

ILLINOIS POLLUTION CONTROL BOARD
January 27, 1971

OWENS-ILLINOIS, INC.)

v.)

ENVIRONMENTAL PROTECTION AGENCY)

#70-31

Opinion of the Board (by Mr. Currie):

Owens-Illinois manufactures glass containers in Chicago Heights, Illinois. It requests a variance to permit continued emissions of particulate air pollutants from two furnaces during the period required to bring them into compliance with the regulations.

The furnaces in question (known as "B" and "D") are used to make borosilicate glass, a special type used to bottle certain drugs because of its extraordinary resistance to chemical attack, which assures the purity of the medicine (R. 23-25, 72). Furnace B, which is continuously operated to produce colorless borosilicate, has a capacity of 35 tons per day, is operated at 30 tons per day, and is estimated by the company to emit 20 pounds of particulates per hour, described as 70% "sodium and potassium borates, and 30% . . . sodium and calcium chloride" (R. 45, 120, 126). Furnace D, which is operated about 90 days per year to produce amber borosilicate, has a capacity of 15 tons per day and is said to emit 7 pounds per hour of the same contaminants when operated at 11.5 tons per day (R. 31-32, 45, 120, 126; petition, p. 5). Amber glass has the advantage of protecting light-sensitive drugs from deterioration (R. 72-73).

The Rules and Regulations Governing the Control of Air Pollution, adopted by the Air Pollution Control Board in 1967 and preserved by section 49 of the Environmental Protection Act, limit particulate emissions in accordance with a process weight table (Rule 3-3.111, Table I); allowable emissions from furnaces B and D, on the basis of the operating figures reported by the company, are 4.6 and 2.5 pounds per hour, respectively. Rule 2-2.11 makes this table applicable to existing as well as to new equipment, and a grace period was afforded by Rule 2-2.2 for bringing older equipment into compliance.

Owens-Illinois submitted a timely letter of intent to file a program for achieving compliance (ACERP), and its compliance program was approved by the old Board November 7, 1968 (Ex. 4 to EPA recommendation). This program promised compliance by October 1970,

relying upon tests of scrubbing equipment on a similar furnace in New Jersey (ibid; R. 38-39). The scrubber failed, pilot tests were run on other control devices, and in March 1970 the company decided to install an electrostatic precipitator on furnace B (R. 40-42, 61-66). The precipitator is expected to have an efficiency of 95% and to bring the emissions into compliance (R. 88); The collected dust is to be recycled (R. 90). Because the precipitator will not be in operation until May 15, 1971, this request for a variance was filed, seeking permission to continue emissions from furnace B in excess of the regulation limit until that date. Moreover, the company asks that we permit operation of Furnace D without controls until three months after the Furnace B precipitator is in operation, in order to determine how to control emissions from that source.

We have no difficulty in granting the variance with regard to Furnace B. So far as the record shows, this has not been a case of undue delay; the company has invested considerable money in an effort to discover a solution to a particulate emission problem that has never been controlled before. While electrostatic precipitators have been in common use in many other applications for many years, glass furnace emissions are high in resistivity and small in particle size and consequently present special collection problems (R. 85, 100-01). So far as the record indicates, the company has moved as rapidly as was feasible to bring this source under control. As for the hardship that would be imposed by requiring immediate compliance, to shut down the furnace would evidently require the layoff of a considerable number of employees (the plant employs 400), deprive the company of considerable sales (plant sales in 1970 were nine million dollars), and create a shortage of borosilicate glass containers, since it is thought unlikely that the sole other producer in the country could meet the increased demand (R. 35, 36, 26-27). On the other side of the balance, the record shows that emissions from the plant had been the subject of no complaints; that they were not toxic at concentrations to be expected as a result of plant operations; that those concentrations were a very small percentage of the ambient air quality standards set on the basis of the adverse effects of generalized particulate matter; and that winds 90% of the time blew in a direction away from the only residences in the vicinity (R. 12, 33, 46-47, 120-23). Several Owens-Illinois customers (R. 27-30), the mayor of Chicago Heights (R. 33-34), and the two plant unions (R. 36-37) asked that the variance be granted; the EPA investigation turned up no complaints from the neighbors, most of whom thought the company should be given time to bring emissions under control (R. 9-12). We think, in light of the company's progress toward controlling a novel type of emission, the undeniably substantial hardships of an enforced closing, the absence of a serious local nuisance, and the short time before completion of the

program, that Owens-Illinois has sustained its burden of proving that to require compliance before May 15, 1971 would impose an arbitrary or unreasonable hardship. Cf. Ozark-Mahoning Corp. v. EPA, #70-19.

The request for an additional three months beyond May 15 before submitting a plan for controlling Furnace D presents a somewhat different issue. The company argues that it would be arbitrary and unreasonable to require it to commence building a precipitator for this second furnace before it knows that the precipitator will satisfactorily control the emissions from Furnace B. Emissions from Furnace D are only seven pounds per hour during operation, and the furnace is to be run only 90 days per year; a precipitator to control it is estimated to cost a quarter of a million dollars (R. 147, 158). The company's most persuasive point is based upon the newness of the application of precipitators to glassmaking: "Rather than make two mistakes that size, that we only make one and learn from it whether an electrostatic precipitator is the thing to put on a "D" furnace" (R. 147).

Although tests of the B precipitator will not be conclusive as to the fate of Furnace D, (R. 76, 102-03), we agree that because of the newness of the technology for controlling glass furnace emissions and the small amounts of matter emitted the company is entitled to a little extra time to evaluate the success of one precipitator before spending large sums on another. We stress that this is a very special case; that emissions are small does not mean they do not contribute to the overall pall or that they can be permitted to continue indefinitely. Since Furnace D is operated intermittently, and since orders for its use are regularly accumulated (R. 32), we think it not too much to require that a firm plan for achieving compliance be submitted and approved before the furnace is operated again after May 15.

Accordingly we shall grant a variance for Furnace D to permit no more than 45 days' operation between now and May 15, 1971. This limitation is consistent with the company's own schedule (R. 32). If the company wishes to operate Furnace D thereafter, it shall file no later than July 15 a new variance petition setting forth a firm plan for achieving compliance in the shortest time practicable.

A bond or other security in the amount of \$10,000, as requested by the Agency, will be required to assure compliance with the terms of the order. Cf. Ozark-Mahoning Co. v. EPA, supra.

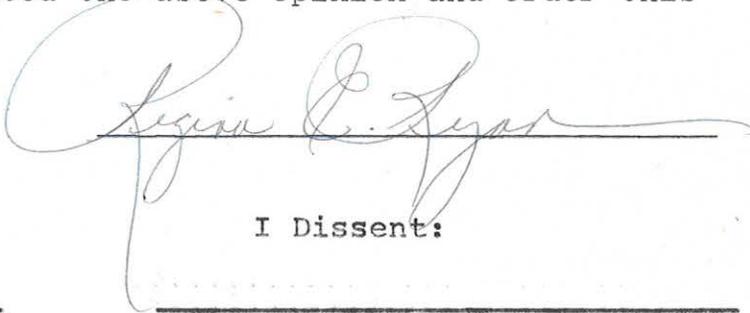
This opinion constitutes the Board's findings of fact and conclusions of law.

ORDER

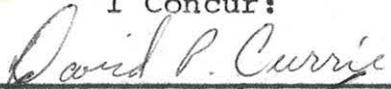
After due consideration of the record, it is the order of the Board that the request of Owens-Illinois Co. for a variance be granted subject to the following conditions:

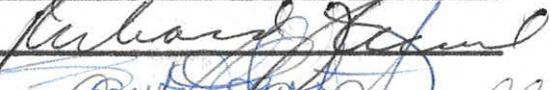
1. Furnaces B and D may emit particulate air contaminants in excess of the regulation limits until May 15, 1971, but not in excess of the emission levels specified in the record.
2. Furnace D shall not be operated more than 45 days during the period of this variance.
3. If Owens-Illinois wishes to operate Furnace D after May 15, 1971, it shall submit to the Board and to the Agency by July 15, 1971, a petition for a new variance to pursue a firm plant for bringing emissions from Furnace D into compliance as expeditiously as practicable.
4. Owens-Illinois shall post with the Environmental Protection Agency by February 15, in a form agreeable to the latter, a bond or other adequate security in the amount of \$10,000, to assure compliance this order.
5. Failure to comply with the conditions of this order shall terminate the variance.

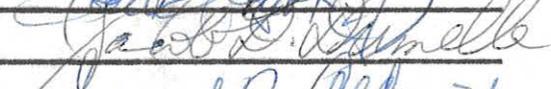
I, Regina E. Ryan, Clerk of the Pollution Control Board, certify that the Board adopted the above opinion and order this 27th day of January, 1971.



I Concur:









I Dissent:

