

ILLINOIS POLLUTION CONTROL BOARD

June 28, 1973

ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
 Complainant, )  
 )  
 vs. ) PCB 72-405  
 )  
 PAR STEEL PRODUCTS COMPANY, )  
 )  
 Respondent. )

Dennis Fields, Assistant Attorney General for the EPA  
Robert Brislsman, Attorney for Par Steel Products Company

OPINION AND ORDER OF THE BOARD (by Mr. Henss)

Respondent Par Steel Products Company is a Chicago manufacturer of steel shelving. The Environmental Protection Agency alleges that the Company emitted excessive particulate matter and gaseous hydrocarbon solvents between November 29, 1971 and October 13, 1972 in violation of Section 3-3.111 of the Rules and Regulations Governing the Control of Air Pollution and Section 9(a) of the Environmental Protection Act. It is also claimed that Par Steel installed and operated equipment without an Agency permit in violation of Section 9(b) of the Act.

Par Steel Products began the fabrication and painting of steel shelves at its present location in 1966. Equipment at the plant includes steel forming apparatus, two spray paint booths and a paint baking oven. About 25 persons are employed at the plant.

Vivid descriptions in the record provided by the ten witnesses leave no doubt in our mind as to the effect of air pollution caused by Respondent. These witnesses testified that they had burning throats, eyes, nostrils and lips (Jan. 10, R. 65, 76, 113, 163), headaches, (Jan. 10, R. 15, 76, 142), and nausea (Jan. 10, R. 15, 61, 64, 70, 134, 154) from almost daily fumes and odors (Jan. 10, R. 17, 72, 78, 124, 135, 153, 171), from a source positively identified as Respondent's plant (Jan. 10, R. 17, 79, 108, 114, 135, 154, 169). This odor was variously described as a paint, naptha, DDT, toxic, or nauseous odor and as a rancid, stale or burning oil odor. There were several indications that the oil odors were different from the other odors (Jan. 10, R. 18, 134) and occurred at different time periods from the other odors.

The witnesses agreed that the odor problems started only after Respondent began operations at the site (Jan. 10, R. 20, 61, 104). Donna Marciniec testified that her daughter would complain of headaches after playing outside near the Par plant (Jan. 10, R. 28). Jeanette Mason testified that her grandchildren could not play outside because of the odors and that her expectant daughter had become very sick after being outside in the fumes (Jan. 10, R. 82). Others testified that outdoor activities were severely restricted because of the odors (Jan. 10, R. 64, 119, 141, 156) and that they were forced to keep their doors and windows closed in an effort to keep the odors out (Jan. 10, R. 64, 70). The witnesses were unanimous in describing the odors as more intense during the summer period (Jan. 10, R. 35, 77, 107, 113, 133) and in the observation that they could notice no improvement in the quantity or duration of odors over the last several months (Jan. 10, R. 86, 105, 117, 147, 163).

Many of the witnesses had observed that the finish was pitted or there were paint specks on their automobiles (Jan. 10, R. 25, 65, 70, 96, 113, 139). Testimony indicates that Respondent voluntarily paid for the cleaning, waxing and buffing of several automobiles (Jan. 10, R. 25, 65, 70, 98, 115). One witness testified that Phillip Rosenband, a Par Steel Vice President, had offered to air condition his home (Jan. 10, R. 118).

Perhaps the most vivid description of the odor problem and its effects was found in the testimony of Frances Gronek:

"I live right across the street from the place. I lived there 47 years, ever since Coach & Car was there. Then when they moved in there about a year after I could not have a window or a door open. I almost died from the smell. I get a queasy feeling in my stomach. My husband was paralyzed and I could not even open the window for him to get air. He died two years ago. He could not stand the smell in there. He said, "Give me something." I used to put a wet cloth on his nose so he could get some air. I could not have a door or window open in the summertime. I could not go out or sit out. I could not enjoy my yard or my flowers. My husband could not sit out on the porch. He was always in the house and when we went to bed at night my bedclothes smelled something terrible from that paint." (Jan. 10, R. 64-65).

The hearing officer for this case has indicated that the credibility of the prosecution witnesses may be lessened due to an overt hostility toward Respondent. Perhaps the testimony of Frances Gronek provides some insight into the reasons for the hostility.

Roy Campin, an inspector for the Chicago Department of Environmental Control, testified that he investigated Par Steel's operation in July of 1970 as a result of complaints from neighbors residing in the plant area (Jan. 11, R. 189). Campin detected what he described as slight odors in the area which he found noxious and which affected his nostrils (Jan. 11, R. 191) and burned his eyes (Jan. 11, R. 197). He stated that his investigation revealed that the odor problem appeared to result primarily from odors escaping through open shipping doors (Jan. 11, R. 196). Campin noticed this condition on numerous occasions and each time requested Par Steel officials to close the doors (Jan. 11, R. 206). The closing of the doors resulted in a noticeable reduction in odor intensity according to Campin (Jan. 11, R. 206). Campin's investigations continued through 1970, 1971 and into 1972 due to continuing complaints about odors and excessive noise (Jan. 11, R. 204). During an August 7, 1972 investigation Campin again detected odors coming from the open shipping doors and he cited the company for violating conditions which had been placed on Par Steel's Certification of Operation (Jan. 11, R. 221). Campin indicated that the doors were found closed on several subsequent visits until August 16, 1972, on which date he found the doors open again and very heavy odors near the open doors (Jan. 11, R. 225). He issued another citation and the company then ordered the paint spray operation shut down (Jan. 11, R. 226).

Campin testified that the Company Vice President had advised him of a change to water base paints about November 1972, after which Campin's investigation revealed a noticeable difference in odor intensity (Jan. 11, R. 232). Campin testified that he still detected some odor but had felt no physical effects from it (Jan. 11, R. 233).

The citations and citizen complaints led to a formal hearing on October 5, 1972 before the Chicago Department of Environment Control the outcome of which was the closing and sealing of the Par Steel plant by the City of Chicago (Mar. 6, R. 306). The plant was later allowed to reopen and has been operated since Jan. 1973 (Mar. 6, R. 309).

In defense, Par Steel presented testimony of several witnesses who reside near the plant. William Beyer, a part time Par Steel employee, testified that he could detect slight paint odors on muggy days at his residence which he testified was about "24 inches" from the plant (Mar. 6, R. 111). Beyer, his wife and his sister-in-law all testified that the odors and fumes from Par Steel had not affected them in their daily routines and that their children had played outside near the plant with no obvious ill effects or complaints (Mar. 6, R. 138, 161).

Burton Balsam, part owner and chief chemist for one of Par's paint suppliers, testified that his firm has been supplying paint for

the Par operation for about 5 years. Until late 1971, the paint was a baking enamel which contained an alkyd oil, a melamine hardening agent and formaldehyde (Mar. 6, R. 18-19). Balsam stated that certain components in the enamel were photochemically active and were "actually toxic to breathe in very large concentrations" (Mar. 6, R. 21). He also stated that the formaldehyde and solvents produced strong odors, were irritating to the eyes and lungs and were damaging to health for long term exposure (Mar. 6, R. 23-24).

Around January 1972, Balsam began supplying Par with a paint described as "low odor Peterson gray bake". This new paint was designed to meet all OSHA and California Air Pollution Regulations according to Balsam (Mar. 6, R. 26). He added that the low odor paint had only 10% to 15% cyclic hydrocarbon solvents but still contained the melamine hardening agent and the formaldehyde. Balsam felt that although the low odor paint would still be somewhat irritating to the eyes and nose and still detectable as an odor, it should have had no effect on Par's neighbors because it met the requirements of air pollution regulations (Mar. 6, R. 28, 35). However, when Par Steel officials still complained about the odors, Balsam testified that his company began development work on another type paint in order to solve the odor problem.

Balsam indicated that the newly developed paint had only recently been delivered to Par and was therefore not yet tested or in production use. The new paint according to Balsam is completely non-toxic, contains no melamine agents or photochemically active solvents and is no more irritating than the paint used by homeowners to paint their homes (Mar. 6, R. 40-42). The new paint is about 20% to 25% more expensive than that previously supplied to Par Steel.

Balsam testified that about 2/3 of his approximately 200 customers use water wash units for particulate control while the other 1/3 use only exhaust fans (Mar. 6, R. 97-98). He stated his belief that a water wash unit would effectively extract "anywhere from 25% to 50%" of the solvents in the air passing through the water (Mar. 6, R. 82). This testimony conflicts with findings of leading authorities in the field of air pollution control:

"Organic solvents used in coatings are not controllable by filters, baffles, or water curtains" (Air Pollution Engineering Manual, U.S. Department of Health, Education and Welfare, No. 999, AP-40, 1967, p. 390)

and

"The solvent concentration in the spray booth varies from 100 to 200 ppm. These solvents are not controllable by filters, baffles, or water curtains. Adsorption by use of activated carbon is the only feasible method for solvent control provided the particulates are removed from the contaminated air stream prior to adsorption". (Industrial Pollution Control Handbook, Herbert F. Lund, 1971, p. 12-13).

Agency investigator Krzymonski testified that he visited the plant on November 22, 1971 to investigate a complaint. Although the plant was not in operation on that date, Krzymonski and two other Agency investigators toured the facility and obtained information sufficient to calculate Par Steel's particulate emissions. Krzymonski calculated that emissions from the two spray booths totalled 0.80 lbs. particulates per hour and that the allowable rate was 0.58 lbs. particulates per hour (Complainant's Exhibit #2). Respondent did not submit any rebuttal testimony on these emission figures. Therefore, although the figures represent a minor particulate discharge from Respondent's plant, we find the Agency evidence sufficient to prove the violation charged. This is not a major factor in our assessment of penalty.

In EPA vs. American Generator, PCB 71-329 and EPA vs. General Classics, PCB 72-298 we held that permit violations in the City of Chicago prior to January 6, 1972 will not be penalized. Testimony here reveals that most of Respondent's equipment was installed prior to January 6, 1972. Par Steel's owner, Maurice Rosenband, testified that no pollution control or abatement equipment had been installed since January 1, 1972 other than filters on the water wash units and extensions on plant exhaust stacks. The filters were installed without permit in September 1972 for the express purpose of reducing emissions (Jan. 11, R. 273, 283). The stacks were extended in the summer of 1972 in order to provide better diffusion of odors (Jan. 11, R. 278). A small penalty will be imposed for these two permit violations.

Respondent claims that the Agency failed to prove that there was economically reasonable technology in existence during the period covered by the Complaint to control the odorous emissions. However, Agency investigator Krzymonski did discuss a variety of methods for the control of Par Steel's odorous emissions, including carbon adsorption units, after burners and water base paints (Jan. 11, R. 334-335). We believe that the Agency's position on the availability of adequate control measures is sound. The technology for adsorption by activated carbon has been adequately developed and is widely used for odor control throughout the country.

The evidence proves that Par Steel caused air pollution with its odor emissions. There was also a permit violation and a very minor particulate violation.

The company's attempts at pollution control have been minimal. The conditions endured by Par Steel's neighbors now call for a change of corporate attitude and a more effective effort for the control of the odorous emissions. If the new paint proves satisfactory Par will have eliminated its most important pollution problem. Our Order will allow the company a sufficient period of time to test the new paint for odor and time to investigate and install adequate

emission control equipment. Respondent should observe the requirement that EPA permits be obtained prior to installation of the control equipment.

We are concerned about the ability of Par Steel to provide adequate control equipment. Phillip Rosenband testified that the company had suffered a \$31,000 loss on sales of \$987,000 during the early months of 1972. He felt that Par Steel could not financially afford an after burner costing an estimated \$10,000 for installation and \$1500 per month in operating expenses. The company did make money during the five years prior to 1972 and it was expected that 1972 would finally show a profit. The record does not show the cost of an activated carbon adsorption unit and it is obvious that further consideration must be given to the company's financial picture.

We have no alternative, however, but to order the company to proceed ahead with its control program.

The odor violation was serious and would ordinarily call for a severe monetary penalty, but we believe Respondent's money is best spent in the control of the odor problem. A penalty of \$2,500 is appropriate.

ORDER

It is ordered that:

1. Par Steel Products Company shall pay to the State of Illinois by July 1, 1973 the sum of \$2,500 as a penalty for the violations found in this proceeding. Penalty payment by certified check or money order payable to the State of Illinois shall be made to: Fiscal Services Division, Illinois EPA, 2200 Churchill Road, Springfield, Illinois 62706.
2. Respondent shall within 60 days of the date of this Order submit to the Agency a compliance plan designed to bring Respondent's operation into compliance with our Regulations governing air pollution and emissions. The plan shall be designed to achieve compliance no later than 120 days from the date of this Order. Respondent shall cease and desist from its violations following the compliance date.
3. Respondent shall submit monthly progress reports to the Agency commencing on August 1, 1973, detailing the progress Respondent has made toward achieving compliance. The monthly reports shall include all pertinent information on the results of the low odor paint evaluation program.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order of the Board was adopted this 28<sup>th</sup> day of June, 1973 by a vote of 3 to 0.

Christan L. Moffett