ILLINOIS POLLUTION CONTROL BOARD November 12, 1982

KRAUS, et al.,)
Complainants,)
v.) PCB 81-76
METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO,)
Respondent.)

MR. THEODORE KRAUS APPEARED PRO SE.

MR. ANTONI E. WESOLOWSKI AND MR. JACK L. SHANKMAN APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by I. G. Goodman):

On March 30, 1981, eleven Des Plaines, Illinois citizens filed virtually identical Complaints alleging violation of the Board's Air Pollution Control Regulations by the O'Hare Water Reclamation Facility of the Metropolitan Sanitary District of Greater Chicago (MSD). In the interest of administrative economy, and with the acquiescense of the Complainants, the Board dismissed all of the Complaints save Docket No. PCB 81-76 and granted leave for all other Complainants to participate in that matter. Hearing was held on May 17, 1982, at which Complainant, Mr. Theodore Kraus (Kraus), appeared pro se. Various citizens were introduced by Kraus and testified on behalf of Complainant. The Board has received public comment in this matter.

The subject of this Complaint is MSD's O'Hare Water Reclamation Plant located at 701 West Oakton Street in Des Plaines, Illinois. The Complaint alleges violation by the MSD facility of Rule 102 of Chapter 2: Air Pollution of the Board's Rules and Regulations. Rule 102 is a general prohibition of air pollution in the State of Illinois. A second count alleges violation of Rule 203(f)(1), Fugitive Particulate Matter. This rule prohibits the emission of fugitive particulate matter into the environment which is generally visible by a person observing at a point beyond the property line of the emission source. The alleged violations of the rules occurred when quantities of airborne aerosol foam allegedly containing concentrations of pathogenic bacteria and viruses were emitted from the aeration basins at the MSD facility and were carried across the property line by the prevailing winds. It was further

alleged that the violations occurred on February 7, 8, and 9, 1981 and the Complaint asks that the Board order the aeration tanks to be covered and to impose suitable control measures to prevent bacteria and virus emissions from the plant.

During the course of the hearing, MSD objected to testimony concerning odor violations alleging that the Complaint did not specifically mention such violations. The hearing officer ruled that since Rule 102 of Chapter 2 is a general prohibition of air pollution and since the odor situation had been addressed at a pre-hearing conference, the allegation of air pollution was broad enough to encompass testimony on odor and MSD could not claim surprise. (R. 14-15.) The Board affirms the hearing officer's ruling and construes odor violations to be part of the Complaint herein.

A number of citizens testified concerning the violations alleged in the Complaint. Mr. Kraus testified that early one morning in February, 1981 he observed foam coming from the MSD facility across the street and into his backyard. In addition, he testified to periodic episodes of odors, which he described as sewer gas, since the construction of the plant. He also stated that prior to construction of the plant MSD had, at public hearings, assured the residents that there would be no foam, odors or unknown bacteria emitted from the proposed facility. Subsequent citizen witnesses testified about the foam episode which apparently occurred early on February 9, 1981, and intermittent odor episodes since construction of the facility. Zych, who lives in the immediate area, described the odor as sewer gas and stated that he had complained frequently to MSD, admitting under cross-examination that he had observed no foam since the February, 1981 episode. (R. 20.)

Mrs. Samson, who lives near the aeration tanks which are apparently the source of the foam, stated she had seen the foam more than once and described it as "an over abundance of detergents in a dishwasher." She also stated that she had not observed the foam recently.

Ms. Peterson, who lives across the street, has noticed the foam only once but has experienced frequent odor episodes and had, in fact, just recently complained to MSD. Ms. Peterson indicated that the odor episodes generally stop within fifteen minutes after she complains to MSD. (R. 30.) Ms. Peterson's roommate, Ms. Blaha, described the foam as appearing like "cottonwood seeds." Ms. Blaha stated she called MSD frequently complaining about the odor and indicated that the intensity of the odor was varied. She also stated that she has not observed foam since the February, 1981 incident but had experienced difficulty with some of her house plants and had experienced a fungus growth on her body. (R. 34.) Under cross-examination, Ms. Blaha admitted that she could not connect the plant and fungus problem directly with the MSD facility across the street.

Mr. Lindahl, the Environmental Officer for the City of Des Plaines, testified that he had received a number of complaints from residents on February 9, 1981 regarding the foam episode. (R. 37.) Mr. Lindahl stated that he had not personally observed any foam outside the MSD facility boundaries. Ms. Jensen, who lives directly across the street from the facility, entered into the record as Kraus Exhibit No. 1, a handwritten record of dates of odor and foam observations along with her personal comments. This record contains dates from the middle of 1980 until April, She noted that she had observed foam on the MSD property on April 17, 1982 and upon reporting it to MSD she observed a number of men hosing the foam down. Ms. Jensen further testified that there have been episodes of very bad odors recently which forces her to close the windows in her house. Ms. Jensen testified that MSD personnel were always polite when she called to complain. The Honorable Richard Ward, an alderman in Des Plaines, testified as an individual and not on behalf of the City. Though he had not observed the foam himself, he had received complaints from (R. 75.)citizens.

MSD presented testimony which tended to explain what caused the problems and to outline what MSD had done to correct the situation. Mr. Knight, Assistant Chief Engineer of MSD, indicated that the foam episode had indeed occurred on February 9. 1981 and explained that it had been caused by a series of factors related to the weather and continuing construction of the facility. The foam was apparently created in an aeration tank which was still under construction and due to weather conditions had not yet been equipped with water spray foam suppression nozzles. Engineers at the facility were wasting excess aeration air through the unfinished tank which, although not in operation, contained a high quality secondary effluent which generated a large amount of foam when subjected to the excess aeration. MSD was unable to control the foam due to the lack of suppression spray equipment. (R. 92.) MSD Exhibit No. 1 contains photographs of the aeration tanks in question. In addition, Mr. Knight indicated that he and his subordinates had received "considerably more than ten" complaints concerning odor but had been unable to verify the complaints upon investigation. He also indicated that MSD was able to and did suppress odors occurring in the plant.

Mr. Sherman, manager of the MSD facility, testified concerning the procedures used by MSD to solve the foam problem. He indicated that the aeration level and frequency has been reduced and the area from which the foam was generated has been taken out of service. In addition, certain foam suppression sprays are operated 100% of the time. (R. 99.) In Mr. Sherman's estimated, the foam problem has been corrected. With regard to the odor problem, Mr. Sherman testified that the major odor problem at the plant comes from the raw sewage as it passes into the plant. The sewage is sampled continuously and an operator uses that information along with the direction and speed of the wind to determine the potential for creation of odors. Chlorine is added manually by the operator to suppress the generation of

odors. MSD is preparing to add the odor suppression chlorine automatically by computer in the future. Mr. Sherman explained the intermittent occurrences of odors as being the time between the discovery of the odor problem or its potential and the addition of the suppression chlorine. (R. 110.) In response to questioning, Mr. Sherman indicated that the suppression chlorine is not added continuously due to the cost involved.

The question of bacteria or viruses being emitted from the facility as aerosols was addressed by the parties in a very cursory manner. Kraus was unable to present any evidence concerning this subject and MSD merely presented MSD Exhibit No. 2, a decision by the U.S. Environmental Protection Agency to rescind a special condition to its construction grant which required MSD to construct aerosol suppression equipment at the facility, indicating that a study had shown that no direct or indirect health hazards result from exposure to aerosols.

As construed by the Board, the Complaint contains three areas of alleged violation: emission of particulate matter as evidenced by the foam episode; emission of odor into the atmosphere; and emission of aerosols potentially carrying bacteria and/or viruses. The Board finds the aerosol issue has not been addressed sufficiently for the Board to consider in this case, and dismisses that portion of the Complaint.

With regard to the foam, the Board finds that MSD did, on at least one occasion, violate Rule 203(f)(1) of Chapter 2 in that it caused the emission of Fugitive Particulate Matter beyond its boundaries. In mitigation of this violation is the fact that it has apparently occurred but once and that MSD has taken measures to insure that the foam no longer goes beyond its property line. In aggravation of this violation is the fact that MSD was aware of the potential creation of foam and indeed had equipped most of the facility with a means of suppressing the foam. Considering the facts of this case and the criteria of Section 33(c) of the Illinois Environmental Protection Act, (Act) the Board finds that a penalty for the violation of Rule 203(f)(1) would not serve to further the purposes of the Act. Nonetheless, the Board shall order MSD to cease and desist further violations of this rule.

Upon review of the record, the Board finds that MSD has violated Rule 102 of Chapter 2: Air Pollution Control Regulations by allowing the discharge of odor into the environment. Since for the purposes of this violation Rule 102 is a restatement of Section 9(a) of the Act under which most odor violations are found by the Board, the Board shall construe the Complaint as alleging violation of Section 9(a) of the Act and shall find violation by MSD of that section. Although there is no question as to the social and economic value of the MSD facility, that value is diminshed when the operation of the facility results in air pollution which can admittedly be prevented. The character and degree of interference with the protection of the health, general welfare, and physical property of the people in this case

is not great. The interference must be balanced, however, against the technical practicability and economic reasonableness of reducing or eliminating the odors. In this case, the technical practicability of elimnation of odors was admitted and there was no showing that it was economically unreasonable to execute this technology. The suitability of the pollution source to the area in which it is located appears to be the crux of the situation. MSD was well aware of the residential nature of the area when it built the facility. Charged with this knowledge, MSD must be held to a high degree of care not to impose the burden of the odors which are inherent in such a facility upon its neighbors.

The Board shall therefore order MSD to cease and desist further violations of Section 9(a) of the Act and shall impose a penalty of \$2,500.00 for the violation found.

This Opinion constitutes a finding of facts and conclusions of law of the Board in this matter.

ORDER

- 1. The Metropolitan Sanitary District of Greater Chicago is found in violation of Section 9(a) of the Environmental Protection Act and Rules 102 and 203(f)(1) of Chapter 2: Air Pollution Control Regulations at its facility located in Des Plaines, Illinois.
- 2. The Metropolitan Sanitary District of Greater Chicago shall cease and desist further such violations of the Illinois Environmental Protection Act and the Board's Rules and Regulations.
- 3. The Metropolitan Sanitary District of Greater Chicago shall pay a penalty for the violations noted in the amount of \$2,500.00. Within forty-five days of the date of this Order, the Metropolitan Sanitary District of Greater Chicago shall pay, by certified check or money order payable to the State of Illinois, the penalty of \$2,500.00 which is to be sent to: Illinois Environmental Protection Agency, Fiscal Services Division, 2200 Churchill Road, Springfield, Illinois 62706.

IT IS SO ORDERED.

Board Chairman Dumelle concurred.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the $\cancel{(1)}$ day of $\cancel{\text{Orember}}$, 1982 by a vote of $\cancel{\text{S-O}}$.

Christan L. Moffett Clerk

Illinois Pollution Control Board