

ILLINOIS POLLUTION CONTROL BOARD
February 25, 1988

IN THE MATTER OF:)
)
PROPOSED SITE-SPECIFIC)
PARTICULATE LIMITATIONS) R87-12
FOR SCHROCK'S SAWDUST)
FIRED BOILERS IN ARTHUR,)
ILLINOIS)
)

OPINION AND ORDER OF THE BOARD (by J. Marlin):

This matter comes before the Board on a petition for site-specific relief filed by Schrock/A Division of White Industries (Schrock) on April 13, 1987. Specifically, Schrock is seeking an exemption from 35 Ill. Adm. Code 212.204 which imposes a particulate emission limitation of 0.1 pounds per million British thermal units (lbs./mmbtu). Instead of that limit, Schrock seeks to be subject to a particulate emission limit of 0.28 lbs./mmbtu.

On May 14, 1987, the Board granted the Illinois Environmental Protection Agency's (Agency) motion to incorporate into this proceeding the record of PCB 86-205, which was a Schrock variance proceeding concerning the same particulate emissions. At hearing, the Agency and Schrock moved again for incorporation of PCB 86-205. That joint motion was granted by the Hearing Officer (R. 7).

A hearing was held in this matter on July 30, 1987 in Arthur; no members of the public were present. The Board will denote citations to the transcript of that hearing by "R". Also, on July 30th, the Board held a separate hearing in PCB 86-205. The Board will denote citations to the transcript from that hearing as "R II".

On October 23, 1987, the Department of Energy & Natural Resources filed its Negative Declaration in this matter. The Economic and Technical Advisory Committee filed its concurrence with the negative declaration on November 13, 1987.

On March 5, 1987, the Board issued its original Opinion and Order in PCB 86-205 which granted Schrock a short-term variance from section 212.204. Pursuant to the Board's grant of Schrock's motion for reconsideration, the Board held the July 30th hearing in PCB 86-205. After reconsidering its March 5th Order, the Board issued an Opinion and Order on October 1, which granted Schrock a variance until October 1, 1988. Since the record from PCB 86-205 is incorporated into this proceeding, the Board finds it useful to reiterate some of its earlier findings.

Schrock owns and operates a manufacturing plant located in Arthur, Illinois, in the County of Moultrie where it manufactures wooden cabinets. Schrock employs approximately 600 employees, making it the largest single employer in Moultrie County. An 8 million BTU per hour ("8 MBTU/hr or 8 mmbtu") Kewanee water tube boiler is used at the plant to provide building heat during the heating season. This boiler is capable of burning oil, gas or wood residue. Normal firing practices are to start the boiler with either gas or oil, and after the boiler is brought up to operating temperature, fire the boiler with wood residue. Approximately one-half ton of wood residue is burned per hour. The boiler was originally installed in 1978 and was modified to burn wood residue pursuant to a construction permit issued on October 22, 1979. An operating permit was issued on February 19, 1981, which expired on February 11, 1986. Schrock experienced severe firing upset problems when firing the boiler with wood residue. As a result, Schrock determined that it was necessary to rebuild the boiler. Schrock applied for a construction permit which was issued on September 3, 1985. The construction permit authorized the reconstruction of the boiler and the removal of the original fabric filter. The permit required that Schrock conduct a stack test prior to applying for an operating permit. A new mechanical particulate collection system consisting of a multicyclone was installed to replace the fabric filter. This multicyclone was designed to meet a particulate level of 1.0 pound per MBTU ("lbs/mmbtu"). A stack test conducted on January 21 and 22, 1986, demonstrated a particulate emission rate of 0.2775 lbs/mmbtu.

(PCB 86-205, slip op. at 1-2,
March 5, 1987)

It appears that there were significant problems associated with the operation of the baghouse [fabric filter]. [Mick] Price [Schrock's Arthur plant manager] testified that the boiler could not be run on "high fire" due to the lack of adequate ventilation through the baghouse. (R. 63). This in turn caused problems in failing to provide enough

steam for a comfortable temperature within the plant. Price asserted that excessive particulate emissions were also a result. (R. 79-80). In addition, he stated that soot from the boiler was being deposited on cars in Schrock's parking lot. Finally, he stated that fires had occurred in the baghouse. According to Price, the baghouse filter had to be replaced three or four times because of fire damage. (R. II. 63-63). Price further stated that the baghouse was one of the problems which necessitated a change in the boiler system. He said that problems would have continued if the baghouse had not been changed. (R.II. 68-69).

Exhibit 18 [of PCB 86-205] is a report authored by Energy Resource Systems (ERS) which evaluated Schrock's boiler system, as it existed prior to the changeover. The report is dated May 7, 1985 and was basically a part of an ERS proposal to modify Schrock's system. (R.II.85) In the report, ERS comments on the baghouse.

Your present dust collector, according to the manufactures [sic] specifications is not large enough to provide a 8,000,000 BTU boiler output with the proper volume of air to control combustion chamber temperatures and maintain proper design velocities within the ductwork and the stack.

(Exh. #18, p. 3)

ERS goes on to recommend that the baghouse be replaced by a new dust collector. The report also states:

The Company [ERS] guarantees that the equipment covered by this Proposal, if installed and operated under the instructions of the Company, will meet the ordinance relating to air pollution, State of Illinois.

(Exh. #18, p. 3)

This guarantee was to apply to the mechanical collector system, the multiclone, which was

eventually installed by Schrock. (R. II. 81). That system is now producing emissions that are not in compliance. It is Schrock's position that pursuing a legal action against ERS for failure to live up to its guarantee would be economically undesirable. (R. II. 83).

(PCB 86-205 slip. op at
3-4, October 1, 1987)

Options for compliance with the limit of Section 212.204 were also discussed in the variance proceeding:

Mick Price, the plant manager for Schrock's Arthur facility, testified at hearing that the Venturi scrubber, proposed as a part of Schrock's compliance plan, would enable Schrock to burn sawdust and still achieve compliance with the 0.1 pound per million BTU standard. In addition, Price testified that a Venturi scrubber could be purchased, installed, and operational within 21 weeks after Schrock placed an order for the scrubber. (R. II. 27-29). The scrubber option would cost Schrock approximately \$80,000. This cost estimate includes expenditures for the purchase, shipping, and installation of the scrubber. (R. II. 43).

Another compliance alternative for Schrock would be to burn oil or gas rather than sawdust. Mick Price testified that it would take less than 30 minutes to convert the boiler from sawdust to gas. However, he also states this option would result in "extremely high costs" due to the costs associated with the purchase of natural gas and the landfilling of sawdust which would have otherwise been burned in the boiler. (R. II. 29-30).

Dean Baird, the Vice President and General Manager of Schrock, testified at the original hearing in this matter held on January 22, 1987. At that hearing, Baird gave some specific costs to burn oil or gas and landfill the sawdust. According to Baird, the annual cost to landfill the sawdust would run in the range of \$50,000 to \$80,000 per year. He stated that natural gas was cheaper to use than oil and that the annual cost to

use natural gas would amount to over \$72,000.
(R. 30-31).

(PCB 86-205, slip op. at 2-3,
October 1, 1987).

At the regulatory hearing, Price testified that Schrock produces 2,385 lbs of sawdust per day. (R. 23). He stated that if the sawdust had to be landfilled, it would cost Schrock \$185 per day. (R. 28).

According to Price, other technically feasible compliance alternatives, which Schrock had discussed with ERS, include an electrostatic precipitator and another baghouse. The cost of precipitators was estimated at \$160,000. (R. 26). While the baghouse would only cost \$50,000, it was not recommended by ERS due to operational problems concerning fires and clogging. (R. 26).

At the regulatory hearing, Schrock first requested that the Board find Section 212.204 invalid as applied to Schrock. The Board notes that it addressed this issue in its March 5, 1987 Opinion and Order and held that the emission limit of Section 212.204 currently applies to Schrock's boiler. (PCB 86-205, slip op. at 7, March 5, 1987).

In general, the Board does not grant site-specific relief from the requirements of a rule unless it is shown that compliance with that rule is technically infeasible or economically unreasonable. It is clear from the record that there are technically feasible methods by which Schrock can comply with Section 212.204. Therefore, the issue before the Board is whether the application of Section 212.204 to Schrock's boiler would create an economically unreasonable situation.

At hearing, counsel for Schrock argued, that in light of the environmental impact at issue, "[t]he available feasible technology for complying with the Board's rule is economically unreasonable." (R. 10).

Later, in response to a question concerning the impact on Schrock due to the cost of compliance, Schrock's counsel stated:

Schrock has taken the position in this proceeding that the cost for control is economically unreasonable on a cost per ton basis for a benefit to inferred basis. [sic]

Schrock has not taken the position [that] installing the control equipment would imperil its financial situation.

(R. 32-33)

On the other hand, the Agency opposes the granting of site-specific relief. According to the Agency, such relief would be improper, since non-compliance with the rule was the result of an intentional engineering change. (R. 8). However, the Agency takes the position that Schrock's current operation would not cause a violation of the ambient air quality standards for particulates. (R. 31-32).

While the Board understands that Schrock did not intentionally change its control technology in order to avoid compliance, the important fact for consideration is that Schrock is currently not in compliance with the limit of Section 212.204. That is, it is irrelevant which person is at fault for Schrock's noncompliance. The issue presently before the Board merely concerns the ability of Schrock to comply with the existing rule.

It is also clear from the record that Schrock could utilize a wet scrubber to achieve compliance at a cost of approximately \$80,000. The Board is not convinced that such a cost is economically unreasonable.

Section 8 of the Title II, Air Pollution, of the Illinois Environmental Protection Act (Act) states in part:

It is the purpose of this Title to restore, maintain, and enhance the purity of the air of this State in order to protect health, welfare, property, and the quality of life and to assure that no air contaminants are discharged into the atmosphere without being given the degree of treatment or control necessary to prevent pollution.

Ill. Rev. Stat. 1985, ch. 111 1/2, par. 1008.

Section 10 of the Act provides:

The Board pursuant to procedures prescribed in Title VII of this Act, may adopt regulations to promote the purposes of this Title. Without limiting the generality of this authority, such regulations may among other things prescribe:

- a) Ambient air quality standards specifying the maximum permissible short-term and long-term concentrations of various contaminants in the atmosphere.

- b) Emission standards specifying the maximum amounts or concentrations of various contaminants that may be discharged into the atmosphere;

* * * *

Ill. Rev. Stat. 1985, ch. 111 1/2 ,
p. 1010.

Consequently, the promulgation of emission limitations and air quality standards are two distinct methods by which the Board may act in order to "restore, maintain, and enhance the purity of the air" in Illinois. The numerical limits set by both emission limitations and ambient air quality standards represent benchmarks that must be reached in pursuing the goals of the Act. Compliance with one benchmark does not negate the necessity for compliance with the other; rather, both have individual worth in achieving and maintaining a high quality environment.

Schrock's plant is located in an attainment area. It also appears that its current emissions do not threaten that "attainment status". But, that fact alone is not sufficient justification for granting regulatory relief. This insufficiency is still not overcome when one adds the factor that compliance would increase costs for Schrock. It is rare when environmental regulation does not increase the costs of the polluter. However, those costs justify relief only when they are found to be unreasonable. Such is not the case here.

If the Board granted relief to Schrock in this instance, it would be establishing a precedent which could undermine the whole regulatory process. The implication would be that any source which would incur added expense, if forced to comply with the emission limits of a rule, would be entitled to relief merely upon the showing that its noncompliance would not cause a violation of an air quality standard. The result of such a policy would be a series of exemptions resulting in the increased degradation of air quality, since under this interpretation emission limitations would be viable only in instances where a source failed to show that an exemption would not lead to violation of air quality standards. Such a holding would clearly contravene the intent of the Act.

Also, the closer the ambient air particulate levels approach the air quality standards, the more likely it is for a new source to cause a violation of the air quality standards. Therefore, the development of future industrial sources, which wish to utilize coal, sawdust, or wood as a fuel source, might be jeopardized by allowing an increase in particulate emissions from existing sources.

At hearing, Mick Price testified that when the baghouse was utilized, Schrock received complaints regarding "soot deposited on the siding of houses and the neighborhood just across the railroad tracks." (R. 20). Even though the soot was the result of a malfunctioning baghouse, it is apparent that Schrock is situated such that its emissions can impact upon a nearby residential neighborhood. The Board is not convinced that Schrock should be allowed to permanently subject its neighbors to emissions which contain particulate levels that are more than double of what is normally allowed.

Finally, the Board notes that in its Motion for Expedited Decision, which was granted on January 21, 1988, Schrock reiterated its position, previously asserted in its April 9, 1987 motion for reconsideration in PCB 86-205, that "it would need forty-six weeks for Schrock to bring its boiler into compliance should the Board deny the petition for site specific rule change." This statement is a direct contradiction to one which counsel for Schrock made at the variance hearing on July 30, 1987:

We anticipate that the Board will grant the site-specific rule change position, and once that is final, Schrock will then be in compliance with the rule as modified. If the Board does not, Schrock believes it can install a Venturi wet scrubber, as will be described by Mr. Price, within six months of the Board's final decision denying the site-specific rule change.

(R. II. 13)

Also, testimony from Mick Price indicates that a scrubber could be purchased, installed and operational within 21 weeks after Schrock placed an order for the scrubber. (R. II. 28-29). Even though the Board is denying Schrock's regulatory relief, the record indicates that Schrock can still achieve compliance with Section 212.204 prior to October 1, 1988, which is the date of expiration for Schrock's variance.

In summary, the Board finds that it is both technically feasible and economically reasonable for Schrock to comply with Section 212.204. As a result, Schrock's petition for site specific relief is denied.

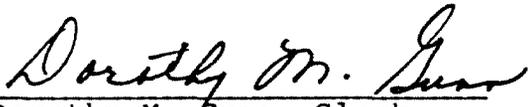
ORDER

The Petition for Establishment of a Site-Specific Limitation filed by Schrock/A Division of White Industries on April 13, 1987 is hereby denied.

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1985 ch. 111 1/2 par. 1041, provides for appeal of final Orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 25th day of February, 1988, by a vote of 7-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board