

ILLINOIS POLLUTION CONTROL BOARD  
January 24, 1991

IN THE MATTER OF: )  
 )  
PETITION OF ELIZABETH STREET )  
FOUNDRY, INC. for an ) AS 89-2  
Adjusted Standard from ) (Adjusted Standard)  
35 Ill. Adm. Code 212.456 )

RICHARD J. TROY APPEARED ON BEHALF OF THE PETITIONER.

DEBORAH STONICH APPEARED ON BEHALF OF THE AGENCY.<sup>1</sup>

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

This matter is before the Board on a petition for an adjusted standard from the Board's air regulations at 35 Ill. Adm. Code 212.456 filed on June 30, 1989. Petitioner filed an amendment to its petition on August 25, 1989. A hearing was held on this matter on October 29, 1989 in Chicago, Illinois. Due to the following reasons, the petition for an adjusted standard is denied.

BACKGROUND

Elizabeth Street Foundry (the Foundry) is a small operation and has recently faced difficult times. (Pet. p. 2).<sup>2</sup> According to Petitioner, the foundry has been in Chicago at the same location for 100 years and currently employs 34 persons who work an average of 25-30 hours a week. (Pet. p. 2). The Foundry produces a specific product at the request of a particular customer who then furnishes the pattern and specifies the type of iron to be used. (Pet. p. 2). The actual metal pouring process takes place typically every third day but occasionally every other day. (Pet. p. 2). The Foundry has remained substantially the same since World War I with the exception of the office area, which was destroyed by fire in 1978 and has since been reconstructed.

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1. Deborah Stonich, now a Board attorney, previously represented the Agency in this proceeding. Ms. Stonich has not participated in any of the Board's deliberations in this matter.

2. The Petition is cited as "Pet. p. "; the Petitioner's Brief is cited as "Pet. Br. p. "; the Agency's response is cited as "Ag. p. "; and the Agency's brief is cited as "Ag. Br. p. ".

On October 1, 1986, the Illinois Attorney General's Office, at the request of the Illinois Environmental Protection Agency (the Agency), filed an enforcement action with the Board (Illinois Environmental Protection Agency v. Elizabeth Street Foundry, PCB 86-161). The Board issued an Interim Opinion and Order in PCB 86-161 on March 24, 1988. That Opinion and Order found that the Foundry was in violation of the Illinois Environmental Protection Act (the Act) (Ill. Rev. Stat. 1987, ch. 111 1/2, par. 1001 et seq.) and the Board's rules. The Board ordered Petitioner to contact Mr. Harry Pestine of the Illinois Department of Commerce and Community Affairs and stated that:

In consultation with the Agency, Respondent [Petitioner] shall discuss with Mr. Pestine or other appropriate person in the Department the availability of Governmental Assistance for conducting a stack test; and assistance in obtaining or financing the purchase of pollution control equipment, including plant modifications which might obviate the need for pollution control equipment, etc.; and information detailing whether Respondent [Petitioner] is located in an enterprise zone, etc.

Petitioner contacted Mr. Pestine and as a result Dr. Mark Rood, a professor with the University of Illinois,<sup>3</sup> performed a site study including calculation of Petitioner's emissions. After receiving the results of Dr. Rood's study, the Petitioner filed this adjusted standard petition.

#### PROCEDURAL HISTORY

On June 30, 1989 Petitioner filed its petition for an adjusted standard from 35 Ill. Adm. Code 212.456. Section 212.456 exempts a foundry from the requirements of Section 212.321 if 1) the cupola was in existence prior to April 15, 1967, 2) the cupola process weight rate is less than or equal to 20,000 pounds per hour and 3) the cupola was in compliance with the emission rate listed in Section 212.456(c)(3) as of April 14, 1972. On July 13, 1989, the Board issued an Order requiring Petitioner to file an amended petition within 45 days. The Board stated that the petition was inadequate in that the petition did not state the level of justification which the Petitioner must show to receive an adjusted standard pursuant to Section 28.1(c) of the Act. Petitioner filed an amended petition on August 25, 1989.

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3. Dr. Rood's Curriculum Vitae was introduced as Exhibit B. The Curriculum Vitae details Dr. Rood's significant experience relating to air emissions and monitoring.

On August 15, 1989, the Agency filed a motion to dismiss the petition and Petitioner filed its response on August 28, 1989. The Agency objected to the petition because the proposed adjusted standard appeared to be a regulation of general applicability. On August 31, 1989, the Board denied the motion to dismiss but directed that:

At hearing, the petitioner shall present proposed language for a Board Order which would impose the requested adjusted standard and which would be consistent with the limitations and requirements of Section 28.1 of the Act.

The Petitioner submitted the following language in its Brief:

Section 212.456.1 Adjusted Standard for Section 212.456

A foundry satisfying the requirements of subparagraphs (a) and (b) of Section 212.456, and showing that it is in compliance with the allowable emissions set forth in subparagraph (c) (3) of Section 212.456 shall be deemed to have been in compliance as of April 14, 1972 and continuously thereafter, if:

1. The foundry is unable to produce production records for the month of April 1972 by reason of a loss of such records due to fire or other casualty; and
2. Sworn testimony of the operator certifies that the operations of the foundry have not changed since April 14, 1972.

#### DISCUSSION

Petitioner's filing for the adjusted standard is directly related to the enforcement action filed by the Illinois Attorney General against Petitioner (PCB 86-161). Pursuant to the Board's Order in PCB 86-161, Petitioner specifically sought assistance from the Department of Commerce and Community Affairs ("Department") at the Board's direction. The Department put Petitioner in contact with Dr. Rood, who visited the site and collected data. Dr. Rood then used that data and submitted a written report to Petitioner and the Department.

At hearing and in its brief the Agency argues that there were flaws in the Petitioner's petition for adjusted standard. Those asserted flaws were that the Petitioner was seeking an adjusted standard to the wrong rule and that the Petitioner had

not met the level of justification necessary to be allowed an adjusted standard. In addition, the Agency disagrees that Petitioner's emissions were within those necessary to meet the requirements of 35 Ill. Adm. Code 212.456.

The Board will first discuss from which rule the Petitioner should be seeking an adjusted standard, as well as its emission rate. The Petitioner is seeking an adjusted standard from Section 212.456 of the Board's rules. The Agency maintains that the Petitioner should seek an adjusted standard from Section 212.321.

Section 212.321(a) provides that:

Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission source which, either alone or in combination with the emission of particulate matter from all other similar new process emission sources at a plant or premises, exceeds the allowable emission rates specified in subsection (c) and Illustration B.

Section 217.321(c) sets forth specific emission rates for sources.

In order to determine from which rule to seek an adjusted standard a petitioner for an adjusted standard must determine what its emission rates are. The report by Dr. Rood, filed as Exhibit C, and the testimony offered by the Agency expert, Berkley Moore, do not coincide as to the rate of emissions from Petitioner's foundry. In order to determine the emission rate, without using a stack test, the process weight rate (PWR) is used. The process weight rate along with the appropriate emission factors are used to determine the emission rate. The Agency maintains that Petitioner and Dr. Rood used emission factors to calculate its actual emission that are different from those normally used. (Ag. Br. p. 3). Because Dr. Rood was not available for cross-examination, the Agency was unable to question his use of the emission factors.

Dr. Rood states that: "Particulate mass emission rates are based on data presented in AP-42 (1977), Kearney and Company (1971) and information provided by representatives of Elizabeth Street Foundry Company". (Exhibit C p. 2). Dr. Rood presented his emission rate calculations in Table 1 at page 4 of Exhibit C. He then stated that: "Results presented in Table 1 indicate that particulate matter emission rates from Elizabeth Street Company's cupola are greater than the standards established by IEPA except for two cases". (Exhibit C p. 4). Further, an examination of the table indicates that only when a PWR of 0.70 tons/hour and the Kearney and Co. data are used is the emission

rate at a level that would be within the limits set forth in Section 212.456. With respect to Section 212.456, Dr. Rood's conclusion from his analysis is similiar, that using "emission factor data from Kearney & Co. (1971) and a process weight rate of 0.70 tons/hr, it is not unreasonable to assume that Elizabeth Street Company's cupola is operating at acceptable Particulate mass emission rates when compared to regulations 212.456 and 212.457." (Exhibit C p. 5).

The Board also notes that Dr. Rood's calculations, although used by the Petitioner in its briefs and petition, were not offered as sworn testimony. The presence of the expert whose calculations the Petitioner is relying upon is of the utmost importance in this type of proceeding. In this instance, the absence of sworn testimony from Dr. Rood prevents the Board from determining whether the calculation of emissions using a PWR of 0.7 tons/hr is appropriate and is therefore, unable to agree with the Petitioner's asserted emission rate.

In addition, the Agency maintains that it is standard practice to use the most recent edition of AP-42 to estimate emissions and the latest edition is dated October, 1986. (Ag. Br. p. 4) Section 212.110 of the Board's rules allow for determination of particulate matter emissions from a stationary source by the "procedures prescribed in the American Society of Mechanical Engineer's Power Test Code 27 1957. . . or by any other equivalent procedures" approved by the Agency. The Agency stated it is standard practice to use the most updated edition of AP-42. (Ag. Br. p. 3). Therefore, pursuant to Section 212.110, the most recent edition of AP-42 is an appropriate equivalent procedure.

The Petitioner, in fact, asserts correctly that the Board, in PCB 86-161 determined that Petitioner's PWR is 1.1 tons per hour and that, the Foundry's emission rate is "in compliance with the maximum allowable emission standards of Section 212.456(c)(3)" (Pet. Br. p. 7). However, using a PWR of 1.10 tons/hr and applying the emission factors from both the 1977 and 1986 AP-42 and data from Kearney and Co., the emission rates do not fall within the limits set forth in Section 212.456. The Board's calculation using a 1.10 tons/hr PWR data based on the 1977 AP-42, shows an emission rate of 18.58 lbs/hr; based on the 1986 AP-42, an emission rate of 15.18 lbs/hr; and based on the Kearney & Co. data an emission rate of 5.63 lbs/hr. Therefore, it is clear that the Section 212.456 limits of 5.03 lbs/hr at a PWR of 1.1 tons/hr cannot be met by the Petitioner.

With regard to the Petitioner's assertion that the Board found in PCB 86-161 that the Petitioner's "current emissions are in compliance with Section 212.456(c)(3)", (Amended Pet. p. 3) the Board finds the assertion to be incorrect since the Petitioner fails to note the Board's explicit determination in PCB 86-161 that:

35 Ill. Adm. Code 212.465 [sic] does not apply to Respondent; because, according to the testimony, Elizabeth Street Foundry did not comply with the limitations set forth in 212.465(c)(3) [sic]. Respondent has argued that the filing of PCB 72-468 triggers Section 212.465 [sic] status. It does not. PCB 72-468 was an enforcement action [not a variance] seeking to restrain Respondent from (alleged) emission violations. PCB 72-468 was filed on December 1, 1972 -- many months after the April 14, 1972, deadline. Additionally, and most significantly, PCB 72-468 was not a variance action as required by Section 212.465 [sic]. Section 212.465 [sic] does not govern this Respondent. (PCB 86-161, p. 5)

The Board further stated that "35 Ill. Adm. Code 212.321, New Process Sources, is the regulation applicable to the Respondent [Petitioner]." (PCB 86-161 p. 6).

The Agency maintains that Petitioner should seek an adjusted standard from 35 Ill. Adm. Code 212.321 and cites to the Board's Interim Opinion and Order in PCB 86-161 quoted above. The Agency argues that "Petitioner cannot comply with the emission rates contained in 35 Ill. Adm. Code 212.456" (Ag. Br. p. 5) using the formula found in AP-42, the 1986 edition, and therefore should not be seeking an adjusted standard from that rule.

Based on the Board's finding in PCB 86-161, and the determination that the use of 1986 AP-42 emission factor is appropriate, the Board finds that Elizabeth Street Foundry's petition for an adjusted standard from 35 Ill. Adm. Code 212.456 is not the proper rule from which to seek an adjusted standard.

The Board will next address whether or not the Petitioner has met the necessary level of justification to be awarded an adjusted standard. Section 28.1(c) of the Act states that:

If a regulation of general applicability does not specify a level of justification required of a petitioner to qualify for an adjusted standard, the Board may grant individual adjusted standards whenever the Board determines, upon adequate proof by petitioner, that:

1. factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner;
2. the existence of those factors justifies an adjusted standard;

3. the requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and
4. the adjusted standard is consistent with any applicable federal law.

The Agency specifically argues that Petitioner did not meet the level of justification with regards to Section 28.1(c)(3).

The Petitioner's amended petition specifically replies to each of the provisions in Section 28.1(c). In reply to Section 28.1(c)(3) the Petitioner states:

Petitioner is not seeking any modification of the allowable emission standards under Section 212.456(c)(3). As previously noted, this Board has found Petitioner to be in compliance with those standards.<sup>4</sup> Nor is Petitioner seeking to extend the date on which foundries had to be in existence to qualify under Section 212.456. The date of April 15, 1967 would remain as the date on which an iron foundry would have to have been in existence to qualify. Thus, the adoption of an adjusted standard will not result in environmental or healthy effects [sic] substantially and significantly more adverse considered by the Board in adopting Section 212.456. In fact, there would be no charge [sic] at all.  
(Amended Pet. p. 6)

The Agency argues that the Petitioner's statement is not sufficient. The Agency points to the explicit provision of Section 28.1(c)(3) and to 35 Ill. Adm. Code 106.705(g) which requires an analysis of the "quantitative and qualitative impact of the Petitioner's activity on the environment if the Petitioner were to comply with the regulation of applicability as compared to the quantitative and qualitative impact on the environment if the petitioner were to comply only with the proposed adjusted standard". The Agency maintains that the petitioner must show that the increase in emissions from the emissions levels set forth in the Board's rules will not cause or contribute to a violation of the primary and secondary national ambient air

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4. The Petitioner is referring to the assertion discussed above, concerning compliance with Section 212.456.

quality standards. (Ag. Br. p. 10).

When the Board considers a rule of general applicability pursuant to Section 27(a) of the Act, the Board examines the "economic reasonableness and technical feasibility" of a rule. Section 28.1 of the Act provides that the Board may grant an adjusted standard "for persons who can justify such an adjustment consistent with (a) of Section 27 of this Act." Thus, one consideration the Board may examine is the "economic reasonableness and technical feasibility" of a Petitioner complying with a rule of general applicability.

Petitioner has set forth facts and figures in its petition which indicate that:

To achieve compliance with 212.321 Petitioner would be obligated to install a baghouse. Such installation would be both costly and cumbersome. (Pet. p. 5)

In addition, Petitioner, at hearing, submitted income tax forms, indicating a loss for the year 1987 and stated that the income tax form reflects the financial condition of the foundry at the time of hearing. (Tr. p. 36, Exhibit H). In PCB 86-161, the Board stated that:

Mr. Troy, owner and operator of Elizabeth Street Foundry, testified that the facility was not in good financial shape; and that Respondent could not afford to conduct a stack test [costing \$50-70,000] or install a baghouse [cost \$250-300,000]. From the evidence introduced, the Board is persuaded that this is true. (PCB 86-161, p. 9).

Thus, if the Petitioner's economic status is unchanged, the "economic reasonableness and technical feasibility" of compliance would be a factor to be considered. However, it should be noted that the economic factors were not updated or argued. Further, due to the Board's findings in this Opinion the economic factors were not considered.

The Board finds that the Petitioner has not established that there will be no significant environmental or health effects. Simply stating that there will be no adverse effect is not sufficient; the Petitioner must demonstrate using appropriate scientific data analysis or techniques including modeling to show that the adjusted standard has no significant adverse environmental or health effects. The Petitioner has not made such a demonstration. Therefore, the petition for an adjusted standard is denied as inadequate pursuant to Section 28.1(c)(3).



CONCLUSION

The Board finds that the Petitioner has failed to meet the requirements of Section 28.1 therefore this petition is dismissed and the docket is closed.

This Opinion should not be construed as finding that the Petitioner is not eligible for an adjusted standard under other portions of the Board's rules. To the contrary, the Petitioner may be eligible for an adjusted standard from 35 Ill. Adm. Code 321. The Board suggests that the Petitioner examine the record in this case closely, especially the testimony by the Agency's expert, Berkley Moore, before proceeding.

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


ORDER

The petition for an adjusted standard for 35 Ill. Adm. Code 212.456 is dismissed.

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1989, ch. 111 $\frac{1}{2}$ , 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 24th day of January, 1991, by a vote of 7-0.

  
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Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board