ILLINOIS POLLUTION CONTROL BOARD
October 31, 1972

ENVIRONMENTAL PROTECTION AGENCY	)	
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	)	
v.	)	# 72-79
	)	
	)	
SANGAMO CONSTRUCTION CO.	)	

Mr. Frederick C. Hopper, for the Environmental Protection Agency

Mr. James T. Mohan, for Sangamo Construction Co.

Opinion of the Board (by Mr. Currie):

This case concerned both an asphalt plant and a concrete plant owned and operated by Sangamo Construction Company and located on Toronto Road on the south side of Springfield, Illinois.

The complaint filed by the EPA March 2, 1972 and amended May 11, 1972 charges Sangamo with violating Section 9(a) of the Act by discharging contaminants into the air so as to cause air pollution; with failure to secure a permit for new equipment capable of emitting contaminants as required by Section 3-2.110 of the Rules and Regulations Governing the Control of Air Pollution; and with operating its asphalt plant at a higher process weight rate than indicated in the application for a construction permit. Two days of hearings were held at which the following facts were revealed.

The amended complaint filed by the EPA charges, in paragraph 4, "that Respondent has operated its asphalt plant in violation of its installation and operation permit; i.e. by operating said plant at a significantly higher process weight rate than the weight rate used in making application for said permit." The record showed that the Sangamo application for an installation and operation permit approved by the Air Pollution Control Board, January 23, 1969 (EPA Ex. 5), specified a process weight rate of 200 ton/hr. Testimony by Sangamo (Record 6/14, pg. 108) indicated an average production rate in 1971 of 247 tons/hr with peaks of 300-320 tons/hr. Actual

production data supplied by Sangamo (Resp. Ex. 18) for certain days in 1971 indicated an average hourly production rate of 235 tons per hour. Thus it is obvious that at certain periods of time a process weight rate of 200 tons per hour was exceeded.

The reason for specifying a process weight rate in the installation and operation permit was to help the APCB assess the environmental impact of the installation. For this reason the process rate identified should have been the maximum rate expected rather than a rate less than the average actual rate (200 tons/hr vs. 235-247 tons/hr, according to the Record). In terms of environmental impact, this additional process rate is the same as if another asphalt plant, having a process weight rate of up to 127 tons/hr (see data for 8/13/71 Resp. Ex. 18), had been built without a permit adjacent to the plant in question. The record also showed that in applying for the installation permit, Barber-Greene Co., acting in behalf of Sangamo, used a fines (material that will pass through #200 mesh) concentration of 3% in calculating the expected emission (Record 7/12, pg. 75). The main product of the asphalt plant, however, was base asphalt mix (BAM) which by State standards must have fines of 8 ± 4% (EPA Ex. 1). The record showed that there was a proportioning engineer, employed by the State, assigned to the asphalt plant whose duties included checking the asphalt mix to see if it met the specifications (Record 6/14, pg. 5). Sangamo also testified that it is impossible to order material with less than 4-5% fines from a quarry (Record 7/12, pg. 75). Again we have the situation of the facts on the installation and operation permit not reflecting reality.

The integrity of the permit system, which is the heart of the program for preventing pollution before it occurs, requires scrupulous adherence to the representations made in the permit application. Sangamo's permit authorized it to do only what it applied for permission to do, and no more: not to build a plant in Peoria, not to build two plants, and not to build a plant of more than 200 tons/hr capacity. In building what the permit did not authorize the company acted without an applicable permit, in violation of Rule 3-2.110 of the Rules and Regulations Governing the Control of Air Pollution.

Much time was spent on the subject of particulate emissions from the asphalt plant. The Amended Complaint filed by the EPA contains no allegation as to a specific violation of the particulate emission limitation for the plant (which would be Rule 3-3.111). However, the EPA

presented calculations (EPA Ex. 4) it said shows a violation of the emission standard (Rule 3-3.111).

The method used by the EPA to calculate the Sangamo asphalt plant emissions (EPA Ex. 3) was developed in 1966 by the Barber-Greene Co., manufacturers of Sangamo's asphalt plant, in order to estimate particulate emissions from its own equipment, primarily the rotary dryer. This method indicates a strong relation between the air velocity in the rotary dryer, the size distribution of aggregate in the dryer, in particular the fraction of fines, and the amount of material entrained in the dryer exhaust. Included in this method are efficiency factors for particulate collection equipment such as cyclones and wet scrubbers.

The Sangamo method for calculating asphalt plant emissions used particulate emission factors for asphalt batch plants (Respondent Ex. 18) developed by Duprey from tests of operating plants. The emission factor to use depends only on the type of pollution control equipment installed and not explicitly on other variables such as particulate size distribution or dryer air velocity.

We find that the Barber-Greene method for calculating emissions is more applicable to the asphalt plant in question than the use of the Duprey emission factor. Respondent's own expert witness testified that the gas velocity would affect the amount of dust entering the collection equipment (Record 7/12, pg. 105). We find the credibility of this witness to be in issue because he denied that the quantity of fines would affect significantly the emissions and also denied that a change in collection efficiency from 99% to 96% meant a fourfold increase in emissions. Since the Duprey emission factor depends only on the type of collection equipment, one would have to investigate the types of asphalt plants and materials used in establishing the factor in order to determine its suitability to the present case. Use of the Barber-Greene method (EPA Ex. 3) results in an emission of 82 lb/hr using the particulate size distribution requirements for the aggregate, EPA Ex. 1, the average process weight rate for 1971, Respondent Ex. 18, and the dryer airflow rate, EPA Ex. 5. The allowable emission for these conditions is 60 lb/hr. On October 30, 1972 the Board received a memorandum from Sangamo Construction Co. commenting on Use of the Barber-Greene Formula. The memorandum states that a stack test recently performed on equipment similar to that in the present case confirms Sangamo's reliance on the Duprey formula. We cannot consider this information because it is factual material not properly in the record. In any event, as this opinion makes clear, we do not penalize the company for a violation of the

particulate emission standard because no such violation was alleged in the complaint.

Because a specific process emission violation was not alleged in the amended complaint filed by the EPA, its use in attempting to show a violation of Section 9(a) of the Act does not give fair warning to the Respondent. The Board has held in other cases (EPA v. Commonwealth Edison, #70-4, Feb. 17, 1971) that "there is no excuse for lack of specificity in filing a complaint except the desire to obtain an unfair advantage by surprise" and further that "the statute itself, in Section 31(a), requires that the complaint not only specify the provision allegedly violated but also contain 'a statement of the manner in, and the extent to which such person is said to violate this law or such rule or regulation'". Thus even though the asphalt plant appears to have been in violation of the process emission limit, a penalty based on this violation is not appropriate.

The record showed that the asphalt plant in question is not currently operating and has not operated since 1971 (Record 7/12, pg. 37). Counsel for the Respondent also said that there was no plan for further operation of the asphalt plant at its present location. We will require proof, preferably based on test data, that the plant will operate in compliance with all applicable regulations before allowing its production operation at its present location or at any other location within the State.

Paragraph 3 of the amended complaint charges Sangamo with operating new equipment capable of emitting air contaminants without a permit. The question of a permit for the asphalt plant is discussed above. The record shows that the concrete plant began operation at the site in the fall of 1969 without a permit (Record 7/12, pg. 51, 52). During the course of these proceedings Sangamo applied for and received a permit for operation of the concrete plant (EPA Ex. 6). The President of Sangamo claimed that prior to this proceeding he had no knowledge that a "permit would or might be required for the operation of a concrete plant." The concrete plant therefore operated about 2 1/2 years without a permit.

The permit as approved by the Agency this summer is for a concrete plant having additional emission controls compared to the same plant when it began operating in the fall of 1969. The record showed that a sleeve and receiving hopper were installed in the Spring of 1970 and a water spray installed in the Spring of 1971 (Record 7/12, pg. 6, 7) to reduce fugitive dust emissions from one of the stacking conveyors. In addition a bag filter was installed

on the exhaust vent of the concrete plant in the Spring of 1972 (Record 7/12, pg. 13). While this indicates commendable action by Sangamo to reduce emissions, it also indicates the importance of a timely application for permit in order to assume that emissions are adequately controlled at the outset. The failure of the company to secure a permit for the concrete plant as installed in 1969, whether through lack of knowledge of the requirements for a permit or for other reasons, is a serious matter and deserves the imposition of a penalty.

In the matter of remedy for the concrete plant, since it is not currently in operation according to counsel for Sangamo, an immediate cease and desist order is appropriate. As for future operation of the plant, we will require that it operate in compliance with all rules and regulations under the jurisdiction of the Board.

Another charge in the amended complaint is that the asphalt and concrete plants are causing air pollution in violation of Section 9(a) of the Act.

Testimony revealed that white dust and odor attributable to Sangamo (Record 6/14, pg. 45, 66, 87) were a nuisance at other industrial facilities in the neighborhood of Sangamo. The dust coated cars, equipment, and materials (including stored household goods) causing a nuisance to these industries. It was observed originating from a conveyor and from unloading operations on Sangamo's property. One witness also testified that, at times, the entire plant (Sangamo) was obsured from view by dust (Record 6/14, pg. 69). The odor was identified as asphalt odor which was sometimes so discomforting that office workers were excused from work (Record 6/14, pg. 68).

Sangamo's response to these complaints was that there is much farming in the area, many unimproved parking lots, and roads with truck traffic kicking up dust (Record 6/14, pg. 91). In addition testimony revealed that at least two of the industries burned waste in incinerators with one company incinerating waste polyurethane (foam rubber) and mattress ticking (Record 6/14, pg. 95).

We find that a definite nuisance attributable to Sangamo did exist. The seriousness of the nuisance must be judged taking into account the industrial and agricultural character of the area. It is undoubtedly true that the farming operations, traffic over unpaved parking lots and roads, and waste material incineration also contributed to the general dustiness of the area. The odors testified to can however be more unilaterally blamed on Sangamo. The exposure to the nuisance is on an occupational (8 hour/day, 5 day/week) basis with no testimony regarding residential nuisance. Based on the record it is impossible to decide the relative levels of nuisance caused

by the concrete and asphalt plants. For these reasons, a small penalty seems appropriate.

We find that the amount of penalty assessed should, according to the record, be based on a) the operation of the asphalt plant at process weight rates up to 127 tons/hr greater than specified on the permit application; b) the operation of the concrete plant for 2 1/2 years without a permit; and c) the nuisance caused by both the plants. In a prior case involving asphalt plants (EPA v. Southern Illinois Asphalt Co., #71-31, __PCB___ (June 9, 1971), a penalty of $5000 was assessed for operating without a permit and causing a considerable nuisance in the area. In the case EPA v. Iowa-Illinois Gas & Electric Co., #72-216 (July 25, 1972) a penalty of $1000 was assessed for installation and operation of turbine generators without a permit where emissions were not an issue. We assess a penalty of $5000 for two violations concerning permits and for causing a nuisance in the area.

ORDER

1. Sangamo shall immediately cease and desist from operating its asphalt and concrete plants, located on Toronto Road in Springfield at the time of this hearing, in violation of law, regulations, or permits.

2. Prior to operating the asphalt plant or concrete plant in question at their present locations or at any other locations in the State, Sangamo shall submit satisfactory proof to the Agency that the plants will operate in compliance with all applicable rules and regulations.

3. Within 35 days after the receipt of this Order Sangamo shall pay the sum of $5,000 in penalty for the violations found in the Board's opinion. 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 Drive, Springfield, Illinois 62706.

I, Christan Moffett, Clerk of the Pollution Control Board, certify that the Board adopted the above Opinion this 31st day of October, 1972, by a vote of 5-0.

Christan L. Moffett