

ILLINOIS POLLUTION CONTROL BOARD  
June 27, 1985

GLACO CORP., )  
 )  
Petitioner, )  
 )  
v. ) PCB 85-29  
 )  
ILLINOIS ENVIRONMENTAL )  
PROTECTION AGENCY, )  
 )  
Respondent. )

MR. JOHN R. OLSEN, ESQ., APPEARED ON BEHALF OF PETITIONER.

MR. JOSEPH R. PODLEWSKI, ESQ., APPEARED ON BEHALF OF RESPONDENT.

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

This matter comes before the Board on a March 5, 1985 variance petition filed by Glaco Corp. (Glaco) requesting variance from the provisions of 35 Ill. Adm. Code 215.204 (emission limitations for metal parts and products coating) and 215.205 (alternative emission limitations) for one year. The Illinois Environmental Protection Agency (Agency) filed its recommendation that variance be granted subject to conditions on April 30, 1985. Glaco sought clarification of a condition by letter filed on May 9, 1985. In response, the Agency filed an amendment to its variance recommendation on May 17, 1985. Hearing was held on May 3, 1985; no members of the public attended.

Glaco manufactures and reconditions commercial bakery pans at its plant located at 1949 N. Cicero Avenue in Chicago, Illinois. This plant employs 300 people and manufactures approximately 1,200,000 new bakery pans per year. This output represents approximately 50 percent of the commercial bakery pan market. In addition, approximately 500,000 used bakery pans are cleaned and reglazed for use at commercial bakeries within a 200-mile radius of Chicago.

Seventy-five percent of the new and used pans are coated on two separate coating lines. Although the coating procedure for new and used pans varies somewhat, the coating formula applied to both is identical. The coating consists of 20 percent silicone resin and 80 percent solvent. The solvents contain volatile organic matter (hereinafter "volatile organic compounds or VOC"). During new pan production, VOC emissions are generated by the spray coating operation. These emissions are drawn off by a duct fan, filtered and vented through a stack to the ambient atmosphere. During old pan reconditioning, VOC emissions are

generated during the spraying process as well as during the preheated/curing oven operation. These emissions are also vented through stacks to atmosphere.

At present, none of the emissions are controlled. According to the Agency, Glaco's 1983 emissions were 60.94 tons. The Agency has made calculations assuming a VOC density of 7.36 lb/gal and stated that Glaco's allowable VOC emissions in 1983 were 19.1 tons. Thus, Glaco emitted 41.84 tons VOC over the allowable.

Glaco's VOC emissions are regulated by Section 215.204(j)(1) which imposes a VOC emission limitation on clear coating operations of 4.3 lb/gal. Section 215.205 offers as alternatives to complying with Section 215.204 the control of VOC emissions by installing either

- 1) An afterburner system, provided that 75 percent of the emissions from the coating line and 90 percent of the non-methane volatile organic material which enters the afterburner are oxidized to carbon dioxide and water; or
- 2) A system demonstrated to have a control efficiency equivalent to or greater than that provided under the applicable provision of Section 215.204.

Glaco states that after considerable experimentation it finds itself unable to use a compliance coating and thus, intends to use an add-on control device. The compliance program proposed by Glaco consists of two phases. The first phase involves modifications to the process equipment and the exhaust systems so as to result in sufficient capture of solvent to allow an add-on control device to be effective. The second phase is to design and implement the control technology. Thermal afterburners are currently contemplated. Modifications to the ventilation system and design and installation of the control device will be accomplished in approximately one year at an estimated total cost of \$250,000.

In assessing the environmental impact of its emissions, Glaco states that hydrocarbons as a group, and the specific species emitted by Glaco, have no adverse health and welfare effects. According to Glaco, toluene, one of its solvent's constituents, "completely lacks the potential to cause damage." (Pet. at 22). The Agency disputes this contention noting that as a VOC, toluene is at the very least a precursor of ozone. Photochemical oxidants, such as ozone, do have well documented significant adverse health and welfare effects especially upon the elderly and people with respiratory and cardiac problems. Ozone is a pulmonary irritant that can impair the normal function of the lung.

The Glaco plant is located in Cook County which is designated a non-attainment area for ozone, a criteria pollutant

for which there are both identical state and federal air quality standards (0.12 ppm (235 ug/m<sup>3</sup>)). The closest ozone monitor is located at 220 N. Cannon (Lincoln Park Zoo) approximately 5 miles from the plant. In 1983 this monitor recorded one ozone exceedance; another exceedance was reported in 1984. The Agency states that it is difficult to determine Glaco's contribution to these exceedances in light of the concentration of other contributing sources, particularly motor vehicles, on ozone concentrations in the area (Rec. at par. 14). Glaco, however, estimates that it contributes less than 0.02 percent to Cook County's total VOC levels (Pet. at 21).

While the proposed control technology is being implemented, Glaco intends to attempt to reduce VOC emissions by improving its present operations. These improvements include adjustment of the coating sprayers to reduce the rate of coating delivery and reducing the amount of solvent used for cleaning. The Agency states that Glaco's continued efforts to control emissions, as well as anticipated reductions during modification and installation of the control technology, will result in no adverse air quality impact associated with the granting of the variance.

The Board finds that immediate compliance with the VOC emissions limitation of 35 Ill. Adm. Code 215.204(j)(1) would constitute an unreasonable or arbitrary hardship. Unless Glaco is allowed to operate the plant while its compliance program is being implemented, Glaco will be compelled to shut down all new bakery pan manufacturing until compliance is achieved. Although Glaco has not provided any estimate of the economic loss occasioned by a one year shut-down, the burden to Glaco in light of its commitment to achieve compliance within one year through the utilization of add-on controls, its proposal to reduce VOC emissions during the variance, and its minor contribution to total Cook County VOC emissions, outweigh the minimal environmental detriment.

In accordance with the provisions of Section 35 of the Act (Ill. Rev. Stat. 1983, ch. 111 1/2, par. 1035), the Board may grant variances only if they are consistent with the provisions of the Clean Air Act (42 U.S.C. Section 7401 et seq.). Because Section 215.204(j) has not yet been approved by the United States Environmental Protection Agency ("USEPA") as part of the State Implementation Plan ("SIP") to attain and maintain primary and secondary air quality standards, the Agency does not believe that the variance requested, if granted, needs to be submitted to the USEPA as a revision to the Illinois SIP. The Agency has, however, reviewed the petition for variance, the applicable air quality standards, the most recent Illinois Annual Air Quality Report and all other information which would normally be necessary to obtain approval of a revision to the SIP by USEPA. The Agency believes that if the Board adopts an order consistent with its recommendation, the order should be approvable as a SIP revision. If the variance is granted, therefore, the Agency will submit it as a SIP revision at such time as USEPA approves the

regulation in question, unless the variance has already expired by that time.

Finally, at hearing and by letter, Glaco expressed concern over the Agency's condition E which required that VOC emission levels "shall not increase to more than representative 1983 levels" (Rec. at 12). Glaco sought clarification of this term stating that they wished to know "whether a 4-5% increase over 1983 would be within acceptable limits of the definition 'representative 1983 levels'" (letter of May 9, 1985). By amendment to its recommendation, the Agency stated that the inclusion of condition E was intended to guard against a drastic increase in VOC emissions but that as much as a 10 percent increase over 1983 VOC emission levels would be representative for purposes of condition E. The Board shares Glaco's concern that it not be precluded from increasing production levels should it become necessary to do so. However, the Board does not wish to exempt Glaco entirely from regulation. Accordingly, the Board will condition this variance upon the use of coating materials with a VOC content less than or equal to the presently used materials. Unfortunately, the facts necessary to set a precise level are lacking.

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

#### ORDER

Glaco Corp. is hereby granted variance from 35 Ill. Adm. Code 215.204(j)(1) and 215.205 for one year subject to the following conditions:

1. Glaco shall use coating materials which have a VOC content less than or equal to those presently used.
2. During the term of this variance, Glaco shall submit quarterly written reports to the Agency detailing all progress made in achieving compliance with 35 Ill. Adm. Code 215.204(j)(1) and 215.205 at its plant located at 1949 N. Cicero, Chicago. The first quarterly report will be due thirty (30) days from the date of the Board order granting the variance. These quarterly reports shall include monthly information on the quantity and solvent content of all new and used bakery pan coatings applied during the reporting period, as well as monthly VOC emission data from each coating line. The first quarterly report shall also include copies of material data sheets showing the composition (in terms of percentage of solid, solvent and water) of all coatings and reconstituting solvent used during the bakery pan coating processes. All of the above information shall be submitted to the Agency at the following addresses:

1. Manager, Permit Section  
Division of Air Pollution Control  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62706
2. Manager, Field Operations Section  
Division of Air Pollution Control  
Illinois Environmental Protection Agency  
1701 South First Avenue  
Suite 600  
Maywood, Illinois 60153

3. Within thirty (30) days of the entry of the Board Order granting a variance, Glaco shall reapply for an operating permit for its coating lines (I.D 031600ADD, No. 75060010), pursuant to 35 Ill. Adm. Code 201.157.

4. No later than ninety (90) days prior to the initiation of construction of a VOC control system, Glaco shall submit an application for a construction permit for that system in accordance with 35 Ill. Adm. Code 201.152. Construction shall not begin until a construction permit is issued. Operation of the emission control system is not allowed until an operating permit is issued by the Agency, pursuant to Section 35 Ill. Adm. 201.143.

5. The Agency shall be notified in writing at the addresses provided in Condition 1 above of any stack tests to be performed at the facility at least five working days before such stack tests take place. Agency personnel may witness any such test.

6. This variance will expire one year from the date of the Board Order granting the variance.

7. Within forty-five (45) days after the date of this Order the Petitioner shall execute and send to:

Mr. Joseph R. Podlewski, Jr.  
Enforcement Attorney  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62706

a certification of acceptance of this variance by which it agrees to be bound by its terms and conditions. This forty (45) day period shall be held in abeyance for any period which this matter is appealed. The form of the certification shall be as follows:

CERTIFICATION

Glaco Corp. hereby accepts and agrees to be bound by all terms and conditions of the Order of the Pollution Control Board in PCB 85-29, June 27, 1985.

GLACO CORP.

BY: \_\_\_\_\_  
As Authorized Agent

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

IT IS SO ORDERED.

B. Forcade concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 27<sup>th</sup> day of June, 1985, by a vote of 6-0.

Dorothy M. Gunn  
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Illinois Pollution Control Board