

ILLINOIS POLLUTION CONTROL BOARD
September 12, 1974

ENVIRONMENTAL PROTECTION AGENCY)

v.)

PCB 71-358)

ALUMINUM COIL ANODIZING CORPORATION)

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

This action was brought by the Environmental Protection Agency (Agency) against the Aluminum Coil Anodizing Corporation (ACA), then located at 212 Northwest Highway, Fox River Grove, Illinois on November 15, 1971. Amended complaints were filed on February 8, 1972 and May 19, 1972. Respondent is charged with causing, threatening, and allowing the discharge, emission, and presence of sulfuric acid droplets or mist, nitric oxide, and noxious odors into the outdoor atmosphere and environment in violation of Section 9(a) of the Environmental Protection Act.

The Agency presented four citizen witnesses and one Agency engineer to testify. Respondent presented four witnesses of whom one was a professional photographer, and three were employees and still are employees of the firm. None of them live in Fox River Grove. The president of the company made a Discovery Deposition on May 18, 1973 and this was admitted as testimony in lieu of his personal appearance (EPA Ex. 14).

ACA operated an aluminum anodizing plant in the Village of Fox River Grove, McHenry County, Illinois. Five anodizing lines were operated, consisting of three coil lines and two piece lines. The lines were put into service at various times from 1961 to 1968. The operation was phased out starting in February, 1971 and the last line was taken out of service late in 1972. The coil lines were transferred to Respondent's plant in Streamwood, Illinois, while the piece lines were transferred to a plant in Ohio.

The anodizing process consists of applying a thin film of aluminum oxide on aluminum by passing an electric current through a 20%

solution of sulfuric acid, with the aluminum to be coated acting as the anode (positive electrode)(R. 20-21). The lead lining of the anodizing tank acts as the cathode (negative electrode). The applied voltage is between 15 and 20 volts. Hydrogen gas is given off at the cathode and escapes into the atmosphere (R. 21).

Additional tanks are used for rinsing, etching and brightening. Besides sulfuric acid, other chemicals used are phosphoric and nitric acids, and caustic soda, plus chemicals for dyeing and sealing, the nature of which are not specified.

The Agency produced four citizen witnesses all of whom complained of odors. Two of the witness described the odor as rotten eggs (R. 180 and 320). One described it as smelling like a combination sulfur or rotten eggs and ammonia (R. 358). The fourth said it was a smell with which she was not familiar and in addition it produced a metallic taste (R. 305 and 310).

The odors were strongest in the vicinity of ACA and especially downwind from ACA premises. It was testified that the emissions were visible when the effects were felt (R. 183).

Other effects claimed by the citizen witnesses were coughing, irritation of the eyes, scratchy throat (R. 310, 331, 369).

Property damage in varying degrees was also claimed. Testimony was also given by an Agency engineer who made four visits to the vicinity to investigate the complaint. His visits were on February 8, February 16, June 1, and July 8, all in 1971.

On his first, February 8, he noticed an acid odor downwind from the ACA plant and what appeared to be a water vapor plume from the roof (R. 13).

On his second visit, February 16, he was shown the inside of the plant by the President of ACA and observed the operation of one of the anodizing lines (R.18). While standing near one of the anodizing tanks, he felt a strong, overpowering acid odor which interfered with his breathing (R. 31).

The anodizing tank, which in this case was 3'x15'x3', held 1900 gallons of 20% sulfuric acid (R. 30). 15-20 volts was applied, resulting in hydrogen escaping at the cathode, which in this case is the lead lining of the tank.

The strong, overpowering odor was similar to, but much stronger than the odor previously felt outside the plant. He also smelled the odor downwind on this visit (R. 36).

On June 1, he again visited the vicinity of the plant and smelled the same acid odor downwind of the plant. On his July 8 visit the engineer took photographs of damage to vegetation and to a roof (Comp. Ex. 5).

Respondent admits to only the emission of hydrogen, water vapor and small amounts of nitric oxide (EPA Ex. 6). He produced four witnesses of whom one was a professional photographer and three were and still are employees of ACA. None are residents of Fox River Grove. All testified that they had never detected any odor outside the ACA premises (R.2. 13-60) (Transcript of Hearings held on April 4 and 29, 1974, have pages numbered 1-64).

Respondent further stated that he has not made any tests to identify emissions (Rush Dep. 14).

The odors within the plant, attested by the Agency engineer (R. 31) and by Mrs. Charles Regal, citizen witness and former employee of ACA (R. 216) clearly demonstrate that the escaping gas from the anodizing tank and possibly other tanks do entrain some of the contents of the tank, and therefore air pollution control equipment is necessary in this process.

We consider that the weight of evidence presented clearly shows that ACA was causing air pollution in violation of Section 9 (a) of the Act and that the disappearance of the odor after the final plant shutdown (R. 185) can leave no further doubt as to the origin of the pollution. The penalty is reduced from what it would have been because the phase out of operations was underway during the period of violations.

The question of a cease and desist order is rendered moot by the closing of the plant.

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

ORDER

It is the order of the Pollution Control Board that Respondent shall pay a penalty of \$1,500 for the violation of Section 9(a) of the Act as described in this Opinion. Payment shall be by certified check or money order made payable to the State of Illinois, Fiscal Services Division, Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706. Payment shall be tendered within 90 days of the adoption of this Order.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 12th day of September, 1974 by a vote of 5-0.

Christan L. Moffett