

ILLINOIS POLLUTION CONTROL BOARD
December 3, 1992

AMOCO CHEMICAL COMPANY,)
AMOCO PETROLEUM ADDITIVES)
COMPANY, WOOD RIVER,)
ILLINOIS,)
)
Petitioners,)
)
v.)
)
ILLINOIS ENVIRONMENTAL) PCB 92-78
PROTECTION AGENCY,) (Variance)
)
Respondent.)
)

DALE M. IWATAKI APPEARED ON BEHALF OF PETITIONER; AND

ANN ZWICK APPEARED ON BEHALF OF RESPONDENT.

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

This matter is before the Board on a petition for variance filed on May 26, 1992, by Amoco Chemical Company and Amoco Petroleum Additives Company. Amoco filed an amended petition on July 31, 1992 and a second amended petition on August 5, 1992.¹ Amoco seeks a three year variance (i.e., from May 15, 1992, to December 31, 1995) from the requirements of 35 Ill. Adm. Code 219.986, entitled "Control Requirements", and 219.987, entitled "Compliance Schedule", for its detergent additives plant (DAP) process vessels, multipurpose additives plant (MAP) phenate filters, MAP ZOP vessels, MAP phenate vessels, and MAP ZOP filters. (Amended Pet. Amended. p. A #3, pp. 2, 12, 40.) Amoco also seeks variance relief from the above-mentioned regulations

¹In its May 26, 1992 variance petition, Amoco sought relief from the requirements of 35 Ill. Adm. Code 219.966 and 219.967 (Subpart RR). After meeting with the Agency, Amoco and the Agency determined that the sources in the petition were subject to 35 Ill. Adm. Code 219.986 and 219.987 (Subpart TT) and that the sources that were subject to Subpart RR were controlled prior to April 1, 1989, as required by 35 Ill. Adm. Code 215. (Agency's Rec. par. 2.) Amoco, in its July 31, 1992 amended variance petition, sought relief from the requirements of Subpart TT. Amoco claimed that some of the information contained in the amended petition was confidential. On August 5, 1992, the Board issued an order directing Amoco to file another amended petition because its July 31, 1992 petition did not comport with the Board's trade secret regulations. Amoco comported with the Board's order via the filing of its August 26, 1992 second amended variance petition.

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for its DAP boration vessel from May 15, 1992 until March 2, 1992 (i.e., six months after the Agency granted Amoco a construction permit for installation of a capture and control system).² (Amended Pet. Amended p. B #10, pp. 2, 12, 40.)

On September 28, 1992, the Illinois Environmental Protection Agency (Agency) filed its recommendation. On November 13, 1992, the Agency filed an amended variance recommendation. The Agency recommends that the variance be granted subject to certain conditions. Hearing was held in this matter on November 4, 1992, in Alton, Illinois. No members of the public were present at the hearing. No post-hearing briefs were filed.

The Board finds that Amoco has presented adequate proof that immediate compliance with 35 Ill. Adm. code 219.986 and 219.987 would result in the imposition of an arbitrary or unreasonable hardship. Accordingly, the Board grants Amoco's variance request, subject to the conditions set forth in the attached order.

BACKGROUND

Amoco Petroleum Additives Company is a wholly owned subsidiary of Amoco Chemical Company that, in turn, is a subsidiary of Amoco Corporation. (Tr. 9; Amended Pet. p. 4.) Amoco Petroleum Additives Company manufactures over 45 million gallons of lubricant additives for motor oil, gasoline, and diesel fuel annually, and employs 303 persons. (Tr. 10, 11; Amended Pet. p. 4.) Both Amoco Petroleum Additives Company and Amoco Chemical Company are located in Wood River, Madison County, Illinois. (Amended Pet. Amended p. A #1.) Wood River is part of the East St. Louis non-attainment area for ozone. (Amended Pet. Amended p. A #1.)

The Amoco site encompasses approximately 500 acres. (Amended Pet. p. 4.) Amoco Petroleum Additives Company is located on approximately 190 acres of the site. (Amended Pet. p. 4; Agency Rec. par. 18.) Wood River bounds the site on the north and east and has a population of 12,448. (Amended Pet. p. 4; Agency Rec. par. 18.) The nearest residences are located approximately one thousand feet west of the site. (Agency Rec. par. 18.) Clark Oil & Refining Corporation's (Clark) petroleum refinery and Shell Oil Company's (Shell) sulfur recovery unit, two other VOM emitting sources, are located south of the site. (Agency Rec. par. 18.)

Amoco is seeking the variance for 23 sources that are located at Amoco Petroleum Additives Company in the DAP, the MAP,

²The DAP boration vessel is the largest emission source of those covered by the petition.

and the utilities main oil/water separator. (Tr. 26; Amended Pet. Amended p. A #6, p. 9.) The VOM emissions from the processes at issue are olefinic hydrocarbons that constitute the lighter boiling components of 5 W oil which, in turn, may constitute as much as 45 percent of a blended additive product. (Amended Pet. p. 9.) Other VOM emissions vary with the source, including those hydrocarbons, such as dodecylphenol used at the MAP, that are specific to the process at that unit. (Amended Pet. p. 9.)

Amoco estimates that it has a total of 24 tons per year, or five pounds per hour, of uncontrolled emissions. (Tr. 21, 28; Amended Pet. p. 10.) The total amount of actual VOM emissions from the plant are greater than five tons per year. (Amended Pet. Amended p. A #7, p. 9.) Approximately 10½ tons of VOM are emitted from the DAP boration vessel. (Tr. 28; Amended Pet. Amended p. B #10.) Source testing has identified actual emissions from some units and has indicated that some sources will not require controls based on the 2.5 tons per calendar year exemption found in 35 Ill. Adm. Code 219.980(c), if total VOM emissions do not exceed five tons per year. (Amended Pet. Amended p. A #7, p. 9.) The VOM sources generally exhaust anywhere from ground level to approximately 50 feet above ground. (Amended Pet. p. 9.)

On April 23, 1992, Amoco Petroleum Additives Company agreed to sell certain assets to Ethyl Petroleum Company (Ethyl). (Tr. 11; Amended Pet. Amended p. A #5.) Although the Wood River plant was not sold, Amoco Petroleum Company agreed to manufacture petroleum additive products at the facility for Ethyl until 1995. (Tr. 12; Amended Pet. Amended pp. A #5, B #16.) At the end of such period, the DAP process vessels, MAP phenate filters, MAP ZOP vessels, MAP phenate vessels, and the MAP ZOP filters will no longer be operated. (Tr. 18; Amended Pet. Amended p. A #5, pp. 3, 38, 40.)

REGULATORY FRAMEWORK

Amoco requests a variance from 35 Ill. Adm. Code 219.986 and 219.987. Section 219.986 provides in pertinent part as follows:

Every owner or operator of an emission source subject to this Subpart shall comply with the requirements of subsection (a), (b), or (c) below.

- a) Emission capture and control equipment which achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent, or

* * * * *

Section 219.987 provides in pertinent part as follows:

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Every owner or operator of an emissions source which is subject to this Subpart shall comply with the requirements of this Subpart on and after [May 15, 1992].

The above regulations were adopted in R91-8 and became effective on August 16, 1991. (Amended Pet. p. 11.) The regulations flowed from the Federal Implementation Plan (FIP) that the United States Environmental Protection Agency (USEPA) had promulgated for Illinois to achieve compliance in the Chicago ozone non-attainment area and also amend the State Implementation Plan (SIP) for the Metro-East St. Louis area. (Amended Pet. p. 11.) The regulations affect Amoco due to the fact that VOM emissions at the plant exceed 100 tons per year. (Amended Pet. p. 11.)

COMPLIANCE PROGRAM

In January 1992, Amoco retained Sverdrup Corporation Consultants (Sverdrup) to identify control technologies that would achieve a minimum of 81 percent VOM emission reductions required by 35 Ill. Adm. Code 219.896. (Tr. 31; Amended Pet. pp. 11, 13, 40.) Sverdrup completed its review on March 1, 1992. (Amended Pet. p. 11.) Sverdrup examined the following control technologies: carbon adsorption, vapor scrubbing, flare combustion, direct contact condensing/scrubbing, and indirect contact condensing. (Amended Pet. p. 14.)

Sverdrup chose not to use carbon adsorption because the VOMs all have high molecular weights and regeneration of the carbon adsorbent is not possible with the such materials. (Amended Pet. p. 14.) Sverdrup also chose not to use vapor scrubbing because it would result in the production of a liquid waste stream (i.e., contaminated scrubbing liquid). (Amended Pet. p. 14.) Sverdrup also determined that flare combustion was not applicable for many of the processing tanks since the VOM concentrations of the effluent streams were relatively low, and excessive requirements for make-up fuel to the flare would be required. (Amended Pet. p. 14.)

Sverdrup selected fume incineration for some volatile solvent tanks. (Amended Pet. p. 14.) Sverdrup selected direct and indirect contact condensing via ejector scrubbing systems for those areas that contain VOMs with very low vapor pressures and have storage temperatures that are all above ambient because cooling to near ambient conditions results in removal of a large percentage of VOM emissions. (Amended Pet. p. 14.) Each system and its proposed VOM control technology is listed below:

| SYSTEM | PROCESS DESCRIP- TION | CONTROL TECHNO- LOGY | % REDUCTION | ESTIMATED COST |
|---------------------------|---------------------------------|--|----------------|-------------------|
| DAP Building | Process Vessels | Ejector/ Scrubbers | 99.9% | \$600,000 |
| MAP Phenate | Process (Phenate) Vessels | Ejector/ Scrubbers | 99.9% | \$900,000 |
| | Process (Phenate) Filters | Ejector/ Scrubbers | 99.9% | |
| MAP-ZOPs | Process Filters | Ejector/ Scrubbers | 99.9% | \$400,000 |
| | Filter Vessels | Ejector/ Scrubbers | 90.0% | |
| DAP Boration Vessel | Process Vessel | Ejector/ Scrubber- Direct Condens- ing | 92.7% | \$100,000 |
| TOTAL | | | | 2,000,000 |

(Amended Pet. pp. 10, 15.)

With the exception of the DAP boration vessel, Amoco is not proposing a control program for the sources at issue other than the slated 1995 plant shutdown. (Tr. 28-29; Amended Pet. p. 3; Agency Rec. par. 27.) During the variance period, however, Amoco states that it will install controls on a case-by-case basis as reasonable opportunities arise to control VOM emissions from the sources at issue. (Amended Pet. Amended p. B #16, pp. 3, 37, 40-41; Agency Rec. par. 27.) Amoco's criteria for defining reasonable opportunities will be based upon improving the plant working environment and community environmental conditions. (Amended Pet. Amended p. B #16, p. 3, 37; Agency Rec. par. 27.) Again, Amoco notes that reduction of VOM emissions will also occur at the plant when the affected units no longer manufacture petroleum additives. (Tr. 29; Amended Pet. p. 37.)

Amoco plans to minimize VOM emissions from the DAP boration vessel during the variance period by installing an ejector scrubbing system on the vessel. (Amended Pet. p. 37.) Amoco's permit application indicates that the control equipment will be operational by November 2, 1992. (Agency Rec. par. 26.) On

September 2, 1992, the Agency issued a construction and operating permit. (Agency Rec. pars. 23, 26.) The equipment was actually installed in mid-October 1992. (Agency's Amended Rec.) The capital cost to install the control equipment on the vessel is \$100,000, and the annual operating costs of such equipment total \$10,000. On November 4, 1992, Amoco submitted a permit modification application to the Agency in order to construct and operate additional control equipment on the vessel and attain additional VOM emission reductions. (Tr. 39-40; Agency's Amended Rec.) Although Amoco's permit application is currently being reviewed by the Agency, Amoco expects to complete construction of the new control system by early December 1992. (Agency's Amended Rec.)

Amoco adds that it plans to comply with the benzene wastes national emission (NESHAP) regulations by adding controls which will reduce VOM emissions from the wastewater sewers and tank T-120 at the general additives plant 200 section. (Amended Pet. p. 37.) Amoco also anticipates a reduction of VOM emissions between 0.5 and 2.0 tons per year by complying with the synthetic organic chemical manufacturing industry (SOCMI) hazardous organic NESHAP's (HON) regulations. (Amended Pet. p. 37.)

Finally, Amoco asserts that it has already spent over 8.6 million dollars in the last three years to reduce VOM emissions at the plant. (Tr. 16, 38.) A breakdown of such expenses follows:

| UNITS CONTROLLED | COSTS OF CONTROLS |
|---|-------------------|
| PIBSA Reactor Controls | \$150,000 |
| Mercaptan Storage Tank Controls | \$15,000 |
| Benzene Contaminated Wastewater Tank Controls | \$100,000 |
| Benzene Air Stripper Columns E-801 A&B | \$7,800,000 |
| Benzene Storage Tank Controls Benzene Rail Tank Car Unloading Facility controls | \$350,000 |
| Main Oil/Water Separator Box Cell Covers | \$225,000 |
| TOTAL | \$8,640,000 |

(Amended Pet. p. 28.)

In terms of emissions reductions, Amoco notes that it installed covers on the main oil/water separator before the May 15, 1992 compliance date and that such covers are 85 percent efficient. (Amended Pet. Amended p. A #8.) As a result, uncontrolled VOM emissions from the main oil/water separator have been reduced from 1083 tons per year to 162 tons per year, a reduction of 921 tons per year. (Amended Pet. Amended p. A #8.) The installation of covers has also achieved an overall Subpart TT VOM emissions reduction of 82.5 percent. (Amended Pet. Amended p. B #13.)

Amoco estimates that the installation of control equipment on the boration vessel will reduce the vessel's emissions by one half, or to 0.78 tons per year (i.e., two pounds per hour). (Tr. 21, 28; Amended Pet. Amended p. B #10.) Amoco adds that, with the main oil/water separator and the DAP boration vessel both being controlled, the overall reduction of Subpart TT VOM emissions is 83.8 percent versus the source by source reduction requirement of 81 percent. (Amended Pet. Amended p. B #13, p. 41.) By March 1993, Amoco estimates that total VOM emissions from the plant will be 13½ tons per year or two and one half to three pounds per hour. (Tr. 28.)

ENVIRONMENTAL EFFECTS

The MAP and DAP are approximately 1.5 miles south of the Agency's Wood River air monitoring station. (Tr. 36; Amended Pet. pp. 9, 27; Agency Rec. par. 19.) According to the Agency's 1989, 1990, and 1991 Illinois Annual Air Quality Reports, the Wood River air monitoring station has not exceeded the ozone attainment limit of 0.12 ppm during those years. (Tr. 22, 37; Amended Pet. p. 27.) The only air monitoring stations that have exceeded the ozone limit in the Illinois section of the Metro-East St. Louis area during that period were the Maryville station in 1989 and the Edwardsville station in 1991.³ (Amended Pet. p. 27.)

Amoco notes that the Agency's 1991 Air Quality Report states as follows:

[t]he three year average of expected exceedence (1989-1991) must be less than 1.0 for a site to attain the ozone standard. Even though ozone levels increased in 1991, there were no sites in Illinois for which the three year average (1989-1991) was above 1.0....

³The Maryville station is approximately 20 miles southeast of Wood River. (Amended Pet. p. 27.) The Edwardsville station is approximately 15 miles southeast of Wood River. (Amended Pet. p. 27.)

(Amended Pet. p. 27.)

Based on the above, Amoco reasons that the Metro-East St. Louis areas' moderate non-attainment rating for ozone should be changed to an attainment rating based on the fact that the area has had few reported ozone levels above 0.12 ppm since 1989. (Amended Pet. pp. 12, 27, 40.)

Amoco also states that it does not expect any adverse impact on human, plant, or animal life, or on the environment during the variance period because it plans to operate its facility at production rates similar to those covered by the Agency's 1989, 1990, and 1991 Air Quality Reports and because the ozone attainment level at the Wood River monitoring station was never exceeded during that period of time. (Amended Pet. Amended p. B #15, pp. 27, 40.) Amoco also bases its conclusion on certain industrial hygiene data that indicates that the VOM emission level at the plant has not had an adverse impact employee health or safety. (Tr. 37.)

The Agency agrees that its monitor closest to Amoco has not indicated an exceedence of the primary ozone standard of 0.120 ppm since 1988. (Agency Rec. par. 19.) The Agency adds that all of its monitoring sites in Madison County measured ozone exceedences during that year. (Agency Rec. par. 19.) The Agency also adds, that Amoco, Clark, and Shell funded an air monitoring project to determine concentrations of several VOMs in the ambient air in the refinery area. (Agency Rec. par. 20.) Five monitoring sites were operated between December 1990, and December 1991. (Tr. 21; Agency Rec. par. 20.) The Agency reviewed the results of the project and determined that there were no measured concentrations of VOMs at a level to pose a risk to the public in the area. (Tr. 21-22; Agency Rec. par. 20.)

CONSISTENCY WITH FEDERAL LAW

Section 35 of the Environmental Protection Act (Act), Ill. Rev. Stat. 1991, ch. 111½, par. 1035, allows the Board to grant variances consistent with the provisions of the Clean Air Act, 42 U.S.C 7401 et seq. (1990). (Agency Rec. par. 24.) The Agency does not believe that the grant of the requested relief in this case would need to be submitted to the USEPA as a revision to the SIP because Subpart TT has not yet been approved by USEPA as a part of Illinois' SIP for ozone. (Agency Rec. par. 25.) However, if the USEPA approves Subpart TT as a SIP revision, the Agency believes that the grant of the requested relief would be approvable as a SIP revision. (Agency Rec. par. 25.)

AGENCY RECOMMENDATION

On June 8 and 10, 1992, the Agency inspected Amoco's facility to discuss which Subpart applied to the sources listed

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in Amoco's petition. (Agency Rec. par. 7.) The Agency also toured the areas of the plant where the sources are located to investigate and verify the information in Amoco's petition. (Agency Rec. par. 7.) On June 17, 1992, Amoco met with the Agency to discuss the applicability issue and informed the Agency that it would be submitting an amended petition. (Agency Rec. par. 7.) The Agency also reviewed Sverdrup's review of the various VOM emission control options, the cost estimates for the control equipment proposed in Amoco's petition, a summary of the VOM emission calculations, and highlights of the emission testing used to determine emission rates from the sources. (Agency Rec. par. 8.)

The Agency agrees that Amoco will undergo an unreasonable hardship if the Board does not grant the requested relief. (Agency Rec. par. 28.) Accordingly, the Agency recommends that the Board grant relief subject to certain conditions. (Agency Rec. par. 28.) The Agency, however, takes issue with several of the representatives made by Amoco in its petition. First, the Agency states that Amoco has improperly taken credit for a large reduction in emissions at the main oil/water separator when, in fact, Amoco initially installed covers on the separator in order to comply with the 85 percent control limit specified in 35 Ill. Adm Code 215.141(a) (previously known as Rule 205(c)(1)). (Agency Rec. par. 10.) In addition, the Agency characterizes Amoco's uncontrolled emissions estimate of 2,166,000 lbs/yr from the main oil/water separator as being unrealistically high in light of the fact that the plant is no longer a petroleum refinery. (Agency Rec. par. 10.)

Second, the Agency disagrees with Amoco's statement that Amoco's interpretation of Subpart TT was a delaying factor for installing controls on the DAP boration vessel. (Agency Rec. par. 11.) The Agency notes that the organic material emission standards and limitations for the Metro-East St. Louis area (i.e., 35 Ill. Adm. Code 219) were promulgated in July 1991, grew out of the FIP that was promulgated by the USEPA in June 1990, and also apply to the Chicago ozone nonattainment area.⁴ (Agency Rec. par. 11.) The Agency argues that, as a result, Amoco would have had nine months to install and operate control equipment on the DAP boration vessel if it had identified the vessel as needing controls as of July 1991. (Agency Rec. par. 11.) The Agency, however, recognizes that determining the actual emission rates of those sources subject to Subpart TT was a time consuming step that may have delayed installation of controls. (Agency Rec. par. 11.) More specifically, the Agency reasons that, because Subpart TT includes an exemption for sources with actual emissions less than 2.5 tons per year if total emissions from

⁴The regulations were adopted in R91-8 and became effective on August 16, 1991.

those sources exceed 5.0 tons per year (35 Ill. Adm. Code 219.980(c)), Amoco had to test emissions for all sources subject to Subpart TT in order to determine which sources to control. (Agency Rec. par. 11.)

Third, the Agency disagrees with Amoco's claim that there will be further reduction of VOM emissions due to the requirements of the SOCOMI HON regulations. (Agency Rec. par. 12.) Specifically, the Agency notes that the USEPA is not required to promulgate such regulations until November 15, 1992, and that compliance with the regulations will not be required until three years after that date (i.e., November, 1995). (See Sections 112(e)(1)(A) and 112(i)(3) of the Clean Air Act, 42 U.S.C. Section 7401 et seq. (1990)). (Agency Rec. par. 12.) Accordingly, the Agency argues that Amoco cannot claim that compliance with the regulations will result in a reduction of emissions when Amoco ceases operations one month after the compliance date. (Agency Rec. par. 12.)

Fourth, the Agency believes that Amoco simplified and misstated the status of the ozone nonattainment areas in Chicago and Metro-East St. Louis. (Agency Rec. par. 13.) The Agency notes that the USEPA designated the Chicago and the Metro-East St. Louis areas as nonattainment for ozone on November 6, 1991, (40 C.F.R. 81) and that there have been violations of the ozone standard in both areas since the initial designation. (Agency Rec. par. 13.) The Agency further notes that the areas will remain classified as nonattainment for ozone until USEPA promulgates a reclassification. (Agency Rec. par. 13.)

Finally, the Agency disagrees with Amoco's projected cost per ton of VOM emissions removed and annual operating costs. (Agency Rec. par. 14.) The Agency argues that Amoco incorrectly assumes that the control system's economic life is 3 years given that compliance was required by May 15, 1992, and the variance is being sought until December 31, 1992, when the plant ceases operations. (Agency Rec. pars. 14, 22.) However, the Agency agrees that, even as corrected, the cost of compliance for the DAP process vessels, MAP phenate filters, MAP ZOP vessels, MAP phenate vessels, and MAP ZOP filters will be high and that requiring controls on equipment scheduled for shutdown in 1995 would cause an unreasonable hardship. (Agency Rec. par. 22.)

HARDSHIP

35 Ill. Adm. Code 219.966 requires an overall reduction in uncontrolled volatile organic material (VOM) emissions of 81 percent or greater. The USEPA estimates that, in eight percent of the areas in the country designated moderate non-attainment, the cost of control equipment needed to meet an 81 percent reduction level will be greater than \$2,000 per ton of VOM reduced. (Amended Pet. p. 2.) The USEPA estimates that, in all

other moderate ozone non-attainment areas (i.e., 81 percent of the country), the cost of control equipment needed to meet an 81 percent reduction level will be less than \$2,000 per ton of VOM reduced.⁵ (Tr. 34; Amended Pet. p. 2.)

Amoco estimates that the cost per ton of VOM emissions reduced at its Wood River facility would exceed \$4,776 and, in some cases, would exceed \$178,000. (Tr. 32, 33, 34-35; Amended Pet. Amended p. B #11, pp. 2, 12, 38, 40.) More specifically, Amoco provides the following breakdown of VOM emissions and control costs:

| PROCESS DESCRIPTION | UNCONTROLLED EMISSIONS, TONS/YR | ANNUALIZED COSTS OF VOM CONTROLS | COSTS PER TON OF VOM CONTROLLED |
|---------------------------------|---------------------------------|----------------------------------|---------------------------------|
| DAP Process vessels (7 vessels) | 4.62 | \$251,200 | \$54,372 |
| MAP Phenate Vessels (8 vessels) | 4.62 | \$170,800 | \$36,970 |
| MAP ZOP Vessels (4 vessels) | 1.52 | \$90,400 | \$59,474 |
| MAP Phenate filters (2 filters) | 1.18 | \$211,000 | \$178,814 |
| MAP ZOP filter (1 filter) | 1.73 | \$90,400 | \$52,254 |
| DAP Boration Vessel (1 vessel) | 10.51 | \$50,200 | \$4,776 |
| TOTALS | 24.18 | \$864,000 | |

(Tr. 32, 34-35; Amended Pet. p. 10.)

Based on the above data, Amoco argues that the cost of installation of RACT type controls for VOM reduction is significantly greater (10 to 100 times) than the costs listed in

⁵USEPA, *Ozone Non-attainment Analysis - Clean Air Act Amendments of 1990*, E.H. Pechan, Inc. (September 1991).

the USEPA's study. (Tr. 33, 34; Amended Pet. p. 2.) Amoco adds that the fact that the DAP process vessels, MAP phenate filters, MAP ZOP vessels, MAP phenate vessels, and the MAP ZOP filters have only a two to three year operating life and are slated for shutdown in 1995, draws into question the expenditure of two million dollars on VOM emissions controls. (Tr. 15-16, 17, 19; Amended Pet. Amended p. B #11, pp. 12, 13.)

In addition to the above, Amoco asserts that the installation of control equipment would require more than nine months to engineer and install. (Amended Pet. p. 38.) More specifically, Amoco asserts that compliance by the May 15, 1992 deadline set forth in 35 Ill. Adm. Code 219.987 is not possible when one considers the time needed to interpret the regulation, develop a compliance design and evaluate the design under Amoco's hazardous operations (HAZ-OP) safety review policy, obtain a construction permit, obtain funding for the project, purchase and install the required equipment, conduct system checks and commence operations, and train operators to run the control equipment. (Amended Pet. p. 38.)

Finally, Amoco states that, because the installation of VOM emission controls cannot be timely accomplished by the May 15, 1992 deadline, the only alternative to achieve compliance would be to shut down all units needing Subpart TT controls. (Amended Pet. pp. 39, 41.) Such action would effectively shut down the entire plant, would result in the loss of the majority of jobs at the facility, and would impose an unreasonable hardship on the Amoco's 303 employees and on the Wood River community. (Amended Pet. p. 39.)

BOARD DISCUSSION

The Board finds that immediate compliance with applicable regulations would impose an arbitrary or unreasonable hardship on Amoco. This conclusion is based upon considerations such as the cost of compliance in light of the slated 1995 shutdown of Amoco's 22 sources and the time duration of the variance for the DAP boration vessel. In addition, the Board notes that Amoco has already spent a significant sum of money in its efforts to reduce VOM emissions. The Board also notes that the data presented in this case indicates that the grant of variance will not have a significant adverse impact on the environment.

The Board notes, however, that Amoco has requested a retroactive variance, commencing May 15, 1992. The Board has granted a limited number of retroactive variances. (See Department of the Air Force, Scott Air Force Base, v. Illinois Environmental Protection Agency (October 1, 1992), PCB 92-63; DMI v. Illinois Environmental Protection Agency (December 19, 1991), PCB 90-227). Although the Agency does not oppose a retroactive variance in this case, the Agency disagrees with Amoco's

statement that Amoco's interpretation of Subpart TT was a delaying factor for installing controls. (Agency Rec. par. 11.)

The organic material emission standards and limitations for the Metro-East St. Louis area (i.e., 35 Ill. Adm. Code 219) were promulgated in August 1991, and grew out of the FIP that was promulgated by the USEPA in June 1990. Amoco has provided no explanation, other than the argument that its interpretation of Subpart TT was a delaying factor for installing controls, as to why it took over one year to file for variance relief. Even if Amoco's interpretation of Subpart TT could somehow be construed as a delaying factor in the installation of controls, Amoco has provided no explanation as to why it waited until approximately two weeks after the compliance date contained in the regulations (i.e., May 15, 1992) to file for variance relief. Moreover, even though Amoco thought that its sources were subject to Subpart RR, the Board notes that Subpart RR itself contains a May 15, 1992 compliance date.

The Board ordinarily grants variances beginning 120 days after the date of filing a variance petition. Accordingly, after considering the circumstances of this case, the Board will grant a variance beginning September 23, 1992, which is 120 days after Amoco filed its initial variance petition. In all other respects, the Board will grant relief consistent with the Agency's recommended conditions.

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

ORDER

Petitioners Amoco Chemical Company and Amoco Petroleum Additives Company are granted a variance from 35 Ill. Adm. Code 219.986 and 219.987, subject to the following conditions:

1. This variance will become effective on September 23, 1992.
2. This variance will expire on December 31, 1995.
3. This variance applies to discharges from the DAP process vessels, MAP phenate filter, MAP ZOP vessels, MAP phenate vessels, and MAP ZOP filters located at Petitioner's Wood River, Illinois facility.
4. Petitioner shall provide written notification to the Illinois Environmental Protection Agency of the permanent shut down of any source at the subject facility within ten (10) days of the shutdown.

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5. Within thirty (30) days of the date of this order, Petitioner shall provide written notification to the Illinois Environmental Protection Agency of the highest daily throughput for each of the sources listed in condition 3 above during the months of June through September for the years 1989 through 1991.
6. Petitioner shall operate the emissions sources listed in condition 3 above such that no emission source shall exceed the throughput submitted pursuant to condition 5 above.
7. Petitioner shall submit a written report of the gallons of each product produced at DAP-100, DAP-400, MAP-100, MAP-200(Phenates), and MAP-200(Sulfurized Olefins) to the Illinois Environmental Protection Agency at the end of each calendar year during the period of this variance.
8. Within thirty (30) days of the date of this order, Petitioner shall submit a final written report of all stack testing that was conducted to determine the emission rates of the sources listed in condition 3 above to the Illinois Environmental Protection Agency.
9. Within twenty four (24) hours of its receipt of any citizen complaints, Petitioner shall provide notification of such complaints to the Illinois Environmental Protection Agency.
10. Within seven (7) days of its receipt of any citizen complaints, Petitioner shall provide notification of any actions taken to eliminate and prevent future complaints to the Illinois Environmental Protection Agency.

Petitioners Amoco Chemical Company and Amoco Petroleum Additives Company are also granted a variance from 35 Ill. Adm. Code 219.986 and 219.987, subject to the following conditions:

1. This variance will become effective on September 23, 1992.
2. This variance will expire on one of the following dates:
 - a) March 2, 1993, or
 - b) upon verification of compliance through testing, whichever occurs first.
3. This variance applies to discharges from the DAP

boration vessel located at Petitioner's Wood River, Illinois facility.

4. Within sixty (60) days of the startup date of the new control equipment on the DAP boration vessel, Petitioner shall test for the volatile organic material emissions from the control device.
5. Petitioner shall have the emission test procedure mentioned in condition 4 above approved by the Illinois Environmental Protection Agency's emission source test specialist prior to testing.
6. No later than thirty (30) days prior to the expected date of the test mentioned in condition 4 above and five (5) working days prior to the test, Petitioner shall provide notification to the Illinois environmental Protection Agency of the exact date, time, and place of the test.

Within forty-five days of the date of this order, Petitioners shall execute and forward to Ann Zwick, Division of Legal Counsel, Illinois Environmental Protection Agency, P.O. Box 19276, 2200 Churchill Road, Springfield, Illinois 62794-9276, a Certificate of Acceptance and agreement to be bound to all terms and conditions of the granted variance. The 45-day period shall be held in abeyance during any period that this matter is 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 this variance is granted. The form of Certificate 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 92-78, December 3, 1992.

Petitioners

By: Authorized Agent

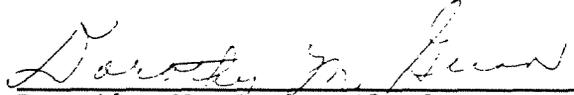
 Title

 Date

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1991, ch. 111½ 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. (But see also Castenada v. Illinois Human Rights Commission (1989), 132 Ill.2d 304, 547 N.E.2d 437).

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 3rd day of December, 1992, by a vote of 7-0.



 Dorothy M. Gunn, Clerk
 Illinois Pollution Control Board