

ILLINOIS POLLUTION CONTROL BOARD  
November 2, 1995

SPECTRULITE CONSORTIUM, INC.,            )  
  )  
    Petitioner,                            )  
  )  
    v.                                     )            PCB 96-6  
  )            (Variance-Air)  
  )  
ILLINOIS ENVIRONMENTAL                 )  
PROTECTION AGENCY,                     )  
  )  
    Respondent.                         )

EUGENE P. SCHMITTGENS, JR., APPEARED ON BEHALF OF PETITIONER;  
RACHEL DOCTORS APPEARED ON BEHALF OF THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by R. C. Flemal):

This matter comes before the Board upon a petition for variance filed by Spectrulite Consortium, Inc. (Spectrulite). Spectrulite requests variance from 35 Ill. Adm. Code 212.458(b)(25) to operate two magnesium pot furnace lines simultaneously. Spectrulite's facility at issue is located at 1001 College Avenue, Madison, Madison County, Illinois. Spectrulite requests the term of the variance be from July 30, 1995 until January 30, 1997, or until particular Illinois Environmental Protection Agency (Agency) rules become effective, whichever occurs first. (Tr. at 61.)<sup>1</sup>

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/35 (1994)). The Board is charged there with the responsibility of granting variance from Board regulations whenever it is found that compliance with the regulations would impose an arbitrary or unreasonable hardship upon the petitioner. (415 ILCS 5/35(a) (1994).) The Agency is required to appear in hearings on variance petitions. (415 ILCS 5/4(f) (1994).) The Agency is also charged, among other matters, with the responsibility of investigating each variance petition and making a recommendation to the Board as to the disposition of the petition. (415 ILCS 5/37(a) (1994).)

As presented below, the Board finds that Spectrulite has met its burden of demonstrating that immediate compliance with the Board regulation at issue would result in an arbitrary or

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<sup>1</sup> The transcript will be cited as (Tr. at \_\_); the petition will be cited as (Pet. at \_\_); and the Agency recommendation will be cited as (Rec. at \_\_).

unreasonable hardship. Accordingly, the variance request will be granted, subject to certain conditions and effective this date.

#### PROCEDURAL HISTORY

Spectrulite filed the petition in this matter, along with a motion for expedited hearing, with the Board on July 12, 1995. The Board accepted the matter for hearing and granted the motion for expedited hearing on July 20, 1995.

Pursuant to 35 Ill. Adm. Code 104.180(a), the Agency's statutory recommendation was originally due on August 13, 1995. On August 28, 1995 the Agency filed a motion to file its recommendation instanter, which the Board granted on September 7, 1995. On August 28, 1995 the Agency filed its recommendation, wherein it recommended that the variance be granted only until July 30, 1996 subject to certain conditions. Subsequent to that filing, at hearing Spectrulite requested (Tr. at 61), and the Agency attorney recommended, to extend the term of the variance until January 30, 1997. (Tr. at 5.)

The hearing was held on September 20, 1995 in Springfield, Illinois before Board Hearing Officer Michael Wallace. Two members of the public were in attendance at the hearing. In addition to testimony, the parties entered two exhibits. The parties did not file any post-hearing briefs.

#### STATUTORY FRAMEWORK

In determining whether any variance is to be granted, the Act requires the Board to determine whether a petitioner has presented adequate proof that immediate compliance with the Board regulation at issue would pose an arbitrary or unreasonable hardship. (415 ILCS 5/35(a) (1994).) Furthermore, the burden is on petitioner to show that its claimed hardship outweighs the public interest in attaining immediate compliance with regulations designed to protect the public. (Willowbrook Motel v. Pollution Control Board (1st Dist. 1977), 135 Ill.App.3d 343, 481 N.E.2d 1032). Only with such a showing can the claimed hardship rise to the level of arbitrary or unreasonable hardship. (We Shred It, Inc. v. Illinois Environmental Protection Agency, (November 18, 1993), PCB 92-180 slip op. at 3.)

A further feature of a variance is that it is, by its nature, a temporary reprieve from compliance with the Board's regulations, and compliance is to be sought regardless of the hardship which the task of eventual compliance presents an individual polluter. (Monsanto Co. v. Pollution Control Board, (1977), 67 Ill.2d 276, 367 N.E.2d 684.) Accordingly, except in certain special circumstances, a variance petitioner is required

as a condition to the grant of a variance, to commit to a plan which is reasonably calculated to achieve compliance within the term of the variance.

The regulation that is the subject of the instant variance request was adopted by the Board as part of Illinois' state implementation plan (SIP) for the Granite City moderate PM-10<sup>2</sup> nonattainment area. The pertinent regulation is as follows:

- b) Emission Limitation. No person shall cause or allow emissions of PM-10, other than that of fugitive particulate matter, into the atmosphere to exceed the following limits during any one hour period:

\* \* \* \* \*

25) magnesium pot furnaces at secondary aluminum smelting and refining plant located in the vicinity of Granite City, as defined in Section 212.324(a)(1)(C), can be operated only one line at a time;

35 Ill. Adm. Code 212.458 (1994)

Compliance with this rule was required by December 10, 1993. (35 Ill. Adm. Code 212.458(e).) According to Spectrulite, it has achieved compliance since the effective date of the regulation. (Pet. at 3.) Spectrulite is requesting variance from 35 Ill. Adm. Code 212.458(b)(25) from July 30, 1995 until January 30, 1997, or until the regulation is amended, whichever occurs first.

These regulations pertaining to the magnesium pot furnace lines are currently the subject of negotiated rulemaking by the Agency, and are scheduled to be amended to allow the operation of two magnesium pot lines. (Pet. at 2.) The Agency plans to address Spectrulite's concerns in a rulemaking proposal to the Board this fall. (Rec. at 3.)

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<sup>2</sup> PM-10 is particulate matter with a diameter of 10 microns or less.

BACKGROUND

Spectrulite is a manufacturer of aluminum alloy and magnesium alloy products. The raw materials used in its operations consist of primary metal, purchased scrap, and in-house scrap. The aluminum and magnesium are cast into billets and sold as is or sent to rolling mills or extrusion presses.

The subject of this variance is the magnesium operation. Spectrulite produces three classes of magnesium products, slabs for rolling, round billets for extrusion or forging, and die cast remelt ingot. (Tr. at 10.)

Spectrulite's unique manufacturing of die cast remelt ingots is significant as regards the instant matter. These recycled magnesium die cast ingots are of a quality equal to primary ingots, which are made from pure magnesium. (Pet. at 1; Tr. at 10.) As a result of this novel recycled process, the sales of magnesium products has increased from 200,000 pounds in the first half of 1995 to over 4 million pounds for the second half of 1995. (Pet. at 1-2.) Mr. Chris Barnes, Spectrulite's chief operating officer, testified at hearing that the reason for the huge increased market demand for die cast products is because the California Automotive Fuel Efficiency (CAFE) standards being implemented require lighter-weight cars to meet fuel efficiency standards, and magnesium is a very light metal suitable for making automobile parts such as instrument panels, steering wheels and transmission housings. (Tr. at 22-23, 28.) Mr. Barnes testified that the recycled die cast orders alone increased to an average of about 600,000 pounds a month for the remainder of this year, and estimates 1996 orders will be 750,000 to 800,000 pounds a month. (Tr. at 24.) Consequently, petitioner is requesting additional production capabilities to meet the new order requirements. (Pet. at 3.)

The operation has three magnesium pot furnace lines: slab unit, billet unit, and intermittent unit. Spectrulite is currently limited to operating only one line at a time due to environmental regulations, labor laws which prohibit operating continuous shifts, and the inability to operate or have people work for more than thirteen consecutive days without shutting down. (Tr. at 11-12.) The company projects that adding the operation of another magnesium pot furnace line will result in employment of an additional 30 individuals. (Tr. at 25.) Spectrulite currently employs 300 hourly and 120 management employees. (Pet. at 2.)

Mr. Bill Moore, Spectrulite employee, testified at hearing that there are not any commercial emission control technology systems available for controlling the magnesium pots. (Tr. at 13.) The emissions from the magnesium pot furnaces emit directly to the building atmosphere and are then drawn to the roof where

they are exhausted through ventilator fans. (Rec. at 2.) It is the magnesium "burning" that causes particulate emissions. (Tr. at 14.) According to the Agency, molten magnesium is easily oxidized and the surface of the bath in the pot is covered with a flux, in this instance salt, to minimize contact with the air. (Rec. at 2.)

## DISCUSSION

### Compliance Status

In order to comply with Title V of the Clean Air Act (CAA), Spectrulite applied for a Federally Enforceable State Operating Permit (FESOP). (Tr. at 31.) The maximum particulate emissions which had been applied for by the facility in its FESOP was 77.36 tons per year for the entire facility, including both aluminum and magnesium operations (of which about 40% is magnesium). (Pet. at 3; Tr. at 31.) The 1994 emissions from operating a single magnesium pot furnace line were 10.93 tons. (Pet. at 3.) Spectrulite believes the increased emissions necessary to meet the demand of additional orders and from the operation of two lines will be 2.0 tons, totalling 12.93 tons. (*Id.*) As a result, it has amended its FESOP application to 35.92 tons per year. (*Id.*) According to the Agency, Spectrulite's variance request is consistent with its proposed FESOP conditions. (Rec. at 5.)

Spectrulite's current operating permit for the subject emission units is valid until February 17, 2000. (Rec. at 4.)

It has been in compliance with the regulation since its effective date. (Pet. at 3.) Agency engineer, Jeffrey Benbenek, testified that petitioner is currently not in violation of any rules. (Tr. at 43.)

### Compliance Plan and Compliance with Federal Law

Spectrulite has examined its options to meet the requirements of Section 212.458 including control technology and alternative scheduling. Regarding control technology, it is currently developing pot covers to reduce emissions of particulates<sup>3</sup>. (Pet. at 4; Tr. at 14-15.) However, because this development is not a condition of the Agency's recommendation to grant this variance, and Spectrulite is only committing to testing the covers, the Agency did not address these efforts (Rec. at 8), nor will the Board today.

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<sup>3</sup> There is no other existing, feasible control technology compatible with Spectrulite's facility. (Pet. at 5.)

The second alternative to compliance is alternative scheduling, currently in use. Spectrulite claims a host of problems associated with this alternative scheduling, including that it prohibits any flexibility for increases in production and is therefore not a viable long-term option (Pet. at 5), which are addressed in the hardship section of this discussion.

Spectrulite proposes to achieve compliance when the Agency finalizes its proposed rulemaking. The status of that rulemaking is as follows. The United States Environmental Protection Agency (USEPA) has conditionally approved Illinois' PM-10 SIP. However the USEPA has identified changes that the Agency plans to address in the form of a rulemaking to be filed with the Board this fall. (Rec. at 3.) Within this rulemaking the Agency intends to include an amendment to 35 Ill. Adm. Code Part 212 allowing Spectrulite to operate two magnesium pot furnace lines simultaneously. (*Id.*) The Agency expected to concurrently file the rulemaking encompassing this variance with its recommendation, but was delayed and has not yet filed such rulemaking.

According to the Agency, the granting of this variance will not adversely impact air quality, it is consistent with the CAA and is approvable by the USEPA. (Rec. at 7.)

#### Environmental Impact

Spectrulite asserts granting this variance will have no adverse impact on human, plant, or animal life in the affected area. (Pet. at 6.) According to the Agency, modeling analyses for the Granite City area also indicated that this variance will not negatively impact air quality. (Rec. at 4, 5.) The Agency model combined emissions from other area PM-10 sources and found that such operation did not exceed the annual or daily national ambient air quality standards (NAAQS) for PM-10 (Rec. at 5) and will not negatively impact the SIP for this area (Rec. at 3).

At hearing Jeffrey Benbenek, Agency Engineer, testified that previous Agency modeling has been updated to reflect new information. First, the original model showed ventilator capacity over the pot furnaces was 16,000 actual cubic feet per minute (ACFM), whereas the current capacity is 40,000 ACFM. (Tr. at 42.) Second, only one fan was originally used for each area at 16,000 ACFM, but there are now three fans with the capacity of 40,000 ACFM each. (*Id.*) Such discrepancies show generally the more ACFM, the more dispersion of contaminants, with less of an impact at ground level. (Tr. at 42-43.) The updated modeling results indicate that the existence of two simultaneously-operating lines would not cause or contribute to a PM-10 air quality violation. (Tr. at 41.)

The Agency's modeling technique consisted of a number of other revisions in the emissions inventory including the emission sources themselves, parameters for stack location, temperature, flow rate, and exhaust points at the facility. (Tr. at 41-42.) Mr. Benbenek testified that modeling showed no adverse impact on air quality in the region if the variance was granted. (Tr. at 44.) He classified Spectrulite as a small to moderate source of PM-10 emissions. (Tr. at 43.)

Two members of the public, Kathy Andria, on behalf of the Madison County Conservation Alliance (Tr. at 46-52), and Jean Bowers (Tr. at 52-54), made statements at hearing regarding the economics and environmental impact of the additional line. The Board believes Mr. Schmittgens of Spectrulite and Ms. Doctors of the Agency adequately addressed those issues<sup>4</sup>.

### Hardship

Spectrulite asserts that in the absence of grant of variance it would suffer an economic hardship not justified because the Agency's imminent rulemaking will allow it to operate two lines.

(Pet. at 7.) Spectrulite states that current alternative scheduling causes it to suffer. For example, it cites the additional expenses relating to the frequent start-up and shorter process runs due to alternate scheduling. Mr. Moore testified at hearing that shutting down a line and then starting another from a cold start takes about 10-12 hours to bring the unit up to casting temperatures, and costs around \$7200 per start up system, beside the long term negative impacts. (Tr. at 12-13.)

Additionally, Spectrulite claims a hardship due to overtime personnel costs to operate, supervise and maintain a single line. (Pet. at 6.)

Petitioner contends that long-term alternate scheduling is infeasible and will likely result in lost sales due to inability to meet orders. (*Id.*) It has a unique business opportunity with increased orders for magnesium ingots and it will lose this business opportunity if forced to operate under regulations which do not reflect the current environmental conditions of the area.

(Pet. at 7.) Additionally, it cannot take advantage of creating job expansion in an economically depressed area. (Pet. at 7, Rec. at 4.)

The Agency agrees that these costs are an arbitrary and unreasonable hardship because of the circumstances, the results of their modeling, and the fact that there has been no violations

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<sup>4</sup> Ms. Andria requested to submit a written statement post-hearing. However, the Board has not received any statement from Ms. Andria regarding this variance. (Tr. at 62.)

of the NAAQS for five years in the Granite City area. (Rec. at 6-7.)

The Board has found that a speculative change in the law is usually not grounds for establishing arbitrary or unreasonable hardship. (Citizens Utilities Company of Illinois v. IPCB (1985), 134 Ill. App.3d, 111, 115; Village of Seneca v. IEPA, February 2, 1987, PCB 86-195, 188 PCB 166.) In particular, a variance petitioner should not be able to create a proposed rule, and then assert that compliance with the existing rule is arbitrary or unreasonable because there is a proposal pending to amend the existing rule.

Here, however, the Agency is the intended rule proponent. The Agency maintains that the rule needs to be amended and that it intends to formally propose this change to the Board. The Board believes that under this circumstance the speculative nature of the change in law should not be an impediment to a finding of arbitrary or unreasonable hardship.

#### CONCLUSION

In determining whether any variance is to be granted, the Act requires the Board to determine whether a petitioner has presented adequate proof that immediate compliance with the Board regulations at issue would impose an arbitrary or unreasonable hardship upon the petitioner. (415 ILCS 5/35(a) (1994).) Furthermore, the burden is on the petitioner to show that its claimed hardship outweighs the public interest in attaining compliance with regulations designed to protect the public. (Willowbrook Motel v. IPCB (1985), 135 Ill.App.3d 343, 481 N.E.2d 1032.) Only with such a showing can the claimed hardship rise to the level of arbitrary or unreasonable hardship.

The Board agrees with the Agency that Spectrulite's operation of an additional pot furnace line will not negatively impact air quality. Therefore, based upon the record before it and upon review of the hardship petitioner would encounter, the Board finds that petitioner has presented adequate proof that immediate compliance with the regulations at issue would result in an arbitrary or unreasonable hardship. The variance accordingly will be granted.

Petitioner has requested that the variance commence on July 30, 1995 and end on January 30, 1997. Spectrulite filed the petition for variance with the Board on July 12, 1995, along with a motion for expedited hearing. Although the Board granted the motion and set this matter along as expeditiously as possible, the Board cannot grant variance in such a short period of time.

The Board notes that it is well established practice that



the term of a variance begins on the date the Board renders its decision unless unusual or extraordinary circumstances are shown. (See DMI, Inc. v. IEPA, (December 19, 1991) PCB 90-227, 128 PCB 245-249.) The Board fails to see any unusual or extraordinary circumstances in the instant matter. Moreover, Spectrulite admits that it "has complied with the emission limitations by altering its operation in such a manner as to limit magnesium production to one line at a time" (Pet. at 6), and apparently therefore has neither been out of compliance nor is in need of the enforcement shield provided by a retroactively-dated variance. Therefore, the Board sees no justification or need to grant this variance retroactively, and declines to do so.

Lastly, the Board has reviewed the conditions that the Agency submitted. The Board agrees that the conditions are necessary to the grant of variance, and accordingly they will be included within the variance order.

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

#### ORDER

Spectrulite is hereby granted a variance for its 1001 College Avenue facility, in Madison, Illinois from 35 Ill. Adm. Code 212.458(b)(25), allowing it to operate two magnesium pot furnace lines at a time, subject to the following conditions:

- 1) This variance is effective beginning November 2, 1995. It terminates on January 30, 1997.
- 2) Spectrulite shall not operate two magnesium pot furnace lines unless at least two ventilators for each line are in operation.
- 3) Spectrulite shall maintain the building housing the lines to minimize the escape of emissions from any opening other than the roof ventilators and vent door. Spectrulite shall conduct weekly inspections of the building.
- 4) Spectrulite shall maintain records of the operating hours, amount of magnesium cast at each of the pot furnace lines, as well as of all maintenance and inspections performed pursuant to the above conditions. Such records must be made available to the Illinois Environmental Protection Agency immediately upon request.

IT IS SO ORDERED.

If Spectrulite chooses to accept this variance subject to the above order, within 45 days of the date of this order Spectrulite shall execute and forward to:

Rachel Doctors  
Division of Legal Counsel  
Illinois Environmental Protection Agency  
P.O. Box 19276  
2200 Churchill Road  
Springfield, Illinois 62794-9276

a Certification of Acceptance and Agreement to be bound to all terms and conditions of this variance. The 45-day period shall be held in abeyance during any period that this matter is being appealed. Failure to execute and forward the Certificate within 45 days renders this variance void and of no force and effect as a shield against enforcement of rules from which variance was granted. The form of said Certification is as follows:

CERTIFICATION

I (We), \_\_\_\_\_,  
hereby accept and agree to be bound by all terms and conditions of the order of the Pollution Control Board in PCB 96-6, November 2, 1995.

Petitioner \_\_\_\_\_

Authorized Agent \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Board Member M. McFawn concurred.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1994)) provides for the appeal of final Board orders within 35 days of the date of service of this order. The Rules of the Supreme Court of Illinois establish filing requirements. (See also 35 Ill.Adm.Code 101.246 "Motions for Reconsideration".)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the \_\_\_\_\_ day of \_\_\_\_\_, 1995 by a vote of \_\_\_\_\_.

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Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board