheck v. Sebastian*, 239 U.S. 394 (1915) (87½% loss in value).

other parts of the land. That is, with the value not of the coal alone, but with the value of the whole property.¹⁶⁰

There have been instances where the diminution in value is so great that it would seem to cry out for compensation.¹⁶¹ Holmes himself rarely found that the regulation involved went beyond the permissible limits; even in those instances where he thought the regulation in question "went to the verge of the law."¹⁶²

To understand the holding of the Pennsylvania Supreme Court in the two cases under discussion it is helpful to look at the factors considered by the United States Supreme Court in *Goldblatt v. Hempstead*,¹⁶³ cited by the court,¹⁶⁴ and the most recent case where the Court gave full consideration to the question of when a regulation is, or is not, a valid exercise of the police power. In *Goldblatt* the Town of Hempstead passed an ordinance prohibiting the excavation of sand and gravel lower than two feet from the top of the underground water level. Goldblatt owned and for 27 years prior to the promulgating of the ordinance had mined a sand and gravel pit which was below the water table level and, consequently, had caused a lake to form. The ordinance would have required Goldblatt to cease his mining (dredging) operations and "backfill" the pit to two feet above the water table level. This would have forced the shut-down of the mining operation and reduced the value of the property from commercial to residential.¹⁶⁵

In considering the constitutionality of the ordinance the United States Supreme Court directed its attention to all three theories. Speaking for the Court Justice Clark started with a hint at the "title" theory:

If this ordinance is otherwise a valid exercise of the town's police powers, the fact that it deprives the property of its most beneficial use does not render it unconstitutional.¹⁶⁶

He followed this with a statement of public nuisance, or noxious use theory:

160. 260 U.S. at 419.

161. *Miller v. Schoene*, 276 U.S. 272 (1928) (destruction of cedar trees to preserve nearby apple orchard).

162. *Block v. Hirsch*, 256 U.S. 135 (1921); *Erie R.R. v. Public Utilities Comm'rs*, 254 U.S. 394 (1921).

163. 369 U.S. 590 (1961).

164. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 15 (Pa., Mar. 16, 1973).

165. 369 U.S. at 591-92.

166. *Id.* at 592. This is designated "title theory" on the basis described in the text accompanying note 153 *supra*, that since "title" is really a bundle of rights, the prohibition of enough of those rights may be regarded as a taking.

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The power which the states have of prohibiting such use by individuals of their property, as will be prejudicial to the health, the morals, or the safety of the public, is not, and consistently with the existence and safety of organized society, cannot be, burdened with the condition that the state must compensate such individual owners for pecuniary losses they may sustain, by reason of their not being permitted, by a noxious use of their property, to inflict injury upon the community.¹⁶⁷

And finally, he referred to the “diminution of value” theory:

There is no set formula to determine where regulation ends and taking begins. Although a comparison of values before and after is relevant, see *Pennsylvania Coal Co. v. Mahon*, . . . it is by no means conclusive . . .¹⁶⁸

Having given attention to all three theories the Court concluded:

The ordinance in question was passed as a safety measure, and the town is attempting to uphold it on that basis. *To evaluate its reasonableness we therefore need to know such things as the nature of the menace against which it will protect, the availability and effectiveness of other less drastic protective steps, and the loss which appellants will suffer from the imposition of the ordinance.*¹⁶⁹

Since no evidence of harm to the defendant had been submitted, other than that further mining would be impossible under the ordinance in question,¹⁷⁰ the Court found that the defendant’s burden of showing the ordinance to be unreasonable—and hence unconstitutional—had not been met.¹⁷¹

The Pennsylvania Supreme Court appears to have adhered strictly to the Guidelines and the holding of *Goldblatt*. The court analyzed *Harmar and Pittsburgh*, as to reasonableness, along the same lines set forth in *Goldblatt*. The court stated that the dangers of acid mine drainage have been noted by the United States Congress, the Pennsylvania legislature and the courts;¹⁷² and found an “obvious” nexus between the

167. *Id.* at 593, quoting *Mugler v. Kansas*, 123 U.S. 623, 668-69 (1887).

168. *Id.* at 594.

169. *Id.* at 595 (emphasis added); see *Lawton v. Steele*, 152 U.S. 133, 137 (1894):

To justify the State in . . . interposing its authority in behalf of the public, it must appear, first, that the interests of the public . . . require such interference; and, second, that the means are reasonably necessary for the accomplishment of the purpose, and not unduly oppressive upon individuals.

Quoted by the Court in *Goldblatt v. Hempstead*, 369 U.S. at 594-95, and by the Pennsylvania Supreme Court in *Commonwealth v. Harmar Coal Co.*, Nos. 89-90, at 15 (Pa., Mar. 16, 1973).

170. 369 U.S. at 596-97.

171. *Id.* at 595-96.

172. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 15 (Pa., Mar. 16, 1973).

clear legislative intent to prevent further acid mine drainage pollution, and restricting the pumping of acid mine water into surface streams where the pumping was to make active mining possible.¹⁷³ The court tied in both the beneficial interest, or title theory, and the diminution in value theory, to determine whether there had been a taking of property, finding that the imposition of a total treatment requirement was not as onerous as the restrictions imposed in the *Slaughter House*¹⁷⁴ and *Reinmann v. Little Rock Cases*,¹⁷⁵ nor did a total treatment requirement deny Pittsburgh and Harmar the use and enjoyment of their property either as coal production fields or as "private" property.¹⁷⁶

The court emphasized at several points that "[T]he prohibition upon the enterprise of mining is not absolute, but only makes its operation more expensive,"¹⁷⁷ and footnoted an admission by Pittsburgh Coal that it would continue to operate even if required to treat the entire discharge.¹⁷⁸ Obviously, the distinction between absolutely prohibiting mining and "only making its operation more expensive" is not a very firm one. At some point, for example, mining could clearly become so expensive that it would be more economical to close the mine than to continue mining.¹⁷⁹

Did the Pennsylvania Supreme Court mean by making the distinction to imply that if there had been an absolute prohibition, or a situation amounting to economic impossibility, it would have decided the other way? Or by citing *Goldblatt*,¹⁸⁰ where there was what amounted to an absolute prohibition, did the court mean to imply that even an absolute prohibition would not have rendered the Clean Streams Law unconstitutional?

One can distinguish *Goldblatt*¹⁸¹ on the grounds that the defendant in that case did not prove that he was harmed by the ordinance in question—even though he could not use the mine for mining, he could still

173. 83 U.S. 36 (1873).

174. 237 U.S. 71 (1915).

175. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 16 (Pa., Mar. 16, 1973).

176. *Id.*

177. *Id.* at 16-17.

178. *Id.* at 17 n.9.

179. The court recognized this in its discussion, *id.* at 14, of *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922). For some mines this "commercial impracticability" could conceivably become a problem under the new 1.5 ppm water quality standard for iron, recently enacted for many streams in Pennsylvania by the Environmental Quality Board, Regulations, Pa. Dept. of Env. Resources, §§ 93.5, 93.6(b)(8), 93.6(b)(10), 3 PA. BULL. 331 (1973); *id.* §§ 93.5, 93.6(b)(2)-(5), 93.6(b)(7)-(11), 93.7(c)(11)-(12), 3 PA. BULL. 764-95 (1973).

180. 369 U.S. 590 (1961).

181. *Id.*

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use it¹⁸² for other purposes, perhaps purposes as valuable as gravel mining, in so far as one might tell from the record. Where the property is an underground coal seam, however, it is difficult to see how it could be argued, even speculatively, with no evidence in the record, that it could have any other beneficial use. Thus, proof of harm to the affected property owner should be fairly easy to establish.

On the other hand, the supreme court was copious in its references to the injuriousness of acid mine drainage, and the harm to the Commonwealth from discharging acid mine water to surface streams.¹⁸³ And, in its comment on retroactivity,¹⁸⁴ the court concentrated on the present discharge, rather than on the past mining operations. This indicates that in a case where a particular regulation clearly presented either an absolute prohibition against mining or commercial impracticability, the court might well apply a public nuisance approach. They would be following the policy lead of the legislature in reasoning that the discharge of acid mine water was so noxious that terminating that evil justified in a particular case forcing a cessation of coal mining and thereby the practical confiscation of property.¹⁸⁵

Both Pittsburgh Coal Co. and Harmar Coal Co. had relied on *Pennsylvania Coal Co. v. Mahon*¹⁸⁶ as authority that the Clean Streams Law was unconstitutional.¹⁸⁷ The Pennsylvania Supreme Court correctly indicated that *Mahon* is distinguishable both factually and theoretically. In *Mahon* the coal company had sold the surface rights to certain property but expressly retained the right to remove the coal beneath and remove the subsurface support.¹⁸⁸ The United States Supreme Court held that a statute absolutely prohibiting the removal of subsurface support was invalid as to those lands to which the coal company had sold only the surface rights, without the right to support.¹⁸⁹ Factually, *Mahon* is distinguishable because neither Pittsburgh Coal Co. nor Harmar Coal Co. is being denied the right to remove its coal; the companies may continue to operate their mines, they simply may not

182. *Id.* at 595-96.

183. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 16-17 (Pa., Mar. 16, 1973).

184. *Id.* at 19.

185. *See* *Lawton v. Steele*, 152 U.S. 133 (1894), and cases cited therein. This is admittedly a rather close judgment on the language of this opinion; it is based partly upon the fact that the court consistently chose broadening, rather than narrowing, interpretations of the Clean Streams Law, and partly upon the tenor of the opinion.

186. 260 U.S. 353 (1922).

187. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 18 (Pa., Mar. 16, 1973).

188. 260 U.S. at 412; *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 18 (Pa., Mar. 16, 1973).

189. 260 U.S. at 414; *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 18 (Pa., Mar. 16, 1973).

discharge acid mine drainage into the surface water of the Commonwealth without first treating it. Theoretically the cases are distinguishable because in *Mahon* the effect of the statute was to take the property of the coal companies and give it to people who had acquired only surface rights.¹⁹⁰

The "Guidelines"

In 1966 the Pennsylvania Department of Health published a "Mine Drainage Manual" that contained a section entitled "Guidelines Regarding Mining in Areas Affected by Inactive Workings."¹⁹¹ The mining companies argued, and the commonwealth court agreed,¹⁹² that since these were officially approved by the Sanitary Water Board they were regulations, and that to the extent they applied to these cases the Board was bound by them.¹⁹³ The question of the extent to which the Guidelines actually did apply to these cases was extensively briefed by both parties.¹⁹⁴

The supreme court held, however, that they were merely policy statements, not binding upon the Board:

Had the Board intended otherwise, it would not have failed to file these guidelines with the Department of State as is required by Section 21 of the Administrative Agency Law, Act of June 4, 1945,

190. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 18 (Pa., Mar. 16, 1973).

191. *Guidelines*, *supra* note 118.

192. 4 Pa. Comm. Ct. at 416-19, 286 A.2d at 464-65; 4 Pa. Comm. Ct. at 440, 285 A.2d at 898.

193. 4 Pa. Comm. Ct. at 440, 285 A.2d at 898.

194. The portions of these *Guidelines*, *supra* note 118, relevant to the *Harmar and Pittsburgh* cases provided as follows:

3. Operations which intercept mine water pools which have a discharge point other than that proposed by the operator, or drain to a common pool.

The operator(s) will be required to comply with Sanitary Water Board requirements for amount of pollutants created by his operation. The maximum limitation would be the Base Waste Load* or the standards set by the Board whichever is higher.

That where more than one operation drains to a common pool, all the operations jointly and individually be held responsible for compliance with Sanitary Water Board requirements.

4. Mining requiring the pumping or draining of adjacent inactive mines to protect the active workings.

The operator(s) will be required to meet Board requirements for drainage from his active mine as well as the pollutional increments in excess of the estimated Base Waste Load* resulting from changes in the drainage pattern in the inactive mine. The maximum limitation would be the Base Waste Load or the standards set by the Board whichever is higher.

* Base Waste Load is the normal waste load originating without pumping or change in drainage pattern from one or more inactive mines as determined by the Board.

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P.L. 1388, *as amended*, 71 P.S. § 1710.21, in order for them to become effective as regulations.¹⁹⁵

While this may be technically correct, and while procedural requirements of the Administrative Agency Law¹⁹⁶ and the Commonwealth Documents Law,¹⁹⁷ if they are to mean anything at all, must be applied, this result nevertheless leaves one feeling a little uneasy. If an administrative agency tells somebody to do something, and that person does it, it may be legal for the agency to change its mind where the "telling" was informal, but a question is raised as to fairness.¹⁹⁸

Perhaps it was fair in these cases. Neither coal company had expended great sums of money in reliance upon the Guidelines. While it is true their permit applications were predicated upon the theory that the Guidelines were applicable, this reliance meant that they were *not* spending money to treat the water from the adjacent mines;¹⁹⁹ their reliance, at least up to the date of the supreme court decision, was saving them money. There was no indication that they had invested in the construction of treatment facilities that were incompatible with the new interpretation and would have to be scrapped, or that they had invested in opening a mine that would have to be closed if the Guidelines were not binding on the Sanitary Water Board.²⁰⁰

This decision, therefore, does not overrule such earlier cases as *Stahl v. First Pennsylvania Banking & Trust Co.*²⁰¹ or *Commonwealth v. Folcroft Landfill Corp.*,²⁰² where it was held that in appropriate cases even the Commonwealth can be estopped to assert some right. These

195. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 20 (Pa., Mar. 16, 1973). Having earlier concluded that the Clean Streams Law applied to the actions of Harmar Coal Co. and Pittsburgh Coal Co., see text accompanying notes 128-39 *supra*, the court went on to say of the applicability of the Guidelines:

More important, we are not bound by rulings or regulations which are contrary to the governing statutes under which they are promulgated. . . . The Clean Streams Law properly requires treatment of the discharges in the present cases and, therefore, the guidelines, to the extent that they are contrary to the Clean Streams Law, are invalid.

Commonwealth v. Harmar Coal Co., Civil Nos. 89-90, at 21 (Pa., Mar. 16, 1973) (citations omitted).

196. Administrative Agency Law, Act of June 4, 1945, Pa. P.L. 1388, *as amended*, PA. STAT. ANN. tit. 71, §§ 1710.21-51 (1968).

197. Commonwealth Document Law, PA. STAT. ANN. tit. 45, §§ 1101-611 (Supp. 1973).

198. See text accompanying notes 102-04 & 111-12 *supra*.

199. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 17 n.9 (Pa., Mar. 16, 1973).

200. *Id.* On the contrary, both mines were opened prior to the publication of the Guidelines, *supra* note 118; and at least one of the mining companies, Pittsburgh Coal Co. indicated it could and would build a treatment facility and continue mining in the event of an adverse decision. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 17 n.9 (Pa., Mar. 16, 1973).

201. 411 Pa. 121, 191 A.2d 386 (1963).

202. 1 Pa. Comm. Ct. 356 (1961).

cases recognize the limitation that ordinarily the rights of the public should not be subject to estoppel because of acts, representations or, in case of laches, delays of agents of the government. But they also recognize that in some instances individual rights may have been so prejudiced by such acts, representations, or delays that estoppel should be applied despite this principle.²⁰³

The supreme court in these cases did not discuss the estoppel issue. But as noted above,²⁰⁴ perhaps it was not considered relevant.

*Aquatic Studies*²⁰⁵

Before setting water quality standards for Deer Creek, the Sanitary Water Board had not performed an aquatic biology study to determine in detail the biological capacity of that stream, and the applicability and meaningfulness of the effluent standards relative to the capacity of Deer Creek to assimilate the discharge.²⁰⁶ The commonwealth court found that fact fatal to the validity of the Board's effluent standards.²⁰⁷ The supreme court held that:

Harmar does not attack the reasonableness of the regulation, but rather asks that we substitute our judgment, by requiring an aquatic study, for that of a body selected for its expertise whose experience makes it better qualified than a court to establish technical standards. This we will not do. In the absence of a purely arbitrary exercise of an agency's duties or functions "*judicial discretion may not be substituted for administrative discretion.*" *Blumenschein v. Pittsburgh Housing Authority*, 379 Pa. 566, 573,

203. *Commonwealth ex rel. Storb v. Schroll*, 398 Pa. 354, 157 A.2d 179 (1960). In *Stahl v. First Pa. Bank & Trust Co.*, 411 Pa. 121, 129, 191 A.2d 386, 391 (1963), the court said:

The landmark case in Pennsylvania on the subject of whether laches may be imputed to the Commonwealth is *Commonwealth ex rel. Hensel v. Philadelphia B. & B. M. Turnpike Company*, 153 Pa. 47, 53, 55, 25 A. 1105, 1106, a quo warranto proceeding. Therein, Mr. Chief Justice Paxson after reviewing the authorities, concluded: "Were the complainant here a private individual we would not hesitate to say that his laches was a bar to this proceeding. Is the commonwealth in any better position? We think not. It is true, the statute of limitations does not run against the commonwealth. But this is not a question of the statute of limitations. It is a question of laches and *laches may be imputed to the commonwealth as well as to an individual*" (Emphasis supplied.).

204. See note 195 and text accompanying notes 199-200 *supra*.

205. The issue of whether or not there was substantial evidence to support the conclusion of the Sanitary Water Board in *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 21 (Pa., Mar. 16, 1973), will not be separately discussed here; since it was disposed of by the court without discussion, there is not much that can be said about it. See notes 120-22 *supra*.

206. 4 Pa. Comm. Ct. at 442, 285 A.2d at 902.

207. It is significant here that the violation alleged is the iron content of the discharge being above the permitted levels. Indeed, no aquatic study has been made by the Board! It is not charged that the increase of the flow makes the aquatic life less possible to survive.

Id.

109 A.2d 331, 335 (1954) [sic]. Our review is particularly restrictive where an administrative agency resolves complex questions of technology and finance. *Pete Flaherty v. Port Authority of Allegheny County*, — Pa. —, — A.2d — (1973). The Board, having adopted standards of general applicability, need not also conduct aquatic studies in every instance to establish pollution.²⁰⁸

Just how far this holding can be carried remains to be seen. Effluent standards should undoubtedly have some relevant factual connection to stream water quality, if only to satisfy the constitutional requirement that there be some reasonable nexus between the public good to be accomplished and the restriction imposed in order to accomplish it.²⁰⁹ Perhaps the amended structure of water quality regulations, whereby the Environmental Quality Board adopts stream water quality standards first, and then ties effluent standards to specific stream standards,²¹⁰ makes this issue largely moot as to future cases. Nevertheless, the extent to which the Environmental Quality Board will be required to have had some evidence to back up both its water quality standard and its effluent standard decisions under this holding will be interesting.

What Now?

The *Harmar and Pittsburgh*²¹¹ decision raises some interesting questions about the future. For one thing, is the entire concept of "Base Waste Load"²¹² now irrelevant? We would say no, even though the Guidelines are themselves no longer, strictly, applicable. Two situations suggest themselves.

(1) If, for example, the Hutchinson (or another) Mine were at the top of the dip in a particular basin, and water discharge from the bottom end of the basin was increased (and could be proved conclusively to have increased) from 2.17 million gallons per day to 3.44 million gallons per day, then can it be said that the mining operation "caused" the entire discharge?²¹³ No. Except for the mining operations,

208. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 23 (Pa., Mar. 16, 1973).

209. *Goldblatt v. Hempstead*, 369 U.S. 590 (1962); *Nebbia v. New York*, 291 U.S. 502 (1934).

210. See generally Greene, Kyle & Watson, *Water Pollution Control in Texas—Part II: The Texas Water Quality Board*, 48 TEX. L. REV. 1029, 1047-85 (1970); Hines, *Nor Any Drop to Drink: Public Regulation of Water Quality; State Pollution Control Programs*, 52 IOWA L. REV. 186 (1966); *Water Pollution Control Act of 1972*, 33 U.S.C.A. §§ 1311-14 (Supp. 1972).

211. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90 (Pa., Mar. 16, 1973).

212. For definition of "Base Waste Load" see *Guidelines*, *supra* notes 118 & 194.

213. To use the *Pittsburgh Coal* figures see text accompanying notes 97-102 *supra*.

2.17 million gallons per day would still be discharging from the basin; hence, the mining operation is the cause of only 1.27 million gallons per day—the increase. The distinction from *Harmar and Pittsburgh* seems to be that in the latter case the court was convinced that the *entire* discharge was occasioned by the mining operations.²¹⁴ Under that decision, the concept of Base Waste Load may still have some application insofar as it relates to whether a particular mining operation *caused* an increase in acid mine water discharge.

(2) What about discharges to an underground mine pool? The Guidelines advise (and we now know it is only advice) that such water need not be treated to an effluent quality better than the underground pool itself.²¹⁵ Again, even if the Guidelines are no longer valid as law, the reasons for them would seem to be. As was argued by appellant in the *Pittsburgh Coal* brief:

As a result of this polluttional phenomenon [whereby the rise and fall of the water level in abandoned mines creates mine acid²¹⁶] when the drainage of an active mine discharges into an underground pool, regardless of how pure or clean the water is as it discharges from the mine into the pool, it will be polluted by the time it is discharged as a part of the pool into a stream of the Commonwealth, if such discharge of the pool occurs. The pollution will result both from the dissolving of iron and acid salts by the drainage and by its mixture with the already polluted pool. Thus, if the drainage had to be treated prior to its discharge into the pool, it would then have to be treated a second time, along with the water from the pool. This would be, if not a complete waste of effort and financial resources, at least a needless diminution thereof. To reduce this loss, guideline 3 requires only that the discharge coming from the active mine not be more polluted than the pool into which it is flowing. Practically invariably no treatment will be required because the discharge will be less polluted than the pool, if for no other reason than the water in the pool has had longer to absorb iron and acid salts. If, as in situation (2), the pool does not discharge to a stream of the Commonwealth, again no useful purpose would be served by treatment, even though a strict application of the Clean Streams Law would require treatment.²¹⁷

214. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 11 (Pa., Mar. 16, 1973).

215. *Guidelines*, *supra* notes 118 & 194 (§ 3); *see* quote accompanying note 217 *infra*.

216. *See* note 8 *supra*.

217. Brief for Appellant on appeal from *Pittsburgh Coal Co. v. Sanitary Water Board* at 67-68, *Commonwealth v. Harmar Coal Co.*, Civil No. 90 (Pa., Mar. 16, 1973).

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Again, the court's argument with respect to causation would seem to cover this case, even in the absence of the Guidelines.

(3) A third fact situation, not explicitly dealt with in the Guidelines but essentially a combination of the above two, may be suggested. If, in a situation like the first, water is discharged into an existing mine water pool, that water may well be of better quality than the water in the pool itself, and yet cause a measurable increase in poorer quality water at some discharge point miles away at the lower end of the basin.²¹⁸ Here, it would seem that the same arguments with respect to causation would permit the Commonwealth to require treatment of the excess water (e.g., to use the *Pittsburgh Coal* figures,²¹⁹ the 1.27 million gallons per day) but not the "Base Waste Load" (i.e., the 2.44 million gallons per day) at the discharge point, to the same degree that would be required if that excess water—the poorer quality 1.27 million gallons per day—were being discharged *directly* from the mine to a surface stream.

(4) What about the treatment of water from inactive mines, by the former operators of those mines? One can imagine several situations. (a) Suppose a mine that was opened prior to 1945 (when the Clean Streams Law was amended to require a "complete drainage plan" prior to opening or reopening a mine)²²⁰ and 1965 (when the Clean Streams Law was made clearly applicable to all acid mine drainage),²²¹ or even

218. In the first example we assumed implicitly that the water would be treated as it left the discharge point. The *Guidelines, supra* notes 118 & 194, seem to require treatment as the water leaves the mine, and is discharged into the underground pool. See quote accompanying note 217 *supra*.

219. See text accompanying notes 97-102 *supra*.

220. Act of May 8, 1945, § 7, Pa. P.L. 440-43 (repealed 1965).

Section 313. Approval of Plans of Drainage.—Before any existing or new coal mine may be opened or reopened, and before any existing coal mine may be continued in operation, a plan of the proposed drainage and disposal of industrial wastes, and acid mine drainage of such mine, shall be submitted to the Sanitary Water Board, and it shall be unlawful to open or reopen any such mine, or to continue the operation of any mine, or to change or alter any already approved plan of drainage and disposal of industrial wastes, and acid mine drainage from such mine, unless and until the board, after consultation with the Department of Mines has approved such plan or change of plan: Provided, however, That this section shall not apply to the continuation of the operation of an existing mine until sixty (60) days after the effective date of this act. . . .

221. Section 1 of the Clean Streams Law as amended in 1965 defined industrial waste as follows:

"Industrial waste" shall be construed to mean any liquid, gaseous or solid substance, not sewage, resulting from any manufacturing or industry, or from any establishment, as herein defined, and *mine drainage*, silt, coal mine solids, rock, debris, dirt and clay from coal mines, coal collieries, breakers or other coal processing operations.

Act of Aug. 23, 1965, § 1, Pa. P.L. 374, as amended, PA. STAT. ANN. tit. 35, § 691.1 (Supp. 1973), amending Act of June 22, 1937, Pa. P.L. 1987; see text accompanying notes 67-68 *supra*.

prior to 1945? (b) Suppose a mine that was opened prior to 1945 but became inactive after 1966 (when a permit was required to continue operating)?²²² (c) Suppose a mine that was opened before or after 1945 and ceased operations after 1965, but before a permit was required to continue operation?²²³ (d) Suppose a mine that opened before or after 1945 and ceased operations after 1965, but after a permit was required to continue operation?²²⁴ (e) Suppose a mine that opened before or after 1945 and ceased operating after 1970 (when, in order to get a permit to continue operating, a complete drainage plan, including post-mining discharge was required)?²²⁵

222. Act of Aug. 23, 1965, § 5, Pa. P.L. 376, as amended, PA. STAT. ANN. tit. 35, § 691.315 (Supp. 1973), amending Act of June 22, 1937, § 315, Pa. P.L. 1987.

Section 5. The act is amended by adding, after section 314, three new sections to read:

Section 315. Permits for Operation of Coal Mines.—(a) Before any coal mine is opened, reopened, or continued in operation, an application for a permit approving the proposed drainage and disposal of industrial wastes shall be submitted to the Sanitary Water Board. The application shall contain complete drainage plans including any restoration measures that will be taken after operations have ceased and such other information as the board by regulation shall require.

(b) It shall be unlawful to open, reopen, or continue in operation any coal mine, or to change or alter any approved plan of drainage and disposal of industrial wastes, unless and until the board, after consultation with the Department of Mines and Mineral Industries, has issued a permit approving the plan or change of plan. A permit shall not be issued if the board shall be of the opinion that the discharge from the mine would be or become inimical or injurious to the public health, animal or aquatic life, or to the use of the water for domestic or industrial consumption or recreation. In issuing a permit the board may impose such conditions as are necessary to protect the waters of the Commonwealth. The permittee shall comply with such permit conditions and with the rules and regulations of the board.

The effective date of the 1965 amendments was January 1, 1966.

223. *Id.*

224. *Id.*

225. PA. STAT. ANN. tit. 35, § 691.315 (Supp. 1973), amending Act of June 22, 1937, § 315, Pa. P.L. 1987 provides:

Section 315. Operation of Mines.—(a) No person or municipality shall operate a mine or allow a discharge from a mine into the waters of the Commonwealth unless such operation or discharge is authorized by the rules and regulations of the board or such person or municipality has first obtained a permit from the department. Operation of the mine shall include preparatory work in connection with the opening or reopening of a mine, backfilling, sealing, and other closing procedures, and any other work done on land or water in connection with the mine. A discharge from a mine shall include a discharge which occurs after mining operations have ceased, provided that the mining operations were conducted subsequent to January 1, 1966, under circumstances requiring a permit from the Sanitary Water Board under the provisions of section 315(b) of this act as it existed under the amendatory act of August 23, 1965 (P.L. 372). . . .

(b) The department may require an applicant for a permit to operate a mine, or a permittee holding a permit to operate a mine under the provisions of this section, to post a bond or bonds in favor of the Commonwealth of Pennsylvania and with good and sufficient sureties acceptable to the department to insure that there will be compliance with the law, the rules and regulations of the board, and the provisions and conditions of such permit including conditions pertaining to restoration measures or other provisions insuring that there will be no polluting discharge after mining operations have ceased. . . .

This last case will, of course, be the case of the Hutchinson Mine and the Harmar Mine, when they cease operations at some point in the future. There does not seem to be much doubt that under the 1970 amendments to the Clean Streams Law they can be required to treat the acid mine drainage from their respective mines after closure, unless they are able to seal the mines or otherwise prevent acid mine water from being discharged.²²⁶

The supreme court does not say a great deal about any of these possible cases—it presumably will have a chance to say something about some of them in the future. The court does define “mine” to include inactive mines,²²⁷ and it does not regard the fact that the Commonwealth was to undertake the treatment of acid mine drainage from inactive mines, under the Act of December 15, 1965,²²⁸ as being at all determinative:

Mine drainage does not cease to be mine drainage once mining has ceased in the mine from which it continues to drain. The Court’s reliance on the Act of December 15, 1965, P.L. 1075, 35 P.S. § 760.1 (1972-73 Supplement), was misplaced. Although this Act directs the Secretary of the Department of Mines and Mineral Industries to “initiate an immediate action program to correct pollution from abandoned deep and strip mines . . .” it does not permit a mine operator to discharge untreated acid mine drainage into the surface waters of the Commonwealth, contrary to the Clean Streams Law. *It is directed at mines long closed at a time when operators of those mines might not even be known.*²²⁹

How long must a mine be closed for that law to apply? Long enough that the operator is no longer known? Or is the date of closure to be keyed into the legislative history of the Clean Streams Law in some way? These questions were presumably left to future decisions.

BARNES & TUCKER

The second (or perhaps third, depending on how one interprets the facts) hypothetical above is *Commonwealth v. Barnes & Tucker Co.*,²³⁰ decided by the commonwealth court one month after the Supreme

226. *Id.*

227. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 11 (Pa., Mar. 16, 1973).

228. PA. STAT. ANN. tit. 35, §§ 760.1-2 (Supp. 1973).

229. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90, at 13 (Pa., Mar. 16, 1973) (emphasis added).

230. No. 896-A Transfer Docket 1970 (Pa. Comm. Ct., Apr. 16, 1973). The Commonwealth intends to appeal this decision to the Pennsylvania Supreme Court and on May 16, 1973 filed exceptions with the commonwealth court.

Court of Pennsylvania handed down its decision in *Harmar and Pittsburgh*.²³¹ The *Barnes & Tucker* case involved a "breakout"—a discharge through an opening into the mine or through the earth's surface after the mine was sealed.²³² The court dealt with numerous and complex factual and legal issues, finally holding that Barnes & Tucker is not responsible under the Clean Streams Law then in effect or under any other legal doctrine, for abatement or treatment of acid mine drainage from its abandoned Lancashire No. 15 Mine (hereinafter No. 15 mine).²³³ Although, as the court noted, *Barnes & Tucker* may be of little precedential value because it was decided on its unique facts and the Clean Streams Law then in effect,²³⁴ the decision raises some significant issues and therefore merits detailed consideration.

The No. 15 mine is a deep bituminous coal mine located in the "B" (Lower Kittanning) seam of coal in the Barnesboro Basin area of Cambria and Indiana counties. The Barnesboro Basin is bounded on the east by the Laurel Hill Anticline, on the west by the Nolo Anticline, on the south by unmined coal and on the north by the West Branch of the Susquehanna River (hereinafter West Branch). The Laurel Hill and Nolo anticlines represent the highest points of elevation in the Barnesboro Basin. Most of the No. 15 mine is situated in the Barnesboro Syncline, which lies between the Laurel Hill and Nolo anticlines and which represents the lowest section in elevation of the Barnesboro Basin.²³⁵

The No. 15 mine was opened in 1915 in the northeast section of the mine near where the coal outcrops in the vicinity of the West Branch. From 1915 until the mine was closed in 1969, mining operations were conducted in the No. 15 mine along the dip of the coal seam—that is, from the highest elevation of the coal seam at the outcrop near the West Branch in a southwesterly direction to the lowest area of elevation of the coal seam.²³⁶ Barnes & Tucker ceased its mining operations in

231. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90 (Pa., Mar. 16, 1973). The commonwealth court noted in a footnote, that the *Harmar and Pittsburgh* decision was filed after the *Barnes & Tucker* opinion was prepared, and stated:

We have carefully reviewed the opinion of the Supreme Court in those cases and, while certain observations and discussion contained therein might ideally suggest some revision of discussion contained in the above opinion, we are of the opinion that the decision in those cases is not controlling of this case. To avoid further delay we, therefore, hand down our opinion in this case without revision.

No. 896-A Transfer Docket 1970, at 63 n.* (Pa. Comm. Ct., Apr. 16, 1973).

232. See text accompanying notes 29-31 *supra*.

233. No. 896-A Transfer Docket 1970, at 61-62 (Pa. Comm. Ct., Apr. 16, 1973).

234. *Id.* at 36.

235. *Id.* at 2.

236. *Id.* at 3.

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the No. 15 mine on May 10, 1969 and then proceeded to seal the mine openings and complete construction of barriers between the No. 15 mine and the adjacent No. 24-B mine. The construction of barriers and seals was performed in accordance with the requirements of the Department of Mines and Mineral Industries then in effect and completed in late July of 1969.²³⁷

The mine drainage permit history of the No. 15 mine, around which much of the controversy centers, is enlightening. From 1945 to 1964, the No. 15 mine was operated under two mine drainage permits.²³⁸ Little need be said about these two permits except that they did not require treatment of the mine drainage and did not include any provision for post-mining discharge. On December 21, 1964, the Sanitary Water Board issued a new permit, No. 564M (hereinafter pre-1965 permit), approving Barnes & Tucker's proposed plan of drainage from the mine. As with the two earlier permits, the pre-1965 permit did not require that mine drainage be treated nor did it include any provision for post-mining discharge.²³⁹

On May 25, 1966, Barnes & Tucker, in accordance with section 315 (d) of the 1965 amendments to the Clean Streams Law,²⁴⁰ applied to the Sanitary Water Board for an extension of time to operate the No. 15 mine under the pre-1965 permit. The Board granted Barnes & Tucker an extension until November 1, 1968.²⁴¹

In October of 1967, Barnes & Tucker applied for a mine drainage permit for its Nos. 15 and 24 mines on an application form used for post-1965 amendment permits. Barnes & Tucker disclosed in this application for the first time that it contemplated closing the No. 15 mine. Permit No. 567M (hereinafter post-1965 amendment permit) was issued by the Board, subject to certain standard conditions accepted by Barnes & Tucker, on May 22, 1968.²⁴² On two separate occasions

237. *Id.* at 16-17.

238. *Id.* at 7-8.

239. *Id.* at 9. No requirement for treatment of mine drainage was imposed or any provision included for post-mining discharge even though a substantial drainage of high acid and iron content was anticipated from the mine. The court noted that, under the 1945 amendments to the Clean Streams Law which were in effect at the time of issuance of permit No. 564M, Barnes & Tucker would have been required to treat the discharge from the No. 15 mine if the streams into which the discharge was to flow had not been already polluted. *Id.* at 9-10.

240. Act of Aug. 23, 1965, § 5, Pa. P.L. 376, as amended, PA. STAT. ANN. tit. 35, § 691.315(d) (Supp. 1973), amending Act of June 22, 1937, § 315, Pa. P.L. 1987.

241. No. 896-A Transfer Docket 1970, at 10 (Pa. Comm. Ct., Apr. 16, 1973).

242. *Id.* at 12-14. The standard conditions incorporated into the post-1965 amendment permit which are relevant to this case are as follows:

(6) The permittee shall notify the reporting agency [Department of Health] by

after the issuance of the post-1965 amendment permit, Barnes & Tucker applied for and was granted two further extensions of time to operate the No. 15 mine under the pre-1965 permit. The third and last extension was until May 20, 1969, and once again subject to certain conditions but which Barnes & Tucker never accepted.²⁴³ It should be pointed out that there was a serious dispute concerning the two extensions of time under the pre-1965 permit after Barnes & Tucker applied for and the Sanitary Water Board issued the post-1965 amendment permit. This controversy is relevant to the interpretation of the Clean Streams Law then in effect and is discussed hereinafter.

All equipment including that for construction of barriers and seals was removed from the No. 15 mine by the end of July 1969 and the mine was allowed to flood.²⁴⁴

In late June 1970, a substantial discharge of acid mine drainage was discovered emanating from the "Buckwheat" borehole of the inactive No. 15 mine and flowing into the West Branch. On July 23, 1970, another discharge into the West Branch was discovered flowing through the earth's surface in what is referred to as the "breakout" area.²⁴⁵

certified mail that he had completed operations within fifteen (15) days after mining is completed.

(7) Whenever, because of an accident or otherwise, a discharge not allowed by the permit occurs, the permittee shall immediately telephone the reporting agency to report such incident and shall promptly take such steps as are necessary to halt the unauthorized discharge.

(8) The permittee shall fully comply with the mine closure procedures set forth in the plan for drainage in an expeditious manner after mining has been completed.

(10) The permittee shall at no time discharge to the waters of the Commonwealth mine drainage from any source the pH of which is less than 6.0, or greater than 9.0.

(11) The permittee shall at no time discharge to the waters of the Commonwealth mine drainage from any source containing a concentration of iron in excess of 7 milligrams per liter.

(12) The permittee at no time shall discharge to the waters of the Commonwealth mine drainage from any source the acid content of which . . . exceeds its alkaline content . . .

Id. at 13.

243. *Id.* at 15. The standard conditions incorporated by the Sanitary Water Board into the third time extension of the pre-1965 permit were identical with those imposed in the first two time extensions. The court considered the following standard conditions of possible relevancy:

Three: No silt, coal mine solids, rock, debris, dirt and clay shall be washed, conveyed or otherwise deposited into the waters of the Commonwealth.

Six: The permittee shall notify the reporting agency by certified mail that he has completed operations within fifteen (15) days after mining is completed.

Seven: Whenever, because of an accident or otherwise, a discharge not allowed by the permit occurs, the permittee shall immediately telephone the reporting agency to report such incident and shall promptly take such steps as are necessary to halt the unauthorized discharge.

Id. at 11 (quoted by the court).

244. *Id.* at 16.

245. *Id.* at 19-20.

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Those two discharges resulted in a series of administrative rulings by the Sanitary Water Board in July 1970. In essence, the Sanitary Water Board suspended Barnes & Tucker's outstanding post-1965 amendment mine drainage permit and ordered Barnes & Tucker to take action immediately to abate the acid mine water discharges from the No. 15 mine. Barnes & Tucker appealed the administrative orders of the Sanitary Water Board to the commonwealth court and the Commonwealth filed a complaint in equity seeking preliminary and permanent injunctive relief. The Commonwealth's complaint sought to enjoin Barnes & Tucker from operating the No. 15 mine and to require Barnes & Tucker to immediately take steps to treat the acid mine drainage discharge to specified water quality standards.²⁴⁶

The Commonwealth and Barnes & Tucker then entered into a stipulation, accepted by the court, whereby the Commonwealth would continue treating the acid mine drainage discharge from the No. 15 mine and Barnes & Tucker would construct and operate for a period of at least thirty days a pumping and treatment facility at Duman Dam, a pumping facility near the lower end of the Barnesboro Basin.²⁴⁷ Barnes & Tucker constructed and operated the Duman Dam facility for 114 days and then terminated its responsibility in accordance with the stipulation. The Commonwealth voluntarily assumed the operation of the Duman Dam pumping and treatment facility and renewed its application for a preliminary injunction.²⁴⁸

The court, in an admittedly novel and unprecedented decision, granted the Commonwealth's request and ordered Barnes & Tucker to resume operation of the Duman Dam facility.²⁴⁹ Irreparable harm was not presently existing because the Commonwealth was voluntarily operating the facility; however, the court held that irreparable harm was "so close to reality, with calamitous results if it becomes a reality, that a court in its equitable powers should consider threatened or potential irreparable harm as the equivalent of existing irreparable harm."²⁵⁰ The court considered the public interest in the continued operation of the pumping and treatment facility because the cessation of this operation would result in harm which could not readily be cor-

246. Commonwealth v. Barnes & Tucker Co., 1 Pa. Comm. Ct. 552, 554-55 (1971).

247. *Id.* at 556. The court made the stipulation a part of the record but was not asked to and did not issue a preliminary injunction incorporating the stipulation.

248. No. 896-A Transfer Docket 1970, at 22-24 (Pa. Comm. Ct., Apr. 16, 1973).

249. 1 Pa. Comm. Ct. at 558-60.

250. *Id.* at 558.

rected or compensated in dollar damages.²⁵¹ The court's order directed that the costs of operating the Duman Dam facility be shared equally by Barnes & Tucker and the Commonwealth, with the ultimate costs to be borne by the losing party after a final decision in the case.

The commonwealth court's final decision, by President Judge James S. Bowman, held that (1) Barnes & Tucker, as a holder of a time extended pre-1965 permit and a post-1965 amendment permit, did not assume responsibility under the Clean Streams Law or any regulation promulgated pursuant thereto then in effect for acid mine water drainage from the No. 15 mine after mining operations ceased; (2) Barnes & Tucker did not become responsible under section 316 of the Clean Streams Law then in effect for abatement of the post-mining acid mine water discharge from the No. 15 mine; (3) the post-mining acid mine drainage from the No. 15 mine does not constitute a public nuisance under section 3 of the Clean Streams Law then in effect for which Barnes & Tucker is responsible for abating; and (4) the post-mining acid mine drainage emanating from the No. 15 mine does not constitute a common law nuisance for which Barnes & Tucker is responsible.²⁵² Procedurally, the court left its earlier order in effect pending (1) the filing of an appeal to the Pennsylvania Supreme Court within 30 days or (2) failing such appeal, the holding of a hearing to determine the amount of "the ultimate costs" that would have to be borne by the Commonwealth under the earlier order.²⁵³

Responsibility under the Clean Streams Law

The commonwealth court dealt with three separate questions in determining that Barnes & Tucker did not assume responsibility under the Clean Streams Law as amended in 1965 for the acid mine drainage discharge from its abandoned No. 15 mine. These questions are:

- (1) Did the 1965 amendments statutorily impose upon Barnes & Tucker responsibility for the post-mining discharge from the inactive No. 15 mine?

251. *Id.* at 559.

252. No. 896-A Transfer Docket 1970, at 61-62 (Pa. Comm. Ct., Apr. 16, 1973). In a concurring opinion, Judge Glenn E. Mencer concurred in the result on the grounds that the discharge was not caused by present activity on the part of the defendant; he thought that the 1970 amendments to section 316 might be applied to the defendant (*see* text accompanying notes 277-81 *infra*), but agreed that the Commonwealth had not taken the necessary steps to do so.

253. *Id.* at 63.

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- (2) If not, did the Clean Streams Law empower the Sanitary Water Board, as an element of an approved mine drainage plan, to require a mine operator to assume responsibility for any post-mining discharge? and
- (3) If yes, did Barnes & Tucker assume such responsibility under its extended pre-1965 permit or post-1965 amendment permit?²⁵⁴

With respect to the first question, the commonwealth court ruled that the Clean Streams Law as amended in 1965 did not impose responsibility upon mine operators for post-mining discharge.²⁵⁵ The court reviewed the statutory framework and placed great emphasis upon the legislative intent before and subsequent to the 1965 amendments. According to the court, there is no doubt that prior to the 1945 amendments to the Clean Streams Law acid mine drainage was specifically excluded from regulation. The 1945 amendments prohibited the discharge of acid mine drainage only into "clean waters" of the Commonwealth and under section 313,²⁵⁶ required all existing, reopened, and newly opened mines to obtain approval of mine drainage plans from the Sanitary Water Board. Barnes & Tucker operated the No. 15 mine from 1945 to January 1, 1966—the effective date of the 1965 amendments—under approved mine drainage permits without any requirement for treatment of discharge during or after mining operations ceased. The commonwealth court, relying in part on the case of *Commonwealth v. Sunbeam Coal Co.*²⁵⁷ construed the 1945

254. *Id.* at 38.

255. *Id.* at 61-62.

256. Act of May 8, 1945, § 7, Pa. P.L. 440 (repealed 1965).

257. 47 Pa. D. & C.2d 378 (C.P. Dauph. Co. 1969). The court in this case held that the Sanitary Water Board had no power under the 1945 amendments to the Clean Streams Law to refuse to issue a permit because of alleged violations of other mine drainage permits previously issued by the Board which covered other mines owned by the applicant and which were later abandoned. The court stated:

Of further significance is the fact that the Clean Streams Act specifically referred to mines being opened, reopened or continued in operation. *Nowhere in the Clean Streams Act is it suggested or implied that a former operator of an abandoned mine can be held in "violation" after the mine is closed.* Even in the case of *Sanitary Water Board v. Sunbeam Coal Corporation*, 77 Dauph. 264 (1961), wherein we held that future plans for the drainage of acid mine water after a mine closed could be required of an applicant at the time of originally applying for a permit, does not constitute authority for the proposition that an applicant can be held in "violation" of a permit after the mine is closed, when he followed the plans approved by the board.

Once the Sanitary Water Board has approved a drainage plan and the drainage plan has been followed, the responsibility of the operator ought not to be increased after the mine has ceased any longer to be a mine.

Id. at 386-87 (emphasis added). The *Sunbeam* case is (or was, until *Barnes & Tucker*) the leading decision in Pennsylvania on the non-applicability of the Clean Streams Law to abandoned coal mines. The *Sunbeam* holding was changed by the 1970 amendments, and

amendments as applying only to *operating* mines, and not to abandoned or inactive mines.²⁵⁸

The court took a hard look at the 1965 amendments to the Clean Streams Law, particularly section 315, to determine whether they applied only to operating mines or also to inactive and abandoned mines. It noted the major change in legislative policy toward the acid mine drainage and stream pollution problems and that the 1965 amendments for the first time prohibited the discharge of acid mine drainage into polluted as well as clean waters.²⁵⁹ As discussed above under *Legislation*,²⁶⁰ acid mine drainage was brought within the definition of industrial waste and thereby became subject to section 307 of the Act which prohibited the operation of "any establishment, which *in its operation* results in the discharge of industrial wastes" that causes pollution.²⁶¹

The serious dispute in the case involved the interpretation of section 315 as it existed in 1965. This new section required each operator to obtain a mine drainage permit before any coal mine was opened, reopened, or continued in operation, and it was also empowered the Board, in issuing a permit, to impose whatever conditions were necessary to protect the waters of the Commonwealth.²⁶² However, section 315(d) afforded a mine operator the choice of applying for a new permit under the 1965 amendments or continuing in operation under a valid permit issued prior to January 1, 1966 until January 1, 1967 or for such additional time periods as the Board allowed.²⁶³ The Commonwealth's principal argument was that the 1965 amendments imposed perpetual responsibility upon a mine operator for post-mining discharges and that Barnes & Tucker assumed such responsibility by applying for and receiving the post-1965 amendment permit. As support for this perpetual responsibility theory, the Commonwealth cited the last sentence of section 315(a) which required that a mine drainage permit application "contain *complete* drainage plans includ-

conceivably may be overruled by the Pennsylvania Supreme Court when it decides *Barnes & Tucker*.

258. No. 896-A Transfer Docket 1970, at 33-34 (Pa. Comm. Ct., Apr. 16, 1973).

259. *Id.* at 36-37.

260. See text accompanying notes 65-71 *supra*.

261. Act of June 22, 1937, § 307, Pa. P.L. 1996, as amended, PA. STAT. ANN. tit. 35, § 691.307 (Supp. 1973) (emphasis added).

262. Act of Aug. 23, 1965, § 5, PA. P.L. 376, as amended, PA. STAT. ANN. tit. 35, §§ 691.315(a)-(b) (Supp. 1973), amending Act of June 22, 1937, § 315, Pa. P.L. 1987.

263. Act of Aug. 23, 1965, § 5, PA. P.L. 376, as amended, PA. STAT. ANN. tit. 35, § 691.315(d) (Supp. 1973), amending Act of June 22, 1937, § 315, Pa. P.L. 1987.

ing any restoration measures that will be taken after operations have ceased”²⁶⁴

On the other hand, Barnes & Tucker contended that it never operated the No. 15 mine under the post-1965 amendment permit but that it ceased operation of the No. 15 mine under the pre-1965 permit and that permit’s subsequent time extensions by the Board. Furthermore, even assuming that it did operate under the post-1965 amendment permit, Barnes & Tucker urged that the 1965 amendments did not apply to post-mining discharges.²⁶⁵

The commonwealth court agreed with Barnes & Tucker that the 1965 amendments did not impose perpetual responsibility upon mine operators for post-mining discharge. Contrary to the contentions of both parties, however, the court believed that whether or not Barnes & Tucker operated under the pre-1965 permit or post-1965 amendment permit was not controlling. It observed that the 1965 amendments to the Clean Streams Law are silent on the subject of a mine operator’s responsibility for acid mine drainage discharge from their inactive or abandoned mines or mines thereafter closed, and, therefore, determined the legislative intent as evidenced by other relevant matters,²⁶⁶ including: (1) the title of the Act of August 23, 1965 which enacted the 1965 amendments was “an Act . . . requiring permits for the *operation* of coal mines”;²⁶⁷ (2) as discussed heretofore, the 1945 amendments were held in the *Sunbeam Coal* case to apply only to *operating* mines;²⁶⁸ (3) the 1965 amendments continued the scheme of the 1945 amendments in that language in subsection (a) and (b) of section 315 of the 1965 version of the Act is identical in substance to that contained in section 313 of the 1945 version;²⁶⁹ (4) shortly after the Clean Streams Law was amended in 1965 the General Assembly recognized the problem of mine drainage from abandoned mines and passed the Act of December 15, 1965²⁷⁰ to provide “for a massive attack by the State

264. No. 896-A Transfer Docket 1970, at 39 (Pa. Comm. Ct., Apr. 16, 1973), *citing* Act of Aug. 23, 1965, § 5, Pa. P.L. 376, *as amended*, PA. STAT. ANN. tit. 35, § 691.315 (Supp. 1973), *amending* Act of June 22, 1937, § 315, Pa. P.L. 1987 (emphasis added).

265. *Id.* at 37-38.

266. *Id.*

267. Act of Aug. 23, 1965, § 11, Pa. P.L. 373, *as amended*, PA. STAT. ANN. tit. 35, § 691.1 (Supp. 1973), *amending* Act of June 22, 1937, § 1, Pa. P.L. 1987.

268. No. 896-A Transfer Docket 1970, at 40 (Pa. Comm. Ct., Apr. 16, 1973), *citing* Commonwealth v. Derstine, 418 Pa. 186, 210 A.2d 266 (1965); City Stores Co. v. Philadelphia, 376 Pa. 482, 103 A.2d 664 (1954).

269. No. 896-A Transfer Docket 1970, at 39 (Pa. Comm. Ct., Apr. 16, 1973).

270. *Id.*; PA. STAT. ANN. tit. 35, §§ 760.1-2 (Supp. 1973).

itself with respect to mine drainage from abandoned mines";²⁷¹ and (5) the 1970 amendments clearly enunciated in section 315 that a mine operator, with one limitation, is now responsible for "a discharge which occurs after mining operations have ceased."²⁷²

In regard to the second question the commonwealth court found that the Sanitary Water Board did have the power under section 315(a) and its general rule making power under section 403 of the Clean Streams Law as it then existed to require a mine operator to assume responsibility for post-mining discharge as part of an approved plan of drainage.²⁷³ As noted above, the last sentence of section 315(a) required that an operator's application for a mine drainage permit "contain complete drainage plans including any restoration measures that will be taken after operations have ceased and such other information as the board by regulation shall require."²⁷⁴

Finally, as to the third question, the commonwealth court found that Barnes & Tucker did not assume under the standard conditions and provisions imposed by the Board in granting the pre-1965 permit or post-1965 amendment permit responsibility for mine drainage from the No. 15 mine after mining operations ceased. None of the standard conditions incorporated into the two permits imposed by any regulation responsibility upon Barnes & Tucker for post-mining discharge from the No. 15 mine. The Sanitary Water Board's regulations and corresponding "Guidelines" are primarily directed to operating mines and drainage and closing procedures to *prevent* post-mining discharge.²⁷⁵

The court could not find any provision in the standard conditions, Board's regulations or guidelines which specifically or inferentially required Barnes & Tucker to correct post-mining discharge if it did occur.

The court concluded:

Rules and regulations of administrative agencies, lawfully adopted, are subject to the same rules of statutory construction as statutes themselves but obviously cannot be construed to afford a greater power or right in an administrative agency than that

271. No. 896-A Transfer Docket 1970, at 39 (Pa. Comm. Ct., Apr. 16, 1973).

272. *Id.*; PA. STAT. ANN. tit. 35, § 691.315(a) (Supp. 1973), *amending* Act of June 22, 1937, § 315, Pa. P.L. 1987.

273. No. 896-A Transfer Docket 1970, at 40 (Pa. Comm. Ct., Apr. 16, 1973).

274. Act of Aug. 23, 1965, § 5, Pa. P.L. 376, *as amended*, PA. STAT. ANN. tit. 35, § 691.315(a) (Supp. 1973), *amending* Act of June 22, 1937, § 315, Pa. P.L. 1987.

275. No. 896-A Transfer Docket 1970, at 41-42 (Pa. Comm. Ct., Apr. 16, 1973).

imposed by the statute itself. The Commonwealth argues that the legislative intent as manifested in the declaration of policy and legislative findings contained in the 1965 amendments compels a conclusion that the statute itself imposes post-mining discharge responsibility upon a former operator as do the Board's regulations consistent with such expressed legislative intent. Considering the legislative history of clean streams legislation both prior and subsequent to the 1965 amendments to The Clean Streams Law, there can be no doubt that the legislature was fully aware of and conversant with the complex problems surrounding mine drainage from closed mines whether they be characterized as having been abandoned or otherwise. It is inconceivable that if in 1965 it intended to place responsibility as argued by the Commonwealth, it would leave the question open to inference.²⁷⁶

This interpretation of the Clean Streams Law as it existed in 1965 seems reasonable. Whether the Pennsylvania Supreme Court will share the commonwealth court's viewpoint is an open question at this time.

Applicability of Section 316

The commonwealth court rejected, on the facts of the case, the Commonwealth's argument that Barnes & Tucker is responsible under section 316²⁷⁷ of the Clean Streams Law for the post-mining discharge from the No. 15 mine as a "landowner" holding title to or having proprietary interest in the lands comprising the mine. As originally added to the Clean Streams Law in 1965, section 316²⁷⁸ provided a means of access by mine operators, governmental agencies, or other appropriate persons on to lands of others who refused to allow such persons access to take whatever measures were necessary to eliminate conditions on the lands which caused pollution. Section 316 was amended in 1970²⁷⁹ to give the Sanitary Water Board the additional authority to order the landowner or occupier to correct conditions on the lands which cause or pose a danger of pollution. This section now provides in part:

Whenever the Sanitary Water Board finds that pollution or a danger of pollution is resulting from a condition which exists

²⁷⁶ *Id.* at 43.

²⁷⁷ PA. STAT. ANN. tit. 35, § 691.316 (Supp. 1973), *amending* Act of June 22, 1937, § 316, Pa. P.L. 1987.

²⁷⁸ Act of Aug. 23, 1965, § 5, Pa. P.L. 376, *as amended*, PA. STAT. ANN. tit. 35, § 691.316 (Supp. 1973), *amending* Act of June 22, 1937, § 316, Pa. P.L. 1987.

²⁷⁹ PA. STAT. ANN. tit. 35, § 691.316 (Supp. 1973), *amending* Act of June 22, 1937, § 316, Pa. P.L. 1987.

on land in the Commonwealth the board may order the landowner or occupier to correct the condition in a manner satisfactory to the board or it may order such owner or occupier to allow a mine operator or other person or agency of the Commonwealth access to the land or take such action. For the purpose of this section, "landowner" includes any person holding title to or having a proprietary interest in either surface or subsurface rights.

For the purpose of collecting or recovering the expense involved in correcting the condition, the board may assess the amount due in the same manner as civil penalties are assessed under the provisions of section 605 of this act: Provided, however, That if the board finds that the condition causing pollution or a danger of pollution resulted from mining operations conducted prior to January 1, 1966, under circumstances which did not require a permit from the Sanitary Water Board under the provisions of section 315(b) of this act as it existed under the amendatory act of August 23, 1965 (P.L. 372), then the amount assessed shall be limited to the increase in value of the property as a result of the correction of the condition.²⁸⁰

The commonwealth court refused to hold Barnes & Tucker liable under section 316 because there was no evidence that the Sanitary Water Board or Department ever issued any order against Barnes & Tucker as a landowner or that it ever intended to exercise the power it apparently has under this section. All the facts and administrative actions taken by the Commonwealth, material to its contention occurred before July 31, 1970, the effective date of the 1970 amendments.²⁸¹

One question left unanswered by the commonwealth court in *Barnes & Tucker* is the validity and construction of section 316. By limiting the decision to the facts of the case, it was not necessary for the court to determine whether section 316 imposes absolute liability upon a landowner or occupier for pollution caused by mine drainage from his lands and whether the imposition of such liability without regard to causation or fault is constitutional. Just what power, if any, the Commonwealth has under section 316 will have to be decided in the future.

Public Nuisance

The court in *Barnes & Tucker*²⁸² discussed both statutory and common law public nuisance. The practical consequence might be the

280. *Id.*

281. No. 896-A Transfer Docket 1970, at 45 (Pa. Comm. Ct., Apr. 16, 1973).

282. No. 896-A Transfer Docket 1970 (Pa. Comm. Ct., Apr. 16, 1973).

same, in that if the discharge in question were a public nuisance of any sort then Barnes & Tucker could be required to abate or treat it.⁸²³

The Commonwealth's argument that the discharge had been declared by statute to be a public nuisance was based on section 3 of the Clean Streams Law, which provided, from 1937 until 1970, that:

The discharge of sewage or industrial waste or any noxious and deleterious substances into the waters of this Commonwealth, which is or may become inimical and injurious to the public health, or to animal or aquatic life, or to the uses of such waters for domestic or industrial consumption, or for recreation, is hereby declared not to be a reasonable or natural use of such waters, to be against public policy and to be a public nuisance.²⁸⁴

The Commonwealth cited *Commonwealth ex rel. Shumaker v. New York & Pennsylvania Co., Inc.*,²⁸⁵ for the propositions that (1) the legislature could declare something to be a public nuisance, and (2) once determined that something is a public nuisance equity has jurisdiction to require abatement.²⁸⁶ While the issue in *Shumaker* was quite narrow—whether the court there had jurisdiction over the subject matter of the action²⁸⁷—the cite was still apposite. In order to determine that jurisdiction existed, the *Shumaker* court had to (or at least did) determine whether, assuming all facts averred in the complaint were true, a public nuisance arguably existed.²⁸⁸

The court in *Barnes & Tucker*, however, while accepting the proposition that the legislature *could* declare post-mining acid mine drainage to be a public nuisance, held it had not done so at least until 1970.²⁸⁹ To decide otherwise, said the court,

... would be to close one's eyes to the provisions of The Clean

283. *Commonwealth ex rel. Shumaker v. New York & Pa. Co., Inc.*, 367 Pa. 40, 79 A.2d 439 (1951); *Commonwealth v. Dietz*, 285 Pa. 511, 132 A. 572 (1926); *Pennsylvania R.R. v. Sagamore Coal Co.*, 281 Pa. 233, 126 A. 386 (1924).

284. Act of June 22, 1937, Pa. P.L. 1987. In 1970 this section was amended to include potential pollution as a public nuisance:

Discharge of Sewage and Industrial Wastes Not a Natural Use.—The discharge of sewage or industrial waste or any substance into the waters of this Commonwealth, which causes or contributes to pollution as herein defined or creates a danger of such pollution is hereby declared not to be a reasonable or natural use of such waters, to be against public policy and to be a public nuisance.

PA. STAT. ANN. tit. 35, § 691.3 (Supp. 1973).

285. 367 Pa. 40, 79 A.2d 439 (1951). This case was later decided in favor of the defendant on grounds not relevant to the issues here. *Commonwealth ex rel. Shumaker v. New York & Pa. Co., Inc.*, 65 Dauph. 118 (Pa. C.P. 1953), *aff'd*, 378 Pa. 359 (1954).

286. No. 896-A Transfer Docket 1970, at 46-48 (Pa. Comm. Ct., Apr. 16, 1973).

287. 367 Pa. at 45-46, 79 A.2d at 443.

288. *Id.* at 47-55, 79 A.2d at 444-47.

289. No. 896-A Transfer Docket 1970, at 48-49 (Pa. Comm. Ct., Apr. 16, 1973).

Streams Law as originally enacted and as amended in 1945, 1965 and 1970 and would render practically meaningless the original exclusion of mine drainage from its original provisions and *the gradual elimination of the exclusion culminating in the amendments of 1970.*²⁹⁰

Once again, as in the interpretation of the word "mining" in *Pittsburgh Coal*,²⁹¹ the commonwealth court appeared to view the movement of the legislature in 1965 into the field of acid mine drainage as being somewhat tentative.²⁹² While this may be a plausible interpretation of the Clean Streams Law, on its face, one must nevertheless wonder whether the supreme court, on appeal, will view the statute in the same way.²⁹³ Certainly section 3 does not purport on its face to be limited to pollutional acts explicitly defined in the Clean Streams Law—in its terms section 3 is quite broad. A question may be raised whether that section was intended to broaden the scope of common law nuisance beyond the holding in *Sagamore*.²⁹⁴ *Sagamore* held that a discharge into a clean stream that was being put to public use constituted a public nuisance. On its face section 3 of the Clean Streams Law would make a discharge into any stream—clean or dirty—a public nuisance if it detrimentally affected a public use. The supreme court will undoubtedly have to consider the question whether the broad language of section 3 was intended by the legislature to be read literally, or was intended to be limited by the exclusions set forth in the remainder of the Act, especially the exclusion of acid mine drainage, in force for already polluted streams until 1965.²⁹⁵

On the non-statutory public nuisance issue, the court traced the application of common law nuisance principles to acid mine drainage from *Sanderson*,²⁹⁶ through *McCune v. Pittsburgh & Baltimore Coal*

290. *Id.* at 48 (emphasis added).

291. See note 129 *supra*.

292. See also *Commonwealth v. Barnes & Tucker Co.*, No. 896-A Transfer Docket 1970, at 38-43, 48-49, 60-61 (Pa. Comm. Ct., Apr. 16, 1973).

293. As already noted in note 129 *supra* and accompanying text, the supreme court viewed the Clean Streams Law broadly, and emphasized its purpose. See also text accompanying notes 329-44 *infra*.

294. *Pennsylvania R.R. v. Sagamore Coal Co.*, 281 Pa. 233, 126 A. 386 (1924); see text accompanying notes 43-46 *supra*.

295. *Pennsylvania Coal Co. v. Sanderson*, 113 Pa. 126, 6 A. 453 (1886).

296. On two grounds, reading the exclusions from the remainder of the act into section 3 seems plausible, but not overwhelmingly convincing. (1) In interpreting statutes generally, the specific controls the general. Statutory Construction Act, PA. STAT. ANN. tit. 46, § 563 (1969). On the other hand, the exclusion is not so all encompassing that, for example, it would be likely to be held to compel the overruling of, say, *Pennsylvania R.R. v. Sagamore Coal Co.*, 281 Pa. 233, 126 A. 386 (1924). So perhaps the exclusion also does not encompass section 3. (2) In *Collegeville Borough v. Philadelphia Suburban*

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Co.,²⁹⁷ and *Roaring Creek Water Co. v. Anthracite Coal Co.*²⁹⁸ The court found that the factors that distinguished those cases from *Sander-son* were (a) the fact that the pollution was of an initially clean stream that would not have been affected without a positive act—pumping—on the part of the defendant and (b) the fact that relatively small expenditures would be required to abate the pollution in each case.²⁹⁹ *Sagamore*³⁰⁰ was found distinguishable because of the relative purity of the stream involved and because it was used for domestic water supply by a large number of people.³⁰¹ *Shumaker*,³⁰² although it contained language that would seem to support the proposition that any discharge of water that affects or may affect the public health or public use of a stream is a public nuisance,³⁰³ was distinguished on the ground that the statement was made in the context of a discharge that was unquestionably a statutory public nuisance, and was not necessarily made with the intent of broadening the definition of common law public nuisance.³⁰⁴

In applying the principles discussed in the earlier cases, the court found none of the factors that led other courts to find a nuisance existed in *Barnes & Tucker*:

The waters of the Commonwealth here in question are and for a long period of time have been polluted by sewage and acid mine drainage from closed or "abandoned" mines. Except for some de-

Water Co., 377 Pa. 636, 105 A.2d 722 (1954), the court held that once the Water and Power Resources Board, which the court viewed as an arm of the legislature, had approved a particular project, that project could not be held to be a nuisance. If the exclusion of acid mine drainage from the provisions of the Clean Streams Law can be read as "approving" acid mine drainage, then it would follow from the *Collegeville Borough* case that acid mine drainage is not a nuisance. But the exclusion in the 1937 Act hardly "approves" acid mine drainage. See quotation accompanying note 57 *supra*. It only postpones regulation until such time as effective treatment or abatement methods are developed. That hardly seems a basis for holding that acid mine drainage cannot be a public nuisance in the meantime.

297. 288 Pa. 83, 85 A. 1102 (1913). In *McCune* mine water at the bottom of a bore hole was pumped to the surface and discharged to a clean stream crossing plaintiff's land. The court held that, once such an active discharge had been shown, the burden of proof passed to defendant to show that there was no other practicable way to dispose of the water, and that the defendant's burden had not been met.

298. 212 Pa. 115, 61 A. 811 (1905). In *Roaring Creek* water was pumped from a mine to a pure stream, when for "a trifling expense" it could have been conveyed to another stream "where it would injure no one." *Id.* at 116, 61 A. at 812. The grant of a preliminary injunction was sustained.

299. No. 896-A Transfer Docket 1970, at 55 (Pa. Comm. Ct., Apr. 16, 1973).

300. *Pennsylvania R.R. v. Sagamore Coal Co.*, 281 Pa. 233, 126 A. 386 (1924).

301. No. 896-A Transfer Docket 1970, at 57 (Pa. Comm. Ct., Apr. 16, 1973).

302. *Commonwealth ex rel. Shumaker v. New York & Pa. Co., Inc.*, 367 Pa. 40, 79 A.2d 439 (1951).

303. *Id.* at 48-49, 79 A.2d at 441.

304. No. 896-A Transfer Docket 1970, at 58-59 (Pa. Comm. Ct., Apr. 16, 1973).

veloping recreational uses there is no evidence that these waters in their polluted state are used for public purposes. Nor do we have in this case facts supporting concepts of negligence, foreseeability or unlawful conduct, being elements of seemingly persuasive force in some of the cases. Similarly, factors of a present activity on the part of the owner or user of the land or of a course of conduct directly producing the deleterious result are absent in this case.

What we do have is . . . the forces of nature at work which forces—given the location of the closed mine and the volume of water entering it by percolation and subterranean flow—produced a breakout which resulted in further pollution of a polluted stream from the acid mine drainage forced out of the mine.³⁰⁵

The court felt that the history of the legislature's dealing with acid mine drainage must be considered, even in deciding whether the drainage in question was a *common law* public nuisance.

Considering the legislative history, the lawful operation and closure of Mine No. 15 at all times and the other salient facts of this case, we cannot today declare—solely for the reason that B & T and its predecessors created a subsurface artificial condition by reason of mining—that a breakout of mine water through the forces of nature at work adjunctive to said artificial condition, constitutes a public nuisance for which B & T is responsible today. The Commonwealth through the legislature, has recognized that the pollution or further pollution of the waters of the Commonwealth by mine drainage is deleterious to the health and welfare to the citizens of Pennsylvania. As to the future it has empowered the government to place responsibility upon operators for post-mining discharge. As to the past, it has declared that the government shall be responsible for such discharge for closed or abandoned mines.³⁰⁶

In light of this legislative history, the court apparently felt it would be coming very close to retroactively penalizing Barnes & Tucker to hold them liable to treat, starting in 1970, pollution that was defined as pollution in 1970, but was not defined as pollution during the largest portion of the time during which the mining activities that led to the discharge took place. Thus, Barnes & Tucker, the court felt, could not have known, when they mined coal from the No. 15 mine prior to 1965, that they might be required to treat, possibly in perpetuity, acid mine drainage that might be caused by that mining. That observa-

305. *Id.* at 59-60.

306. *Id.* at 61.

tion, that thought, which is really at the core of the objection to retroactive legislation, whether criminal or not, seemed to dominate the discussion of all four issues.³⁰⁷

CONCLUSION

The state of the law in Pennsylvania with respect to acid mine drainage may be summarized with two observations about *Harmar and Pittsburgh*³⁰⁸ and *Barnes & Tucker*.³⁰⁹

(1) It is certainly true, as appellees argued at length in their brief, that there are limitations to the right of a legislature to declare something, by statute, a public nuisance.³¹⁰ "The general power of a [government] to declare, prevent, and abate a nuisance does not include the power to declare anything a nuisance which is not one in fact nor one per se."³¹¹

However, as the United States Supreme Court said in *Lawton v. Steele*, one of the leading cases on this point:

While the legislature has no right *arbitrarily* to declare that to be a nuisance which is *clearly* not so, a good deal must be left to its discretion in that regard, and if the object to be accomplished is conducive to the public interests, it may exercise a large liberty of choice in the means employed.³¹²

The question is, of course, how far can the legislature go without crossing this nearly invisible boundary? Does it matter that the activity that is being declared a nuisance is one that has in the past been encouraged? This was claimed to be the case with coal mining.³¹³ But it is not the mining that is being penalized now, it is the discharge of acid mine drainage—and that, while tolerated before, was hardly encouraged.

By one interpretation, the most significant extension that the Clean Streams Law makes, beyond the *Sagamore*³¹⁴ decision, is to broaden

307. *Id.* at 38-41, 43, 44-45, 48-49, 60-61.

308. *Commonwealth v. Harmar Coal Co.*, Civil Nos. 89-90 (Pa., Mar. 16, 1973).

309. No. 896-A Transfer Docket 1970 (Pa. Comm. Ct., Apr. 16, 1973).

310. Brief for Appellee on appeal from *Pittsburgh Coal Co. v. Sanitary Water Board* at 68-85, *Commonwealth v. Hammar Coal Co.*, Civil No. 90 (Pa., Mar. 16, 1973).

311. *City of Twin Falls v. Harlan*, 27 Idaho 769, 776, 151 P. 1191, 1195 (1915); see *Dougherty v. Messner*, 404 Pa. 235, 172 A.2d 288 (1961). *But see* *Commonwealth v. Dietz*, 285 Pa. 511, 132 A. 572 (1926).

312. 152 U.S. 133, 140 (1893).

313. Brief for Appellee on appeal from *Pittsburgh Coal Co. v. Sanitary Water Board* at 72, *Commonwealth v. Harmar Coal Co.*, Civil No. 90 (Pa., Mar. 16, 1973).

314. *Pennsylvania R.R. v. Sagamore Coal Co.*, 281 Pa. 233, 126 A. 386 (1924).

vastly the definition of public use. Certainly this is true if we consider only the reach of the law—as distinguished from the administrative machinery created to define standards and enforce the law. In *Sagamore* the supreme court held that where a stream is put to a public use it is a public nuisance to discharge acid mine water into it. In 1924, the court was willing to find as a matter of common law that using water for drinking and domestic purposes was a public use, and that use by the Pennsylvania Railroad for its locomotives was also a public use.³¹⁵

In *Harmar and Pittsburgh* the court was ready to accept the judgment of the legislature that future economic development,³¹⁶ and future outdoor recreation,³¹⁷ are public uses, and the implicit judgment of the legislature that all streams in the state, whether or not now clean are or will be devoted to a public use.³¹⁸

Once it is accepted that all streams are devoted to a public use, the power of the Commonwealth to compel the abatement of acid mine drainage stemming from active mining is clear, and one need only cite *Sagamore* to prove it.³¹⁹ So viewed, *Harmar and Pittsburgh* goes very little farther than did *Sagamore*, nearly 50 years ago.

The commonwealth court in *Barnes & Tucker* evinced some doubt that future public uses “are” public uses.³²⁰ But the commonwealth court was even more concerned about making acid mine drainage from an abandoned mine a public nuisance where substantially all the mining that gave rise to the discharge took place prior to 1965, when the Clean Streams Act was amended to apply to acid mine drainage into already polluted waters such as the West Branch of the Susquehanna.³²¹

The retroactivity problem is inherent in the application of common law nuisance doctrine. The activities that turn out to be an unreasonable interference with the enjoyment of life or property, that is to create a nuisance, public or private, may not appear to be unreasonable at the time they are performed. A recent case in Massachusetts³²²

315. *Id.* at 247, 126 A. at 391; see text accompanying notes 43-46 *supra*.

316. Act of Aug. 23, 1965, § 2, Pa. P.L. 374, as amended, PA. STAT. ANN. tit. 35, § 691.4 (Supp. 1973), amending Act of June 22, 1937, § 4, Pa. P.L. 1987; see note 66 *supra*.

317. *Id.*

318. *Id.*

319. Pennsylvania R.R. v. Sagamore Coal Co., 281 Pa. 233, 126 A. 386 (1924). See also Commonwealth *ex rel.* Shumaker v. New York & Pa. Co., Inc., 367 Pa. 40, 79 A.2d 439 (1951); Commonwealth v. Dietz, 285 Pa. 511, 132 A. 572 (1926).

320. No. 896-A Transfer Docket 1970, at 59 (Pa. Comm. Ct., Apr. 16, 1973); see note 305 *supra*.

321. *Id.*

322. *Pendoley v. Ferreira*, 345 Mass. 309, 187 N.E.2d 142 (1963).

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went so far as to require a pig farmer to cease operations on the ground that the farm was a private nuisance with respect to the surrounding residential area, even though that area had built up and had become a residential area *after* his pig farm was in operation. Not only did his farm not *appear* to be a nuisance during most of its existence, it was clearly *not* a nuisance until the area around it was developed as a residential community.³²³ Even there, however, the activity that was enjoined was an ongoing activity. New, stricter environmental restraints are frequently applied to ongoing activities because of changed circumstances,³²⁴ or because of a better recognition of harmful effects as, for example, new epidemiological studies are performed.³²⁵ In the *Barnes & Tucker* situation, there is no ongoing activity; the drainage is occurring now, but all of the mining that gave rise to the drainage occurred prior to the time when that drainage was generally recognized as being a public nuisance.³²⁶ In a situation that might have fallen under the principle enunciated in *Sagamore*, or one of the other early nuisance cases, this problem might not be controlling. Nor would it be controlling if the supreme court views section 3 of the Clean Streams Law³²⁷ as broadening, *as of the time of its enactment in 1937*, the definition of public nuisance as applied to acid mine drainage. But the retroactivity problem will necessarily be central to the legal issues surrounding the control of that two-thirds of acid mine drainage that emanates from abandoned or inactive mines.³²⁸

323. *Id.* at 312, 187 N.E.2d at 144.

324. As, for example, in the field of air pollution control, where, in Pennsylvania, "air basins," areas that are built up, with many sources of air pollutants, are subjected to more stringent regulations than areas with relatively few sources, and relatively little air pollution. Regulations, Pa. Dept. of Env. Resources, 25 PA. CODE §§ 22.11, 22.22-23, 22.26 (1972). It is obviously contemplated that if a non-air basin area builds up and becomes more polluted, sources located there will be subjected to more stringent regulations.

325. Again using the development of air pollution regulation as an example, primary ambient air quality standards which state how clean we want the air we live and move about in to be—are set by the federal government, under the Clean Air Act as amended in 1970, 42 U.S.C. §§ 1857c-4 to -5 (1970), according to the best information available relative to the health effects of the various air pollutants for which standards are set. Once these standards are set, the emission or effluent limitations that directly affect a particular source of air pollutants will tend to be controlled by the severity of the ambient air quality standards relative to existing air quality. 42 U.S.C. § 1857c-4 (1970) explicitly provides: "Such primary standards may be revised in the same manner as promulgated." It is clearly contemplated that, if information on the effects of particular pollutants on human health is developed, through epidemiological studies or any other research, that indicates more stringent ambient air quality standards should be imposed, then the standards will be changed.

326. No. 896-A Transfer Docket 1970, at 48-49, 60-61 (Pa. Comm. Ct., Apr. 16, 1973).

327. Act of June 22, 1937, § 3, Pa. P.L. 1987, *as amended*, PA. STAT. ANN. tit. 35, § 691.3 (Supp. 1973).

328. See note 18 *supra*; text accompanying notes 17-19 *supra*.

(2) How the law ultimately deals with the retroactivity issue, as well as other issues left by *Harmar and Pittsburgh* and *Barnes & Tucker*, may be influenced by what we identify as an interpretational bias on the part of the supreme court. Every time there was a choice between a broad and a narrow interpretation of the Clean Streams Law,³²⁹ the supreme court in *Harmar and Pittsburgh* chose the broad interpretation.³³⁰ If there was any doubt whether the law applied to the activity in question, the court seemed disposed to apply it.

Three times, the court gave as a reason for reaching a particular conclusion the importance of controlling pollution. Once, implicitly referring back to the statement of purpose of the Clean Streams Law,³³¹ the court gave as a reason for broadly interpreting the term "industrial waste" to include the discharge of water from inactive mines in the Irwin Basin that: "[t]o permit this discharge to the surface and ignore its essential role in Pittsburgh's mining operation is to promote rather than abate pollution."³³² The second time, already referred to,³³³ the court cited the Environmental Declaration of Rights, article I, section 27 of the Constitution of Pennsylvania, as one reason for finding an overriding public interest in the abatement of acid mine drainage, that would be sufficient to support the strict review of the constitutionality of the Commonwealth's actions in these cases.

The third time it also cited the Statutory Construction Act,³³⁴ to the effect "that the legislature intends to favor the public interest as against any private interest," thus making its interpretational "bias" explicit.³³⁵

The commonwealth court, in *Pittsburgh Coal*³³⁶ and *Harmar Coal*,³³⁷ and much more explicitly in *Barnes & Tucker*,³³⁸ seems to have regarded the legislature as moving only tentatively into the field of acid mine drainage regulation in 1965, finally making the extent of its commitment clear only in 1970.³³⁹ While, as noted above,³⁴⁰

329. Act of June 22, 1937, Pa. P.L. 1987, as amended, PA. STAT. ANN. tit. 35, §§ 691.1-1001 (Supp. 1973).

330. Commonwealth v. Harmar Coal Co., Civil Nos. 89-90, at 11 (Pa., Mar. 16, 1973).

331. *Id.* at 5.

332. *Id.* at 12-13.

333. *Id.* at 16.

334. PA. STAT. ANN. tit. 46, § 552 (1969).

335. Commonwealth v. Harmar Coal Co., Civil Nos. 89-90, at 24 (Pa., Mar. 16, 1973).

336. 4 Pa. Comm. Ct. 407, 286 A.2d 459 (1972).

337. 4 Pa. Comm. Ct. 435, 285 A.2d 898 (1972).

338. No. 896-A Transfer Docket 1970 (Pa. Comm. Ct., Apr. 16, 1973).

339. *Id.* at 39-40.

340. See note 129 *supra*.

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reasonable men might differ on this question, a reading of the statement of policy in the 1965 amendments would seem to support the supreme court's view. The commonwealth court in *Barnes & Tucker* hardly mentioned that statement of policy,³⁴¹ in the supreme court's opinion in *Harmar and Pittsburgh*, it was a central point in the decision.

Which ever is correct in the abstract, of course, the Supreme Court of Pennsylvania speaks last. Whether the interpretational leaning in favor of applying the Clean Streams Law is enough to support the application of section 3³⁴² to any discharge resulting from mining that took place after 1937, based in part on the Statutory Construction Act,³⁴³ legislative and constitutional changes,³⁴⁴ and changes in public attitudes that have occurred recently, must remain an open question.

341. See pp 507-08 *supra*.

342. PA. STAT. ANN. tit. 35, § 691.3 (Supp. 1973), amending Act of June 22, 1937, § 3, Pa. P.L. 1987.

343. PA. STAT. ANN. tit. 46, § 552 (1969).

344. Pa. Const. art. 1, § 27 (*see note 136 supra*); Act of Aug. 23, 1965, § 2, Pa. P.L. 374, as amended, PA. STAT. ANN. tit. 35, § 691.4 (Supp. 1973), amending Act of June 22, 1937, § 4, Pa. P.L. 1987 (statement of policy in the 1965 amendments).

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