ILLINOIS POLLUTION CONTROL BOARD December 4, 1997

IN THE MATTER OF:)
)
PETITION OF THE LOUIS BERKMAN)
COMPANY, D/B/A THE SWENSON)
SPREADER COMPANY, FOR AN)
ADJUSTED STANDARD FROM 35 ILL.)
ADM. CODE 215, SUBPART F)

AS 97-5 (Adjusted Standard - Air)

INTERIM OPINION AND ORDER OF THE BOARD (by K.M. Hennessey):

Petitioner Louis Berkman Company, d/b/a the Swenson Spreader Company (Swenson), manufactures snow and ice control equipment at a plant in Lindenwood, Ogle County, Illinois. Swenson applies coatings to its products and in this proceeding, Swenson seeks an adjusted standard from a regulation that limits the amount of volatile organic material (VOM) that may be contained in its coatings. The Illinois Environmental Protection Agency (Agency) opposes Swenson's request for an adjusted standard.

Section 215.204(j)(2) requires that Swenson use coatings containing no more than 3.5 pounds of VOM per gallon (VOM lb./gal.). Swenson claims that not all of the coatings that it uses can meet this limit. Petition Narrative (Nar.) at 2. Although Part 215 provides several alternatives to complying with this limit, Swenson believes that the cost of these alternatives is unreasonable. Nar. at 10; see 35 Ill. Adm. Code 215.205(b), 215.206(a)(1).

For the first year after the grant of the adjusted standard, Swenson requests an adjusted standard that would allow it to use coatings that contain, on a monthly average, 5.0 VOM lb./gal. Thereafter, Swenson requests an adjusted standard that would allow it to use coatings that contain, on a monthly average, 4.75 VOM lb./gal. Nar. at 49.

The Board finds that compliant coatings for Swenson's specialty coatings are not available. The Board also finds that the cost that Swenson would incur to comply with the regulatory alternatives to Section 215.204(j)(2) are unreasonable. The Board concludes that these factors are substantially and significantly different from those that the Board considered when adopting Section 215.204(j)(2) and that they justify an adjusted standard. The Board also concludes that an adjusted standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting Section 215.204(j)(2), and that an adjusted standard is consistent with applicable federal law. The Board therefore will grant Swenson an adjusted standard. However, the Board will modify the adjusted standard that Swenson proposed, as further discussed below (see pp. 14-15).

In addition, the Board has made this an interim order directing Swenson to submit, within 30 days from the date of this order, a plan for demonstrating compliance with this

adjusted standard. The Agency may file a response to the compliance plan within 21 days thereafter, and the Board will incorporate a compliance plan into the final adjusted standard.

PROCEDURAL HISTORY

Swenson filed a petition for an adjusted standard on October 11, 1996. On December 11, 1996, the Agency filed an enforcement action against Swenson alleging that Swenson violated 35 Ill. Adm. Code 215.204(j)(2), the same provision from which Swenson seeks an adjusted standard. See <u>IEPA v. Louis Berkman Company</u>, d/b/a Swenson Spreader Company, PCB 97-101.

Swenson has filed four amended petitions, the last of which Swenson filed on April 20, 1997 (Am. Pet.). On July 31, 1997, Swenson filed a motion to accept a courtesy copy of the complete petition narrative consisting of all four amendments (Nar.). The petition narrative was filed by Swenson to alleviate any confusion that may have arisen from Swenson's amended petitions. Swenson's motion is granted and the Board accepts the complete petition narrative that Swenson filed on July 31, 1997.

The Agency has consistently recommended that the Board deny the adjusted standard, including in its June 23, 1997, amended response (Am. Resp.) to Swenson's amended petition of April 20, 1997.¹

Board Hearing Officer Deborah Frank Feinen held hearings in this case on April 25, 1997, and June 3, 1997.² No members of the public attended either hearing. In accordance with a Hearing Officer order, Swenson filed a post-hearing brief on July 10, 1997. The Agency filed a post-hearing brief on July 23, 1997, and Swenson filed a reply brief on July 30, 1997.

On August 4, 1997, the Agency filed a motion to strike the portions of Swenson's posthearing reply brief relating to Dr. John Reed's testimony, a conversation between counsel for Swenson and Jeff Palmer of the Powder Coating Institute, Swenson's comments on powder coating, and the status of settlement negotiations. Swenson filed an objection to the motion on August 11, 1997.

The Board strikes the portion of Swenson's brief that recounts a conversation between Swenson's counsel and Mr. Palmer of the Powder Coating Institute. The Board agrees with the Agency that such evidence may not be presented through a post-hearing brief. However, the Board denies the remainder of the Agency's motion to strike. The Agency addressed Dr. Reed's testimony, powder coating, and the status of settlement negotiations in its post-hearing brief, directly or indirectly, and Swenson was therefore entitled to address those issues.

¹ The Agency's original response, filed on February 26, 1997, is cited as "Resp. at ___."

² The transcript of the April 25, 1997 hearing is cited as "Tr.1 at __;" the transcript of the June 3, 1997 hearing is cited as "Tr.2 at __." Swenson's exhibits at the hearings are cited as "Pet. Exh. __."; the Agency's exhibits at the hearings are cited as "Resp. Exh. __."

FINDINGS OF FACT

Swenson's Location

Swenson is a division of the Louis Berkman Company located in Ogle County, Illinois. Ogle County is in an attainment area for the National Ambient Air Quality Standard (NAAQS) for ozone. However, Ogle County is approximately 60 miles from Kane and McHenry Counties, both of which are part of the Chicago ozone nonattainment area. Section 215.204(j)(2), from which Swenson seeks an adjusted standard, applies to ozone attainment areas in the State, including Ogle County.

Between 1988 and 1995, there were no exceedences of the ozone standard in the air quality control region in which Ogle County is located (AQCR 73). Nar. at 37. There also were no ozone exceedences in the air quality regions immediately adjacent to AQCR 73 during this period. Nar. at 38.

The State projects declining employment for Ogle County, and employment in Ogle County has declined steadily since 1988. Nar. at 40-41. One company, Caron International, recently moved 650 jobs from Ogle County to another state. Nar. at 41.

Swenson's Operations

Swenson manufactures snow and ice control equipment. It has 123 full-time employees and three part-time employees. Nar. at 2, 4; Am. Pet. Exh. A. Swenson considers itself a "job shop" because it makes different types of equipment to the order and specifications of various customers. Tr.2 at 19. Swenson also manufactures an "all-purpose body" (APB) that it distributes to dealers for resale. Tr.1 at 49-50. Swenson uses hot rolled steel to manufacture between 70 - 90% of its products. Tr.1 at 101, 141. The remainder of its products are stainless steel. *Id.*

Swenson generally applies both a primer and at least one topcoat to its snow and ice control equipment (excluding its stainless steel products, which Swenson usually does not paint, and its APBs, to which Swenson only applies a primer). Tr.1 at 49-50. Swenson has one coating booth. Tr.1 at 98. Currently, Swenson uses coatings that have a VOM content greater than 3.5 lb./gal. to paint its products. Nar. at 12.

From 1992-1996, Swenson's VOM emissions were 23.3 tons, 30.6 tons, 29.6 tons, 43.4 tons, and 32.1 tons per year respectively. In part, Swenson attributes this rise in VOM emissions to expanded production as a result of increased sales. Nar. at 5.

Swenson uses approximately 11 "standard coatings," and has reformulated those standard coatings so that all are now in compliance with the 3.5 VOM lb./gal. limit. Tr.1 at 58, 104. A "standard" coating is used when a specification requires only a color rather than a specific type of paint or brand. Tr.1 at 58.

Swenson also must use non-standard, or specialty, coatings to comply with certain orders. Swenson uses these specialty coatings when a customer requires a specific type of paint or name brand. Tr.1 at 58-59. Between 21 and 27 % of Swenson's business requires non-standard coatings. Tr.1 at 103, 106. On parts that are stored outside and are subject to the weather, Swenson also must use a heavy primer, which also has a high VOM content. Tr.1 at 50-51.

Government agencies often require specialty coatings, and federal, state, and local governments account for approximately 90% of Swenson's business. Nar. at 4, 14; Tr.1 at 38-39. Swenson offered several governmental requests for proposal (RFPs) to demonstrate the requirements typically found in such RFPs. Tr.1 at 40-42; Pet. Exh. 1, Item D. For example, Pet. Exh. 1, Item D at 1 sets forth the City of Dayton's specifications for a spreader, which state that the spreader shall be painted with "DuPont Centari 6847A yellow or approved equal." The material safety data sheet for DuPont Centari 6847A yellow shows that the VOM content for the paint is 4.3 lb./gal. Tr.1 at 41. Swenson also presented specifications from the Illinois Department of Transportation (IDOT) and the State of West Virginia, each of which also required that the bidder use specified paints, along with material safety data sheets for those paints that showed that their VOM content was in excess of 3.5 lb./gal. Pet. Exh. 1, Item D at 1-3.

Although Swenson could "take exception" to some of the requirements on an RFP specifying a high-VOM paint, and occasionally does substitute for a specified paint, such exceptions could result in its exclusion from the bidding process. Tr.1 at 46, 114. Swenson alleges that its main competitors, who operate in Iowa or Wisconsin, are not subject to a 3.5 VOM lb./gal. limit. Nar. at 34.

Swenson's Attempts to Comply

The Agency and Swenson introduced conflicting testimony on the availability of compliant coatings. After reviewing the testimony, the Board finds that Swenson established that compliant coatings are not available for its specialty coatings, as described below.

Patrick T. Rielly, an industrial engineering manager/safety manager for Swenson, testified that the paint industry cannot supply pigments, resins, or powders that are lower in VOM and still provides the colors and qualities that Swenson's customers require. Tr.2 at 17-18. Reilly testified that Swenson approached paint suppliers Tioga Coatings Company (Tioga), DuPont, Sherwin-Williams, Rust-Oleum, and Barrett to determine if they could reformulate Swenson's paints. Tr.2 at 29-34. Only Tioga and Barrett were interested in attempting to do so. *Id*.

Rielly testified that Tioga has reformulated Swenson's standard paints to lower their VOM content to 3.5 lb./gal. or below. Tr.2 at 29. Swenson also purchased high-efficiency spray guns and in-line heaters, both of which allow Swenson to use paints with less VOM content. Tr.1 at 52-55.

However, state and municipal bids still require paints with high solvents, as well as a hardener. Tr.2 at 29. The technology to reformulate such two-component paints (*i.e.*, paint with

a hardener) with low VOM content is not available. Tr.2 at 59. Jerry Olson, an operations chemist at Tioga with 33 years experience in the paint industry, also testified that some specialty paints cannot be reformulated to below 3.5 VOM lb./gal. Tr.1 at 143-147, 185-187. Swenson also experimented with water-borne paints (which contain no VOM), but found that these paints did not adhere well. Tr.1 at 60.

In rebuttal, the Agency offered the testimony of Richard Hunter, an IDOT equipment engineer. He testified that in order to comply with IDOT's paint specification, a bidder must simply match the paint color, which for approximately 35 years has been an orange color that matches DuPont paint number LF1021AM. Tr.2 at 200, 201. IDOT supplies color chips to bidders to allow them to match the color with a paint other than the one specified. Tr.2 at 200. IDOT does not investigate VOM content. Tr.2 at 201. Hunter testified that IDOT accepts many coatings other than those specified, so long as there is a color match. Tr.2 at 202. On crossexamination, Hunter testified that IDOT would be concerned if Swenson used paints that flaked off in the field, or if Swenson's products rusted very quickly in the field. Tr.2 at 213.

The Agency also offered the testimony of Dr. Robert Smet, a permit analyst for the Agency. Tr.2 at 134. He testified that he contacted a number of agencies, including IDOT, the Kansas Department of Transportation, and the Sangamon County Highway Department regarding their paint requirements. Tr.2 at 139-140. He testified that in each case, the agency was primarily concerned with color and durability. Tr.2 at 139-140, 164.

Dr. Smet also compiled a list of sources in Illinois that coat metal and products that he "felt . . . would meet pretty much the same conditions that a spreader would." Tr.2 at 148; Resp. Exh. 2. He testified that these sources are subject to and can meet a 3.5 VOM lb./gal. standard. Tr.2 at 148, 180-181, 183. On cross-examination, Dr. Smet admitted that not all of the sources listed on Resp. Exh. 2 are in the same category as Swenson – *i.e.*, the miscellaneous metal parts and products category. Tr.2 at 158. Dr. Smet also stated that he did not know if the sources he had listed must match specific paint colors for their customers. Tr.2 at 183. He also testified that the list was not compiled based on any specific bid specifications sources have to meet. *Id*.

Dr. John Reed, an employee of the Agency's Bureau of Air, testified that in his opinion Swenson had not established that low VOM coatings are not available for its operation. Tr.2 at 234. In Dr. Reed's opinion, Swenson did not take all of the steps necessary to investigate the availability of compliant coatings. These steps include contacting suppliers to see if they have compliant coatings, contacting trade associations to see if they know of any compliant coatings, reviewing paint trade publications, and advertising in paint trade association publications. Tr.2 at 237; Resp. Exh. 4. In addition, Dr. Reed testified that Swenson would be able to use high-solids or water-based coatings which meet the requirements of Section 215.204(j)(2) if Swenson cleaned the hot rolled steel that it uses before applying the high-solids or water-borne paints. Tr.2 at 232-234; see also Resp. at 8. Dr. Reed testified on cross-examination that he knew that Swenson had contacted Tioga but was not aware of the other suppliers that Swenson had contacted. Tr.2 at 251. The Board finds that Swenson has shown that compliant coatings for Swenson's specialty coatings are not available. Swenson contacted several suppliers in an effort to have its coatings reconstituted, but only Tioga was willing to be of any substantial assistance. While it may have been helpful for Swenson to advertise in trade publications or to contact trade associations, the Board finds that in light of Swenson's other efforts, these steps are not necessary to demonstrate the unavailability of compliant specialty coatings. See <u>Petition for Site-Specific Volatile Organic Material Emission Limitations for National Can Corporation (National Can Corporation)</u> (Jan. 22, 1987), R85-28, slip op. at 4 (noting that coating suppliers cannot be expected to research and develop compliant coatings for certain uses when the demand for such coatings is small). In addition, while the Agency showed that at least some of the governmental units that Swenson deals with are more concerned with color and durability than the exact type of paint used, the Agency did not show that there were in fact compliant paints that matched those specified in color and durability, or that otherwise could be considered equivalent.

The Board also finds that the Agency did not sufficiently substantiate its claim that because the sources listed on Resp. Exh. 2 can meet a 3.5 VOM lb./gal. standard, Swenson can as well. As Dr. Reed conceded, those sources may not need to meet the same color and durability requirements that Swenson must meet. Similarly, there is insufficient evidence that Swenson economically could use compliant, water-borne coatings if it simply cleaned the hot rolled metal before coating.

Other Compliance Alternatives

Swenson considered whether it could meet regulatory alternatives to 35 Ill. Adm. Code 215.204(j)(2). Specifically, Swenson first considered adding an afterburner to meet the alternative emissions limitation in 35 Ill. Adm. Code 215.205(b). Generally, that regulation exempts a source from compliance with Section 215.204(j)(2) if the source uses an afterburner that destroys at least 81% of the VOMs that the source emits. Second, Swenson considered using powder coatings to come within the exemption at 35 Ill. Adm. Code 215.206(a)(1). Generally, that regulation exempts a source from compliance with Section 215.204(j)(2) if the source limits its VOM emissions to 25 tons/year or less in the absence of air pollution control equipment. The Board addresses these alternatives in turn.

Afterburner

Section 215.205(b) exempts sources from complying with Section 215.204 if the source controls its emissions with an afterburner system that reduces VOM emissions by 81% and meets other specified requirements. Swenson investigated this alternative by soliciting two quotes for an afterburner system from Brule Industries (Brule), one in 1995 (Pet. Exh. 1, Item I at 4) and in 1997 (Pet. Exh. 4). The 1997 quote was lower than the 1995 quote, and Swenson relied upon the 1997 quote to calculate the cost of installing and using an afterburner.

On March 6, 1997, Brule quoted Swenson a price of \$168,965 for a Model FB-1270 Fume Oxidizer. Pet. Exh. 4 at 3. Brule also offered, as optional equipment, "a heat exchanger system utilizing the oxidizer hot flue gases to preheat the flue stream from 70 degrees F to 850

degrees F range or for using the heated air for other in-plant purposes." Brule quoted a price of \$315,780 on the oxidizer with a heat exchanger. Pet. Exh. 4 at 3.

A heat exchanger significantly decreases the energy costs required to run the oxidizer. According to Brule, the oxidizer without a heat exchanger uses energy at a rate of 50 million British Thermal Units (BTU)/hour. One hundred thousand BTUs are a "therm," and in 1995, Brule estimated the cost of the natural gas to run the oxidizer at \$0.25/therm. Pet. Exh. 1, Item I at 4. Using this information, Swenson calculated that the cost of natural gas to run the oxidizer without the heat exchanger would be \$500,000/year. Pet. Exh. 5 at 3. With the heat exchanger, however, the oxidizer requires only 20 million BTUs/hour, resulting in a \$200,000/year natural gas cost. *Id*.

Swenson calculated an annual direct operating cost of \$203,589/year for the oxidizer with a heat exchanger. Pet. Exh. 5. Indirect annual operating costs for this system would be \$73,517/year; its total annual operating costs were therefore an estimated \$277,106. Pet. Exh. 5.

To calculate the cost per ton of required VOM reduction, Swenson used its 1996 VOM emissions of 32.1 tons as a baseline. Because Section 215.205(b)(1) requires 81% VOM reduction, Swenson multiplied 81% by 32.1 tons to arrive at a required reduction of 26 tons. Swisher then divided the total annual operating costs (\$277,106) by the required VOM reduction (26 tons) to arrive at a cost per ton of VOM reduced of \$10,658. Pet. Exh. 5; Pet. Exh. 9; Tr.1 at 89-97.

In its post-hearing brief, the Agency challenges this calculation on several grounds. First, the Agency notes that in Brule's 1995 quote, Brule assumed that the oxidizer would use only 20,800 therms/year at a cost of \$0.25/therm, resulting in an annual natural gas cost of only \$5,200/year. The Agency contends that this figure, rather than the \$200,000/year that Swenson calculated, should be used to calculate Swenson's annual direct operating costs.

The Board finds, however, that the assumption in Brule's 1995 quote that the oxidizer would use only 20,800 therms/year is unsupported. In both its 1995 and 1997 quotes, Brule rated the oxidizer as using 20 million BTUs/hour with the heat exchanger. Pet. Exh. 1, Item I at 8; Pet. Exh. 4 at 7. If the oxidizer were to run 16 hours/day, 5 days/week, for 50 weeks/year, it would therefore require 800,000 therms/year, not 20,800. Eight hundred thousand therms at \$0.25/therm is \$200,000, the figure that Swenson has used. The Board finds this the appropriate cost to use in calculating the annual operating cost of the oxidizer with the heat exchanger.

Second, the Agency argues that Swenson has provided no technical justification for the use of a heat exchanger. Agency Post-Hearing Brief at 11. The Agency notes that the heat exchanger is not necessary for controlling VOM emissions. *Id.*

The Board finds it reasonable for Swenson to have included the cost of the heat exchanger. Although it increased Swenson's indirect costs, which include an annual capital recovery cost of 16.28% of the total capital cost, that increase was more than offset by the dramatic decrease in Swenson's energy costs that the heat exchanger allows (from \$500,000/year

to \$200,000/year). Furthermore, the United States Environmental Protection Agency (USEPA) has noted that the proper use of heat exchangers can minimize fuel use in afterburners. Exh. T at 2-8.

Third, the Agency notes that the afterburner will allow Swenson to destroy 95% of its VOM emissions. The Agency contends that when Swenson calculated the cost per ton of VOM controlled, Swenson should have spread the costs of control over the number of tons of VOM actually reduced (95%, or approximately 30 tons), not the number of tons of VOM reduction that the regulation requires (81%, or 26 tons).

The Board agrees that Swenson should have spread its control costs over the number of tons of VOM actually reduced rather than the number of tons required. With 95% destruction (30 tons), the Board calculates Swenson's control costs per ton of VOM reduced to be \$9,085.

Powder Coatings

Swenson and the Agency also introduced conflicting testimony on the economic and technical feasibility of using a powder coating system to bring Swenson's total VOM emissions to 25 tons/year or less, thereby enabling Swenson to qualify for an exemption to 35 Ill. Adm. Code 215.204(j)(2). See 35 Ill. Adm. Code 215.206(a)(1).

Swenson estimates that it could use powder coatings on up to 70% of its products. Tr.1 at 74-75. Certain products require a specific primer and therefore cannot be powder coated; others cannot be powder coated because of their size; and certain parts, such as motors and plastic parts, cannot be powder coated because they cannot withstand the heat generated in the powder coating process. Tr.1 at 73-74, 130. Swenson also would need to persuade government agencies to accept powder coatings as substitutes for specified paints, which could take some time. Tr.1 at 75, 77.

In rebuttal, Dr. Reed testified that powder can be used, and has been used, on parts of a very large size. Tr.2 at 225. He also testified that plastic parts can be coated in powder coating systems, provided that the source uses powder with a curing temperature below the melting point of the plastic. Tr.2 at 226-227. Motors also can be powder-coated if the source uses an epoxy with a working temperature of approximately 500 or 600 degrees F. Tr.2 at 227.

The Board finds that Swenson can use powder coatings on approximately 70% of its products. While some plastic parts or motors can be powder coated, there is insufficient evidence that Swenson's plastic parts or motors can be powder coated. Similarly, there is insufficient evidence that Swenson can coat all of its products, either because of their size or customer requirements for a specific primer.

It would cost Swenson approximately \$1.5 million to install a powder coating system. Tr.1 at 71. Swenson is considering installing a powder coating system, but it will be some time before the system is installed and working smoothly. Tr.1 at 71-72, 136-137. The cost per ton of VOM reduced through powder coatings is approximately \$29,362.¹ Nar. at 23.

DISCUSSION

Section 28.1 of the Environmental Protection Act (Act), 415 ILCS 5/28.1 (1996), authorizes the Board to grant adjusted standards from rules of general applicability. If the rule of general applicability does not contain the level of justification that the petitioner must meet to obtain an adjusted standard, the requirements in Section 28.1(c) of the Act apply. In this case, Section 215.204 does not provide a specific level of justification for an adjusted standard from the rule. Therefore, Swenson must show 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. 415 ILCS 5/28.1(c) (1996).

Existence of Substantially and Significantly Different Factors that Justify an Adjusted Standard

As noted above, compliant coatings for Swenson's specialty coatings are not available. This unavailability, and the unreasonableness of the costs that Swenson would incur if it complied by adding an afterburner or a powder coating system, are substantially and significantly different factors that justify an adjusted standard.

As noted earlier, Swenson's cost per ton of VOM reduction with the afterburner would be \$9,085. Swenson argues that this cost is unreasonable, noting that when the Board adopted Section 215.204(j)(2) as part of the Board's second round of Reasonably Available Control Technology rules (RACT II rules), it relied upon a study prepared on behalf of the Illinois Institute of Natural Resources (the IINR study). Resp. Exh. 5. The IINR study determined that the average cost of control for facilities in attainment areas, in 1980 dollars, would be \$1,032/ton

¹ In calculating this cost, Swenson used a method slightly different than the method it used to calculate the costs of the afterburner. See Nar. at 20, 23. However, the Agency did not challenge this calculation and the Board has no reason to believe that powder coating is less expensive than the afterburner.

of VOM reduced. Swenson assumed a 4.5% inflation rate and found that \$1,032 in 1980 dollars equates to \$1,734/ton in 1996 dollars (which the Agency does not contest). Nar. at 20. Swenson argues that its control costs are unreasonable when compared to \$1,734/ton.

The Agency argues that even if the Board accepts Swenson's calculations, Swenson's control costs are not excessive. The Agency notes that the cost that the Board relied on in adopting 35 Ill. Adm. Code 215.204 was not \$1,032 per ton for every facility. Rather, that figure represents an average of the total costs for the entire miscellaneous metal parts and products coating facilities category – including small, medium, and large facilities. Am. Resp. at 3. To arrive at that figure, the IINR study relied on USEPA estimates of control costs for "model plants" using various control techniques at small, large, and medium facilities. Resp. Exh. 5 at 65. The IINR study then assumed that 93% of these facilities would switch to compliant coatings, and 7% would use incineration. *Id.* The IINR study noted that 41.4% of the costs were from the facilities that would use incineration. *Id.*

The Agency argues that the proper measure of comparison, therefore, is a medium-sized facility (in the IINR study, a facility emitting between 25 and 100 tons VOM/year) that elects to use incineration. For such facilities, the cost per ton of VOM reduction is \$10,019/ton in 1980 dollars. Resp. Exh. 5 at 63-64. The Agency argues that Swenson's control costs, even in current dollars, are comparable and therefore not unreasonable.

In the past, the Board – and the Agency – have cited the \$1,032/ton figure (adjusted for inflation) when considering the reasonableness of control costs. The Board recognizes that this figure represents an average based upon an assumption that certain facilities would incur control costs in excess of the average, and costs cannot be deemed unreasonable simply because they exceed the average. However, Swenson's costs would exceed the average, even when adjusted for inflation, by more than a factor of five. This difference in cost is a substantially and significantly different factor than the factors considered by the Board when adopting 35 Ill. Adm. Code 215.204(j)(2). See Petition of John Deere Harvester-Moline (formerly Plow & Planter) Works of Deere & Company (John Deere) (November 3, 1988), R87-1, slip op. at 4-5 (adopting a site-specific rule exempting petitioner from 35 Ill. Adm. Code 215.204(k)(2); petitioner contended that its control costs of \$4,298/ton of VOM reduced were "clearly beyond RACT costs envisioned by the Board when establishing these regulations," i.e. \$1,032/ton); Petition of DMI, Inc. for Site-Specific Air Regulations 35 Ill. Adm. Code 215.215 (DMI) (January 9, 1992), R91-9, slip op. at 4 (in petition for site-specific relief from 35 Ill. Adm. Code 215.204(j)((3), Agency and DMI agreed that control costs of \$7,065/ton were unreasonable; DMI noted that when rules enacted, control costs were \$1,032/ton).

The Board believes it more appropriate to consider the average, rather than one of the components used in calculating the average, when considering the reasonableness of costs. While the Board noted the assumptions upon which the IINR study calculated the average, it did not suggest that the components of the average should be considered the measure of the reasonableness of costs. See <u>RACT II Rules, Chapter 2: Air Pollution</u> (October 5, 1982), R80-5, slip op. at 19.

Indeed, when the Board adopted these rules, it noted that variances and adjusted standards may be necessary because of the breadth of the miscellaneous metal parts and products category: "Due to the variety of operations involved and the limited amount of information in this record on each operation, it is impossible to write a rule or even several rules which will address all of these circumstances. Rather, [these] particular problems . . . may appropriately be raised in a petition for variance from the general rule." *Id.* at 21.

The cost per ton of VOM reduction through a powder coating system (\$29,362) is higher than the cost of an afterburner and is also unreasonable. In post-hearing briefs, however, the Agency notes that Swenson has offered to install a powder coating system as part of settlement discussions in the Agency's enforcement case against Swenson. Resp. Post-Hearing Brief at 8. The Agency claims that this offer is inconsistent with Swenson's claim that the cost of installing a powder coating system is unreasonable. *Id*.

In response, Swenson notes that it offered to install a powder coating system as a supplemental environmental project as part of settlement negotiations in the Agency's enforcement case. Swenson argues that an action is not economically reasonable merely because it is offered as part of the settlement negotiations in another case. Pet. Post-Hearing Brief at 4. The Board agrees and holds that this compliance alternative is not economically reasonable.

Finally, the Agency argues that the adjusted standard that Swenson seeks is overbroad because it encompasses Swenson's standard coatings. The Agency argues that Swenson's standard coatings meet the 3.5 VOM lb./gal. standard and that Swenson has not demonstrated that there are substantially and significantly different factors justifying an adjusted standard for Swenson's standard coatings.

The Board notes that because Swenson has requested an adjusted standard that is an average, Swenson will likely need to continue to use those compliant standard coatings to achieve this average. In any event, the Agency did not present any evidence justifying a different average, and the Board notes that Swenson's requested adjusted standard is roughly comparable to other relief that the Board has granted. See cases cited on page 12 herein.

In summary, the Board holds that substantially and significantly different factors justify an adjusted standard for Swenson's coating operations.¹ The Board discusses the content of that adjusted standard below.

Environmental or Health Effects

As noted earlier, Swenson is located in an attainment area that has not had an exceedence, and is surrounded by other attainment areas that have not had exceedences.

¹ In reaching this conclusion, the Board gave no weight to Swenson's claims that the Agency was unfairly biased against Swenson or that an Agency witness had committed perjury. Swenson did not prove these claims, and in light of the other evidence submitted, they are not material.

Swenson accordingly argues that the adjusted standard it seeks will not have environmental or health effects substantially and significantly more adverse than those considered by the Board when adopting 35 Ill. Adm. Code 215.204(j)(2).

Swenson also argues that the proposed adjusted standard is more stringent than adjusted standards that the Board has granted to other companies. Swenson specifically cites the adjusted standards or site-specific rules regarding 35 Ill. Adm. Code 215.204 that the Board has granted or adopted in Proposed Amendments to 35 Ill. Adm. Code 211 and 215 (May 28, 1987), R85-21(A), slip op. at 18, 31; National Can Corporation, R85-28, slip op. at 5 (5.8 VOM lb./gal. limit); John Deere, R87-1, slip op. at 7 (6.2 VOM lb./gal. weekly average); Site-Specific Petition of Roadmaster Corporation (Roadmaster Corporation) (April 26, 1990), R88-19, slip op. at 4 (5.9 VOM lb./gal. weekly average); DMI (Feb. 6, 1992), R91-9, slip op. at 5; and Petition of Ford Motor Company for an Adjusted Standard from 35 Ill. Adm. Code 215.204 (May 14, 1991), AS 91-2, slip op. at 8. Nar. at 52-61. Swenson further argues that its proposed adjusted standard is similar to adjusted standards that the Board has granted from other air regulations. See Joint Petition of Outboard Marine Corporation and the Environmental Protection Agency for an Adjusted Standard from 35 Ill. Adm. Code Part 218, Subpart TT (December 7, 1995), AS 94-3; Joint Petition of Chase Products Company and the Illinois Environmental Protection Agency for an Adjusted Standard from 35 Ill. Adm. Code 218, Subpart DD (May 16, 1996), AS 94-4; and Joint Petition of Solar Corporation and the Illinois Environmental Protection Agency for Adjusted Standards from 35 Ill. Adm. Code 218, Subpart PP (July 20, 1995), AS 94-2, slip op. at 10 (5.75 VOM lb./gal. limit). Nar. at 62-65. While the Board does not necessarily agree the adjusted standard that Swenson seeks is more stringent than the relief granted in these cases, the relief is roughly comparable and supports Swenson's requested relief.

The Agency argues that while Swenson is in an attainment area, it is within 60 miles of the Chicago ozone nonattainment area and may affect that area. Am. Resp. at 6-7. The Agency failed, however, to provide any evidence substantiating its claim. The Board further notes that in similar proceedings, the Board has found certain operations in attainment areas with no registered ozone violations will not have significant or substantial environmental effects. See, *e.g.*, <u>Lawrence Brothers</u>, Inc. v. IEPA (August 9, 1990), PCB 90-74, slip op. at 3 (finding "relatively negligible" environmental effects from extending a variance for a plant in an attainment area, noting that the nearest monitoring station had registered no ozone violations). The Board holds that the adjusted standard that Swenson seeks will not result in environmental or health effects substantially and significantly more adverse than those that the Board considered when adopting 35 Ill. Adm. Code 215.204(j)(2).

Consistency with Federal Law

The Agency states that Section 215.204(j)(2) is part of the Illinois State Implementation Plan (SIP) for achieving and maintaining the ozone NAAQS, and that this SIP provision exists as a federal regulation. Therefore, the Agency argues that if the Board grants the adjusted standard, it must be submitted to USEPA for approval as a SIP revision. Resp. at 16. If USEPA does not approve such a SIP revision, the Agency claims that USEPA could seek to

enforce the federal regulation against Swenson. *Id.* In that event, the Agency argues, the adjusted standard will give rise to an inconsistency with federal law.

Swenson argues that the Board's grant of an adjusted standard will not require Illinois to revise its SIP. This is so, Swenson argues, because a SIP revision is only required if USEPA finds that the SIP is substantially inadequate to attain the NAAQS which it implements. Nar. at 48-1. Because Swenson is in an ozone attainment area, and is not a major source of air pollutants, Swenson argues that the 3.5 VOM lb./gal. limit that the Illinois SIP imposes is not federally required. *Id*.

Swenson acknowledges that because the SIP is a federal regulation, the Board's grant of an adjusted standard may lead USEPA or citizens to allege that the adjusted standard does not comply with a federal regulation. Swenson notes, however, that USEPA has a policy that if a company is in an attainment area for ozone, and the approval of a proposed SIP revision will not increase the historical VOM emission level from the source, the SIP revision will not interfere with the maintenance of the ozone NAAQS. *Id*.

The Board holds that an adjusted standard for Swenson's coating operations is consistent with federal law. Even if the Illinois SIP must be revised, the Board has previously held that the fact that a variance may require a SIP revision does not render the variance inconsistent with federal law. See, *e.g.*, <u>Marathon Oil Company v. IEPA</u> (November 7, 1996), PCB 96-254, slip op. at 13-14. The same principle applies here.

Provisions of Adjusted Standard

Based upon the factors set forth in Section 28.1 of the Act, the Board will grant Swenson an adjusted standard for its coating operations. The Board finds it appropriate, however, to revise the adjusted standard that Swenson has requested.

First, the Board is not persuaded that Swenson has demonstrated a need for permanent relief. As Swenson has noted, its government customers sometimes require high-VOM specialty coatings. Swenson argues that "[w]ith regard to coatings that it cannot control (*e.g.*, governmental specifications in RFPs), no amount of research and development will cure this problem." Nar. at 71. But Swenson's governmental customers may change their specifications. Furthermore, improvements in technology also may eventually enable Swenson to comply with the 3.5 VOM lb./gal. limit. As Jerry Olson of Tioga noted, progress is ongoing in paint suppliers' efforts to lower VOM content in coatings. Tr.1 at 182.

The Board has granted adjusted standards or site-specific rules of limited duration in the past, including in some of the cases that Swenson relies upon. See, *e.g.*, <u>Roadmaster</u> <u>Corporation</u>, R88-19, slip op. at 4 (limiting site-specific rule to approximately ten years); <u>DMI</u>, <u>Inc.</u>, R91-9, slip op. at 6 (limiting site-specific rule to approximately eight years at most). Here, the Board finds it appropriate to limit the duration of the adjusted standard to ten years.

Second, Swenson has requested an adjusted standard that would allow it to meet a 5.0 VOM lb./gal. limit for the first year after the grant of the adjusted standard, and a 4.75 VOM lb./gal. limit thereafter. Swenson states that its request for the 5.0 VOM lb./gal. limit in the first year is "attributable to existing stocks of higher VOM content paints. Company coating substitution efforts will eliminate much of this paint stock within one year." Nar. at 51-52. The Board does not find these existing paint stocks a substantially and significantly different factor that justifies an adjusted standard. A 4.75 VOM lb./gal. monthly average adjusted standard would still allow Swenson to use its existing stocks; it merely must do so in a way that allows it to meet the required average. The Board further notes that the adjusted standard that Swenson seeks is a monthly average, which already allows it more flexibility than the Board has granted to others in a similar position. See John Deere, R87-1, slip op. at 7 (6.2 VOM lb./gal. weekly average); Roadmaster Corporation, R88-19, slip op. at 4 (5.9 VOM lb./gal. weekly average). The Board accordingly will grant Swenson an adjusted standard of 4.75 lb./gal monthly average for the duration of the adjusted standard.

In addition, Swenson requested that it be granted an adjusted standard from 35 Ill. Adm. Code 215.204(j)(2) generally, but then limited the 4.75 VOM lb./gal. requirement to "its existing operations." Nar. at 49. The 4.75 VOM lb./gal. limit applies to all of Swenson's coating operations during the term of the adjusted standard, not merely its currently existing coating operations. Accordingly, the Board will delete the reference to "existing operations."

In addition, the Board notes that neither Swenson nor the Agency has addressed how Swenson will demonstrate compliance with the adjusted standard. Sources subject to 35 III. Adm. Code 215.204 must submit an approvable compliance plan that will describe "the procedures and methods used to determine the emissions of volatile organic material including a method of inventory, record keeping and emission calculation" 35 III. Adm. Code 215.213. Although the Board will grant Swenson an adjusted standard from 35 III. Adm. Code 215.204(j)(2), Swenson must prepare a compliance plan similar to that called for in Section 215.213 so the Agency may determine whether Swenson complies with the adjusted standard. Accordingly, this order is an interim order and the Board directs Swenson to submit, within 30 days of the date of this order, a plan for demonstrating compliance with this adjusted standard. The Agency may file a response to the compliance plan within 21 days thereafter, and the Board will incorporate a compliance plan into the final adjusted standard. The Board encourages Swenson and the Agency to cooperate in developing a workable and effective compliance plan.

CONCLUSION

The Board will grant Swenson a modified version of the adjusted standard it has requested. The adjusted standard will allow Swenson to use coatings that contain, on a monthly average, 4.75 VOM lb./gal. Because the Board is not persuaded that compliant coatings will always be unavailable, or that Swenson's customers always will require non-compliant coatings, the adjusted standard will expire ten years from the date of the Board's final order. In addition, the Board directs Swenson to submit to the Board, within 30 days of the date of this order, a plan for demonstrating Swenson's compliance with the adjusted standard. The Agency may file a response to the compliance plan within 21 days thereafter.

After reviewing the compliance plan and the Agency's response, the Board will issue a final order granting an adjusted standard and incorporating a compliance plan.

INTERIM ORDER

Within 30 days from the date of this order, Swenson is hereby directed to submit to the Board, and to serve upon the Agency, a compliance plan for the adjusted standard that describes the procedures and methods Swenson will use to demonstrate that its coatings will contain, on a monthly average, no more than 4.75 VOM lb./gal. The proposed compliance plan must include record keeping requirements. Within 21 days after Swenson files its compliance plan, the Agency may file a response.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above interim opinion and order was adopted on the 4th day of December 1997, by a vote of 6-0.

Dorothy M. Hun

Dorothy M. Gunn, Clerk Illinois Pollution Control Board