

ILLINOIS POLLUTION CONTROL BOARD
September 7, 1995

JLM CHEMICALS, INC. (formerly BTL)
SPECIALTY RESINS CORPORATION),)
)
Petitioner,)
)
v.) PCB 95-98
) (Variance - RCRA)
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

JEROME BOWMAN AND CHARLES M. CHADD, ROSS & HARDIES APPEARED ON BEHALF OF THE PETITIONER;

MICHELLE SIMCIK, PAUL JAGIELLO AND DANIEL MERRIMAN APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD BY (E. Dunham):

This matter comes before the Board on a petition for variance filed on March 14, 1995 by BTL Specialty Resins¹ (JLM/BTL). Petitioner seeks a determination from the Board that the byproduct from its phenol production unit is not K022 hazardous waste or in the alternative, a variance from the hazardous waste regulations.

A hearing on the petition was held on May 30, 1995 before Board hearing officer Deborah Frank in Chicago, Illinois. On June 28, 1995 the parties filed a stipulation to amend the transcript of the hearing. The Board accepts the stipulation and notes the corrections to the transcript as agreed to by the parties. Petitioner filed its post-hearing brief on June 28, 1995. Respondent filed its post-hearing brief on July 21, 1995. The petitioner's reply brief was filed on August 4, 1995.

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/1 et seq. (1994).) The Board is charged therein with the responsibility of granting

¹ On June 21, 1995, petitioner filed a "Notice of Change of Corporate Petitioner", indicating that BTL was purchased as an ongoing entity by JLM Chemicals, Inc. (JLM). Petitioner indicates that the change in corporate identity does not affect the accuracy of the information presented to the Board. The Board has changed the caption in this proceeding to reflect the change. The petitioner will be referred to as JLM/BTL.

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).) The Illinois Environmental Protection Agency (Agency) is required to appear in hearings on variance petitions. (415 ILCS 5/4(f).) 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).)

BACKGROUND

JLM/BTL operates a chemical manufacturing plant at 3350 W. 131st in Blue Island, Cook County, Illinois. (Pet. at 1.) The plant employs 54 people. (Pet. at 1.) The plant uses distillation equipment to produce phenol and acetone from cumene. (Pet. at 2.) As part of this operation, JLM/BTL generates a liquid product referred to as T105 bottoms material. (Pet. at 2.) In 1993, the plant generated 7,965,000 pounds of this material. (Pet. at 2.) In 1994, the plant generated 8,307,000 pounds of T105 bottoms material. (Pet. at 2.)

In December of 1993, the Agency informed JLM/BTL that the T105 bottoms material is a K022 hazardous waste and should be handled in accordance with the hazardous waste regulations. (Pet. at 2.) Prior to the Agency notifying JLM/BTL that the T105 bottoms material is a K022 waste, JLM/BTL sold the T105 bottoms material to a fuel blender. (Pet. at 3.)

WASTE DETERMINATION

The issue in dispute in this matter is whether the T105 bottoms material is a K022 waste and therefore must be handled as a hazardous waste. Before reviewing the petition for variance the Board must first address the question of whether JLM/BTL's T105 bottoms material is a K022 waste. A determination by the Board that the T105 bottoms material is not a K022 waste would eliminate the need for the variance.

Before considering whether the T105 bottoms material is a hazardous waste the Board must first consider if the T105 bottoms material is a solid waste. Both parties were asked at hearing to address the issue of whether the T105 bottoms material is, in the first instance, solid waste, and then whether the waste is a hazardous waste. (Tr. at 198.) The Agency presented testimony at hearing on the issue, and presented arguments in its post hearing brief demonstrating that the T105 bottoms material is a solid waste. Petitioners have failed to offer any evidence or arguments to contradict the Agency's arguments.

The Board finds that JLM/BTL's T105 bottoms material satisfies the definition of solid waste. Section 721.102(a)(1)

defines a solid waste as "any discarded material that is not excluded by Section 721.104(a) or that is not excluded pursuant to 35 Ill. Adm. Code 720.130 and 720.131." (35 Ill. Adm. Code 721.102(a)(1).) "Discarded material" includes disposed materials as well as materials that are "abandoned", "recycled" or "considered inherently waste-like". (35 Ill. Adm. Code 721.102(a)(2).) Materials burned for energy recovery whether they are used to produce a fuel or are otherwise contained in fuels are recycled materials. (35 Ill. Adm. Code 721.102(c)(2)(A).) JLM/BTL was selling the T105 bottoms material to a fuel blender for blending and resale to industrial users therefore the Board finds the T105 bottoms material is a solid waste.

A solid waste is a hazardous waste if it is both not excluded from regulation as a hazardous waste and it meets one of the criteria listed in 721.103(a)(2). One of the criteria of Section 721.103(a)(2) is listing in Subpart D of Section 721. In Subpart D, Section 721.132 describes K022 waste as distillation bottom tars from the production of phenol/acetone from cumene. (35 Ill. Adm. Code 721.132.)

JLM/BTL contends that the T105 bottoms material should not be classified as K022 hazardous waste because it is not a "tar". JLM/BTL maintains that the T105 bottoms material remains a flowable liquid with a viscosity similar to that of pancake syrup at room temperature. Petitioner argues that the Agency is bound by the limiting language of the regulation which defines K022 waste as a "tar". JLM/BTL maintains that its process differs in critical ways from the process described in the listing document. JLM/BTL further maintains that the official interpretations of the regulation issued contemporaneously with the regulation provide physical characteristics of tars which do not describe its T105 bottoms material.

The Agency maintains that the T105 bottoms material satisfies the definition as a K022 waste. The Agency argues that the T105 bottoms material contains the same hazardous constituents for which the material is listed, namely phenol and polycyclic aromatic hydrocarbons. The Agency maintains that the viscosity of the product was not an issue of concern in creating the listing document. The Agency maintains that there are differing definitions for "tars" and that "tars" does not have one unique meaning, even with respect to viscosity.

The definition of "tar" used by JLM/BTL was derived from dictionaries of the English language. (Pet. at 8.) Since we are attempting to define a technical term, the Board attempted to find a definition of "tar" in the technical literature. Most definitions of tar in the chemical engineering texts referred to tar only with a modifier indicating its source, such as "coal tar" or "pine tar". Grant and Hackh's Chemical Dictionary 5th

ed., Grant and Grant (1987), defines tar as:

"A thick, brown to black liquid mixture of hydrocarbons and their derivatives with distinctive odor; obtained by distillation of wood, peat, coal, shale, or other vegetable or mineral materials."

While the first part of the definition leads the reader to believe that the definition describes a material with high viscosity, the second part of the definition indicates the derivation of the tar, and indicates that tar is a distillation bottom. In chemical engineering, it is commonly known that the viscosity of a still bottom can be affected by factors such as temperature, time, pressure, and feedstock². Each of these parameters is optimized in a well run plant to obtain maximum product from a process. The Board does not believe that it was the intention of the USEPA to permit a chemical manufacturer to escape regulation because he was willing to decrease the viscosity of his still bottom by reducing the efficiency of capture of his product.

JLM/BTL argues repeatedly that its material is not K022 waste because the material is not viscous enough to fit the dictionary definition of "tar". The argument is irrelevant where the definition of tar can be found in the regulation itself. Section 721.132 describes K022 waste as distillation bottom tars from the production of phenol/acetone from cumene. (35 Ill. Adm. Code 721.132.) Appendix G of Section 721 provides the basis of listing K022 waste as hazardous waste as phenol, tars (polycyclic aromatic hydrocarbons). (35 Ill. Adm. Code 721.Appendix G.)

The Board finds that the basis for listing includes the definition of tar that applies to this waste, and tar here specifically refers to, and is defined as, polycyclic aromatic hydrocarbons (PAH). The record states that the witness for the Agency, Mr. Reitskins, believes that polycyclic aromatic hydrocarbons are present. (Tr. at 184.) The witnesses for JLM/BTL do not deny that PAH may be present, and JLM/BTL has presented no analysis that shows that polycyclic aromatic hydrocarbons are absent. Mr. Moffat of JLM/BTL stated that gas chromatography and mass spectroscopy of the T105 bottoms material did not detect PAH (Tr. at 111), but he did not state whether the tests were run to specifically detect PAH, or to eliminate matrix interferences to their detection.

In all other respects, the T105 bottoms material meets the definitional requirements of K022 hazardous waste.

² See Perry's Chemical Engineer's Handbook, 6th ed., Perry, R.H. and D. Green, McGraw-Hill (1984); Chapter 13 - Distillation.

The Board finds that the T105 bottoms material produced by JLM/BTL is a K022 listed hazardous waste.

PETITION FOR VARIANCE

If the Board finds that the T105 bottoms material is a K022 listed hazardous waste, JLM/BTL argues in the alternative that they should be granted a variance for five years to continue research into alternatives to disposal. JLM/BTL claims that the determination that the T105 bottoms material is a K022 waste and must be handled as a hazardous waste has resulted in a loss of revenue from the sale of the T105 bottoms material. JLM/BTL is currently studying the possibility of alternate uses for the T105 bottoms material.

AGENCY RECOMMENDATION

The Agency filed its recommendation on the petition on April 20, 1995. In its recommendation, the Agency restates the position advanced in its motion to dismiss that this matter is not the proper subject of a variance action and should not be considered by the Board. The Board denied the Agency's motion to dismiss on April 20, 1995. The Agency also restates its position that the T105 bottoms material is a K022 waste.

The Agency recommends that the Board deny the variance request. The Agency maintains that the T105 bottoms material is properly characterized as a K022 waste. The Agency contends that JLM/BTL is using the variance procedure as a means to avoid compliance with the hazardous waste regulations. The Agency asserts that the only hardship that JLM/BTL can claim is that it is now required to comply with the regulations with which all similar generators have been required to comply with for years. The Agency contends that the requested variance is inconsistent with federal law and regulations concerning K022 listed waste.

DISCUSSION

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. (415 ILCS 5/35(a) (1992).) Furthermore, the burden is upon 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.

A further feature of a variance is that it is, by its nature, a temporary reprieve from compliance with the Board's

regulations. Compliance is to be sought regardless of the hardship which the task of eventual compliance presents an individual polluter. (Monsanto Co. v. IPCB (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 grant of variance, to commit to a plan which is reasonably calculated to achieve compliance within the term of the variance.

JLM/BTL asserts that compliance with the hazardous waste regulations will result in an arbitrary and unreasonable hardship in the form of a financial loss to JLM/BTL. (Tr. at 85.) As a result of the Agency's determination that the T105 bottoms material is a K022 hazardous waste, the fuel blender to which JLM/BTL sold its material refused to accept further shipments. The sale of the material to the fuel blender generated revenue of \$115,000 in 1993, the last year the material was sold. (Tr. at 86.) JLM/BTL now contracts with licensed waste haulers for the removal and disposal of the T105 bottoms material. (Tr. at 88.) The annual cost for the disposal of the T105 bottoms material is \$315,000. (Tr. at 88.) JLM/BTL anticipates that the costs of disposal will increase in the future. (Tr. at 89.) JLM/BTL also made modifications to its plant to comply with the hazardous waste regulations at a cost of \$95,000. (Tr. at 87.)

JLM/BTL estimates that compliance with the hazardous waste regulations will decrease its profits by approximately \$430,000 each year. (Tr. at 90.) The total loss of revenue is the sum of the \$115,000 loss from the sale of the material plus the \$315,000 for the disposal of the material. (Tr. at 90.) JLM/BTL estimates that this loss represents about one-sixth or one-seventh of its earnings. (Tr. at 90.)

JLM/BTL is exploring three new uses for its T105 bottoms material. (Tr. at 167.) JLM/BTL estimates that it would take between six months to five years to completely develop and implement any of the new uses being considered by JLM/BTL. (Tr. at 168, 170 and 175.) JLM/BTL hopes to be able to sell as much of the T105 bottoms material as possible through the development of these new uses. (Tr. at 176.)

JLM/BTL was on notice when the 1981 federal regulations (40 CFR 261) took effect that K022 waste was listed, and that material from similar processes was regulated. (46 FR 4619, January 16, 1981.) They were further notified at a pre-enforcement conference with the Agency in 1988 that the Agency did not agree with their determination that T105 bottoms material is not regulated; though the Agency did not contact JLM/BTL on that matter again until 1993. (Ag. Rec. at 3.) Once the Agency finally determined that T105 bottoms material was a K022 hazardous waste, JLM/BTL worked diligently to comply with the regulations, and is today in compliance with the generator requirements for the collection, storage and shipment of

hazardous waste.

JLM/BTL is currently capable of complying with the hazardous waste regulations by contracting with licensed waste haulers for the disposal of its T105 bottoms material. If the variance is granted, JLM/BTL would be able to handle the unused T105 bottoms material in compliance with the regulations upon the expiration of the variance through the use of a licensed waste hauler. (Tr. at 176.)

Based upon the record before it and upon review of the hardship petitioner would encounter, and the environmental impact that would result from grant of variance, the Board finds that petitioner has not presented adequate proof that immediate compliance with the regulations at issue would result in an arbitrary and unreasonable hardship on petitioner. The Board finds that the financial implications of the hazardous waste regulations do not represent an unreasonable or arbitrary hardship. The costs of compliance for JLM/BTL are the same costs that are encountered by other generators of similar waste products.

The Board notes that, according to the Act, Section 34(a), variance relief may only be granted where the petitioner shows that an arbitrary or unreasonable hardship would result if the relief is not granted. (415 ILCS 5/34(a) (1994).) Where the petitioner is currently in compliance, as in this case, it is presumed that continued compliance is neither arbitrary nor unreasonable. Petitioner has presented insufficient information in this case to overcome that presumption.

The Board finds that petitioner has not shown that variance relief is appropriate in this case.

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

CONCLUSION

The Board hereby determines that the T105 bottoms material produced by JLM/BTL in their phenol production operation are K022 hazardous waste. The Board further finds that JLM/BTL has not shown that it would face an arbitrary or unreasonable hardship by complying with the hazardous waste regulations.

ORDER

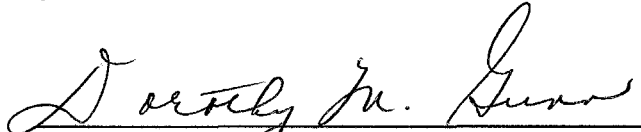
The Board denies the petition for variance filed by JLM/BTL for the reasons stated above.

IT IS SO ORDERED.

Board Member M. McFawn concurred.

Section 41 of the Environmental Protection Act, (415 ILCS 5/41 (1992)), provides for appeal of final orders of the Board 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, Motion 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 7th day of September, 1995, by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board