

ILLINOIS POLLUTION CONTROL BOARD
December 20, 1977

ENVIRONMENTAL PROTECTION AGENCY)
)
 Complainant,)
)
 v.) PCB 76-35
)
 TRUMBULL ASPHALT, DIVISION OF OWENS-)
 CORNING FIBERGLASS CORPORATION,)
)
 Respondent.)

MS. ANNE K. MARKEY, ASSISTANT ATTORNEY GENERAL, APPEARED FOR
THE COMPLAINANT.
HALFPENNY, HAHN AND ROCHE (Mr. James F. Flanagan, of counsel),
ATTORNEYS AT LAW, APPEARED FOR THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by Mr. Werner):

I. LEGAL BACKGROUND

This matter comes before the Board on the February 6, 1976
Complaint brought by the Environmental Protection Agency
(Agency) charging Trumbull Asphalt Company of Delaware
with violations of Rules 103(a) and 103(b)(2) of Chapter 2:
Air Pollution (Chapter 2) and Section 9(b) of the Environmental
Protection Act (Act). Hearings were held on September 30,
1976 and November 15, 1976. The parties filed a Stipulation
and Proposal for Settlement on November 7, 1977.

In the stipulation, the parties have agreed to strike
Trumbull Asphalt Company of Delaware as a party Respondent
and put Trumbull Asphalt, Division of Owens Corning
Fiberglass Corporation (Trumbull-Owens) in its place.
The Board hereby substitutes Trumbull-Owens as the party
Respondent.

II. FACTUAL BACKGROUND

Trumbull-Owens owns and operates an asphalt manufacturing
plant located about 14 miles southwest of Chicago's Loop
area in Summit, Illinois.

The plant site itself and land to the south is zoned I-2 "limited industrial," while land to the north (including Summit Park) is zoned I-1 "light industrial." Chicago's Midway Airport is located 2 1/2 miles to the east and a large industrial area known as the Clearing District stretches out along the Belt Railroad southeast from the plant site.

The Trumbull Summit Plant produces airblown asphalt for roofing, paving, and specialty products. The plant is one of the largest airblown asphalt operations in the country, producing an average of 1,000 tons of asphalt a day. The plant employs a staff of 65 people, and operates 3-production shifts (i.e., 24 hours per day).

The asphalt production operation consists of loading flux oil products into feed tanks. A preheater-afterburner warms the flux before it is sent to one of 9 vertical oxidation stills. Once in the still, air is then passed through the flux, which dehydrogenates the crude material. The oxygen combines with hydrogen in the flux to form water vapor. This loss of hydrogen results in polymerization or condensation of the flux into asphalt of the desired consistency.

The exothermic nature of the airblowing process liberates a great amount of heat. The product is continuously removed and the vapors are run through a knockout drum and then the heat and remaining off gases are circulated back to the preheater-afterburner to be incinerated. The off gases contain sulfur compounds and hydrocarbons as gases and aerosols.

Once the desired consistency is obtained in the stills, the asphalt is circulated to storage tanks until needed for shipping. Asphalts are delivered to large usage customers by tank trailers or railroad cars which are loaded from overhead racks.

The preheater-afterburner carries on several functions. Material from several of the storage tanks may be circulated through each of the preheater-afterburners to absorb excess heat. The heated material is then circulated back to the storage tanks. This assists in keeping the asphalts in a liquid state.

There are four process areas in the Trumbull-Owens plant that may be run independently of each other. These four systems are referred to as Bulk Roofing Process No. 1, Bulk Roofing Process No. 2, Specialty Roofing Process and Paving Products Process. The two areas that serve multiple process lines contain feed and storage tanks only.

As an integral part of the aforesaid facility, Trumbull-Owens operates 5 truck loading racks, 30 hot asphalt feed and storage tanks, and 9 stills all of which are capable of emitting odorous hydrocarbons. All of this equipment was operational prior to April 14, 1972 and has been operated continuously without an Agency Operating permit. Trumbull-Owens in the stipulation admits to a violation of Rule 103(b)(2) of Chapter 2 and Section 9(b) of the Act.

III. STIPULATION AND SETTLEMENT

Trumbull-Owens agrees to undertake compliance measures in strict accordance with all the terms and conditions of the detailed compliance plan delineated in the Stipulation and Proposal for Settlement.

This detailed compliance plan contains 22 specific steps to be taken pertaining to Trumbull-Owens' asphalt converter stills, loading docks and asphalt storage tanks in order to safeguard the environment.

Compliance measures concerning its 9 asphalt converter stills include:

- (a) Strict numerical temperature controls on preheaters #1, 2, and 3 when batch and continuous stills are in operation;
- (b) Zero opacity will be maintained on all pre-heater stacks at all times;
- (c) A preventive maintenance program which includes periodic inspection of the explosion lids on the converters for possible "break-throughs" or defects (as well as a point-by-point log on all activities) will be submitted to the Agency within 60 days after the acceptance of the settlement stipulation by the Board;
- (d) Trumbull-Owens will maintain a log of all complaints received concerning asphalt related odor. The log will be available for inspection by representatives of the Agency. Trumbull-Owens agrees to make an investigation on any odor complaint and report back to the complainant; and

- (e) The Agency will be notified for any increase in production using current equipment. In the event of any further increase in load on the converters, Trumbull agrees to perform a stack test to determine compliance.

Compliance measures concerning the 5 truck loading racks include:

- (a) Installation and use (within two months of the Board Order approving this settlement) of a specialized loading dock structure to combine the two loading racks located between tanks #17 and #40. Its use will reduce truck loading time from 25 minutes to approximately 6 minutes. This time reduction, along with an increased updraft, will greatly reduce the venting of fumes to the atmosphere. Fumes from loading operations will be ducted to the afterburner-incinerator;
- (b) The fume recovery system for the loadout rack on stills #6, #7, #8 and #9 will be modified to increase the suction pressure and to control adequately fugitive emissions during loading operations;
- (c) Trumbull will notify the Agency of any complaints concerning asphalt related odor at times when the emergency load out rack for stills #1 and #2 is used. If the Agency determines that the use of this load out rack creates an odor problem, then either Trumbull will install an incineration or vapor recovery system that is adequate to control fugitive emissions, or it will cease to use the load out rack for stills #1 and #2 at any time; and
- (d) The afterburner-incinerator for vapor recovery will be equipped with a control system and a stack test will be performed in the afterburner to determine its conversion efficiency. This will be performed within 3 months of the Board's approval of this settlement, and the Agency will be informed prior to the test.

Moreover, the afterburner-incinerator will have a **retention** time of one-half second at 1200° F. Trumbull will modify the incinerator if necessary to insure that the retention time, flow rate, and temperature are adequate to treat all vapor recovery systems connected to the incinerator.

Compliance measures concerning the 30 hot asphalt feed and storage tanks include:

(a) Vapor emissions from tank #33 are bubbled into a 55 gallon drum filled with water. If this arrangement is inadequate to control odor emissions from tank #33, then Trumbull will install a fume scrubber similar to the scrubber on tank #15. Prior to reactivation of tanks #46, #47, #48, and #49, they will be provided with an adequate vapor recovery or incineration system;

(b) The fume scrubber controlling the fumes from tank #15 will be operated at all times when asphalt products are loaded or unloaded;

(c) Tank #11 is used to store #63 oil and is heated to a temperature of 450° F. Trumbull will install an automatic temperature control device and a vapor recovery system on this tank;

(d) Tanks #9, #10, #12, #13 and #14 are raw material storage tanks for the specialty roofing process and are normally maintained at temperatures below 325°F. Storage tanks #1, 2, 3, 4, 5, 6, 7 and 8 are currently used for fuel oil shortage. Therefore, none of these tanks currently need vapor control systems. However, if Trumbull at any time desires to use any of these tanks for hot products, it will provide an adequate vapor recovery or incineration system for each tank so used.

Other provisions of the compliance plan include the following requirements:

(a) Trumbull will apply to the Agency for construction and operating permits for any modifications to its afterburner -incinerator or vapor recovery systems that it is making currently or that it plans to make in the future. and,

(b) Within 12 months after the Board's approval of this settlement, Trumbull will have completed all the requirements of this Compliance Plan and will have obtained all necessary permits from the Agency. If Trumbull is unable to comply with any time limit in the compliance plan due to circumstances beyond its control, an extension of that time limit may be allowed by agreement of the parties and approval by the Board.

Parenthetically, the Board has noted that the Stipulation and Proposal for Settlement appears to have two typographical errors. Paragraphs 7 and 8 of the Stipulated Background Facts refer to the "equipment described in paragraph 7." Since no equipment has, in fact, been described in paragraph 7, the phrase "the equipment described in paragraphs 5 and 6" was obviously intended. Moreover, on the last page of the settlement proposal, the address to which penalty payment shall be made is hereby corrected to read "State of Illinois, Fiscal Services Division, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Ill. 62706."

The Board accepts the Stipulation and Proposal for Settlement and finds Trumbull-Owens in violation of Rules 103(a) and 103(b)(2) of Chapter 2 and Section 9(b) of the Act from February 1, 1973 until February 6, 1976. The Board imposes the stipulated penalty of \$5,000.00.

This Opinion and Order constitute the findings of fact and conclusions of law of the Board.

ORDER

It is the Order of the Pollution Control Board that:

1. Trumbull-Owens has violated Rules 103(a) and 103(b)(2) of Chapter 2 and Section 9(b) of the Act from February 1, 1973 until February 6, 1976.

2. Within 30 days of the date of this Order, Trumbull-Owens shall pay the stipulated penalty of \$5,000.00, payment to be made by certified check or money order to:

State of Illinois
Fiscal Services Division
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

3. Trumbull-Owens shall comply with all terms and conditions of the Stipulation and Proposal for Settlement filed November 7, 1977, which is incorporated by reference as if fully set forth herein.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 20th day of December, 1977 by a vote of 5-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board