ILLINOIS POLLUTION CONTROL BOARD May 2, 1974

ENVIRONMENTAL PROTECTION AGENCY,

Complainant,

vs.

PCB 72-309

TRILLA COOPERAGE, INC.,

Dennis R. Fields, Assistant Attorney General, on behalf of the Environmental Protection Agency;

Francis X. Riley, Attorney, on behalf of Respondent.

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

Respondent.

On July 26, 1972, the Environmental Protection Agency filed Complaint against Trilla Cooperage, Inc., the owner and operator of a drum reconditioning facility upon premises at 3201 South Millard, Chicago, County of Cook, Illinois.

The Agency alleges that during the period beginning on or before October 28, 1971, and continuing at least to the date of its Complaint, Respondent operated its drum reconditioning facilities and equipment in such a manner as to violate Section 9(a) of the Environmental Protection Act, (III. Rev. Stat., Ch. III 1/2, §1009(a), 1971), by causing, threatening, or allowing the discharge or emission of gaseous hydrocarbon solvents, sodium hydroxide solution and trisodium phosphate solution into the environment in Illinois in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, and thereby causing or tending to cause air pollution in Illinois, either alone or in combination with contaminants from other sources.

More particularly the Agency alleges that drums are sprayed with enamel in the paint-spray booths and are dried in paint-baking ovens, that this process results in the emission of gaseous hydrocarbon solvents into the ambient air through stacks in the paint-spray booths and in the paint-baking ovens and that neither the paint-spray booths nor the paint-baking ovens are controlled to prevent or reduce these aforementioned emissions.

The Agency further alleges that closed-headed drums are washed in a chamber with sodium hydroxide solution and trisodium phosphate solution, that this process results in the emission of sodium hydroxide solution and trisodium phosphate solution, entrained in a steam plume, into the ambient air through stacks in the chamber, and that the chamber is not controlled to prevent or reduce these aforementioned emissions.

Finally, the Agency alleges that the emissions of hydrocarbon solvents, sodium hydroxide solution, and trisodium phosphate solution by Respondent result in, without limitation, pungent and irritating odors, eye irritations, damage to mucus membranes, atmospheric reactions with other elements producing photochemical smog, or damage to property.

Public hearings were held in this matter on May 31, 1973, August 9, 1973 and August 10, 1973. The transcripts from the three days of proceedings are not numbered consecutively. Therefore, citations to the transcript of May 31, 1973 will be indicated by the page number, and citations to the transcripts of August 9 and 10 will be indicated by the page number followed by a (1).

Respondent has been operating the subject facility since $1957 \ R. 5(1) \ J. Trilla operates from 7:30 a.m. to 5:00 p.m., five days per week R. 138. Residential areas are located directly to the north and west of Respondent's facility. A few light industries and businesses are located to the south and east <math>[R. 177 (1)]$.

Fifty-five (55) gallon steel drums are brought to the plant in Respondent's trucks and trailers. The drums are both open-headed drums covered with a lid and closed-headed drums with a screw cap [R. 142]. The drums have been received with up to two inches of residue in them [2. 144]. The open-headed drums had contained such materials as petroleum, petroleum by-products and derivatives and solvents [R. 143; 6(1)]. These drums may be stored in Trilla's yard for up to nine (9) months on a rotating stock inventory before they are reconditioned [R. 145]. At Respondent's facility, the open-headed and closed-headed drums are reconditioned by two separate processes [R. 19(1)].

The open-headed drums are first placed on a conveyor and sent to a drum incinerator to remove the outside and inside coatings from the drum. The incinerator has a champer about 60 feet long and produces a gas-fired flame. All of the gases go up a stack into an afterburner. The afterburner has been used by Trilla since 1957 [R. 19, 160-161(1)].

The open-headed drums then go to a sandblaster and to a drum straightener. From the drum straightener, the drums go to the spray coating operation [R. 20(1)]. Respondent uses five (5) paint spray booths to coat its open-headed drums [R. 150]. The booths are 10 feet square. The drum is placed between the man spraying the drum and the back of the booth. The man uses a spray gun which causes a stream of enamel to be shot towards the drums. That portion of the material not adhering to the drum is called overspray. These booths are equipped with filters located behind the drums. Behind the filter is a fan which pulls the air through the booth and forces it out through a stack through the roof to the atmosphere [R. 21, 161-162(1)]. These types of booths are standard means of applying paint to an object and are in common usage [R. 21-22(1)]. The booths are used nine (9) hours a day and are located in the center of Respondent's main building [R. 157-158].

Respondent sprays in excess of thirty (30) gallons an hour of enamel [R. 9(1)]. The enamel weighs between 8 and 8.5 pounds per gallon [R. 13(1)]. The paint is an alkyd enamel [R. 12(1)], and is between 45% and 53% solvent, depending upon the color used [R. 12(1)].

The drums then go from the booths to the paint bake ovens. The ovens are approximately 60 feet long. They are gas fired. The barrels are moved continuously through the ovens [R. 161]. The ovens have exhaust stacks through the roof [R. 169(1)]. The bake ovens evaporate the solvent portion of the enamel still present on the drums when they enter the oven [R. 30(1)].

The closed-headed drums undergo a different reconditioning process. The closed-headed drums are first sent to an exterior washer. The drums pass through a thirty-foot long chamber. In that chamber, the drums are sprayed with hot water and a heated solution to remove contaminants [R. 34-35, 170(1)]. The solution is a sodium hydroxide (caustic) detergent purchased from Koal Chemicals [R. 11, 34, 206(1)]. Prior to August 1972, Trilla used a sodium hydroxide solution which was heated to 190°. It subsequently purchased the Koal sodium hydroxide solution which is heated to 120°. [R. 179-180]. The chamber has a stack to the atmosphere [R. 35(1)].

The closed-headed drums are then straightened and sent to an interior washer. The interior washer consists of ten (10) detergent and rinsing tanks where contaminants are removed from the inside of the drums $[R.\ 170(1)]$. The drums then go to a sandblaster, to a paint spray booth and to a paint bake oven. These booths and ovens are very similar to those used with the open-headed drums, the only difference being that the closed-headed paint spray booth has a water wash as opposed to filters $[R.\ 44-46(1)]$.

Between 108 and 135 pounds per hour of solvents are used in Respondent's painting operation. This is between 972 and 1215 pounds per day [R. 50-51(1)]. All of the solvents used by Respondent are emitted to the atmosphere from Respondent's plant, primarily through stacks from the booths and the ovens [R. 50, 24-26(1)].

Respondent's paint spray booths are controlled only by filters or water washers R. 160; 45(1). The purpose of the filter and the water wash is to trap the solid portion of the enamel. None of the solvents is controlled by these devices [R. 21, 24-26, 45, 50(1)]. There are no pollution control devices on the ovens [R. 170; 32(1)].

The exterior washer used by Respondent emits detergent entrained in the water vapor plume. This water vapor with the entrained detergent is emitted from the exhaust stack of the washer R. 36-37(1).

Seven citizens who reside in the vicinity of Respondent's facility testified at the hearings. Their testimony was to the effect that obnoxious paint and/or detergent odors, allegedly emanating from Respondent's facility, were interfering with the enjoyment of their lives and property. A summary of their testimony follows:

Mrs. Barbara J. Jones (R. 7-41) lives in an apartment at 3200 South Millard with her two children. She is thirty-five years old, widowed and has lived at that address for ten years. Her home is located directly across the street from Respondent. She has been smelling paint odors from Respondent's facility since she has been living there. These paint odors enter her home when the wind blows from Respondent's direction. Both she and her son frequently get headaches from the paint odors. The paint odors last almost all day. She has noticed no change in the intensity of the odors since has lived there.

Mrs. Tamara Harmon (R. 41-55) lives with her husband in their home at 3153 South Millard. They have lived there for twenty-three years. Mrs. Harmon is 63 years old. Mrs. Harmon has smelled paint and detergent odors around her home. Last summer, she smelled these odors every day. The odors frequently drove her from her garden into her house. She stated: "It used to be so bad you got to go in you can't breathe" and "It's so strong I have to go in. You choke and it was real strong."

Mr. George L. Harmon (R. 56-70) is the husband of Tamara. Respondent is located directly south of their home. Mr. Harmon testified to smelling obnoxious detergent odors around his home. He has smelled this odor in his home at times. He smells it when the wind is from the south. This odor has driven him from his yard and garden and forced him into his home. While he testified that the detergent odors have been less intense, he still characterized them as obnoxious.

Mrs. Nada Panovich (R. 70-88) lives in an apartment building she owns at 3208 South Millard. She lives there with her husband and two children, ages 9 and 4. They have lived there for 2-1/2 years. Respondent is located to the east across the street. Mrs. Panovich has smelled a paint odor in and around her home since she moved in.

She testified that:

"Well, of course, you can smell it in your home. You smell it outside, you smell it even if you open up the windows. If my boys come from school you open the door and you smell it right away. I can't help that." (R. 75)

and

"It (the odor) makes you feel like you don't want to eat. It makes you feel like you don't have an appetite. You don't feel like you want to do anything or nothing. I don't like it. --- You feel like sometimes, I can't say yesterday, but sometimes it is so bad that you feel like you want to faint or something. You feel so weak, maybe it's just me, I don't know." (R. 73-74)

Mr. Jerry Dukes (R. 88-104) lives in an apartment at 3208 South Millard with his wife and five children. His apartment is across the street from Respondent. He smells odors from Trilla in his home every day that the Respondent's plant is running. His children have complained to him about the odors. When Mr. Dukes would work nights and sleep days, the odors would disturb his sleep.

Mrs. Valeri Strand (R. 104-118) lives with her husband in their cottage at 3224 South Millard. They have lived there for 22 years. She is 63 years old. She has smelled obnoxious odors whenever the wind blew from Respondent's direction for the 16 years that Respondent has been there. She described the worst odor from Respondent as a kind of burnt paint odor. She testified that, at times, the odor is so strong she could not breathe. The odors give her headaches.

Mrs. Helen Smitka (R. 118-136) lives alone in her house at 3220 South Millard. She is 67 years old and has lived in that house for 49 years. Mrs. Smitka retired in 1967 and does housework and tends her garden. She testified that when the wind blows from Respondent's direction she gets a paint odor. The odor makes her eyes tear, makes it difficult to breathe, and makes her sick. Sometimes, the odor seeps into her home and makes her sick. The odor sometimes lasts all day. The odors have forced her to stop work in her garden. She testified that guests comment on the odors.

Mr. Steven Rosenthal, an Agency engineer, testified that he smelled detergent odors downwind of the exterior washer and paint odors downwind of the central part of the plant during his investigation R. 36, 61(1).

Respondent's witness, George Zarem, who supplies paint to Respondent, testified to the effect that the "paint" odor complained of could not be attributed to the paint solvents emitted from Respondent's facility because the odor of paint solvent is milder and different from the characteristic odor of paint R. 216-222(1). We do not find this position convincing.

This Board is satisfied that, from the testimony presented and the physical facts adduced, Respondent's operation constitutes an odor nuisance and a continuing violation of Section 9(a) of the Environmental Protection Act in that the gasses emitted from Respondent's facility are of such quantity and characteristics as to unreasonably interfere with the enjoyment of life and property of those persons in the vicinity.

Estimates of the cost of compliance to Respondent range to \$263,500 R. 55-57(1). Nevertheless, our Order will require Respondent to submit a compliance schedule for quick abatement of the odor nuisance.

Respondent, in its Brief, vigorously argues that to speak of eliminating the odors at such a cost is "offensively punitive" and tantamount to confiscation. (Respondent's Brief, p. 10). Respondent's attention is directed to Rule 205(f) of the current Air Pollution Regulations. The provisions of Rule 205(f) are now applicable to Respondent's operation and to all similar operations throughout Illinois; compliance is mandatory; exceptions arise only by individual variance proceedings before this Board.

This Opinion constitutes the findings of fact and conclusions of law of the Board.

IT IS THE ORDER of the Pollution Control Board that Respondent, Trilla Cooperage, Inc., shall:

1. Within 60 days of the date of this Order file with the Agency a statement detailing the abatement procedures it intends to implement in order to achieve compliance with the Act within one year. Respondent shall obtain all necessary permits pursuant thereto.

2. Pay to the State of Illinois \$1500.00 within 35 days from the date of this Order. Penalty payment by certified check or money order payable to the State of Illinois shall be made to: Fiscal Services Division, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706.

Christanol Moffett