

ILLINOIS POLLUTION CONTROL BOARD  
August 24, 1978

FRANK'S CAR WASH, INC., an )  
Illinois corporation, )  
 )  
Petitioner, )  
 )  
vs. ) PCB 78-116  
 )  
ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
Respondent. )

OPINION AND ORDER OF THE BOARD (by Dr. Satchell):

On April 24, 1978 Frank's Car Wash, Inc. (Frank's) filed a petition for variance from Board Rule 202 of Chapter 8: Noise Pollution Regulations. The Environmental Protection Agency (Agency) filed its recommendation on May 22, 1978. A hearing was held on this matter on June 27, 1978. At the hearing the petition was amended to include requests for variance from Rules 102 and 204 of Chapter 8 as well as Rule 202. Also at the hearing Mr. Richard Petersen, an objector, testified.

This same facility was the subject of a previous enforcement case before the Board PCB 76-238, 25 PCB 375 (1977). That case was resolved through a stipulated settlement that included a compliance plan.

Frank's Car Wash, located at 217 West Illinois Avenue, Aurora, Kane County, Illinois was built in the fall of 1974 on land zoned commercial; however, the area surrounding the facility has both residential and commercial establishments. The facility employs approximately 5 to 8 persons. It operates from 8:00 a.m. until 6:00 p.m. Monday through Saturday and from 9:00 a.m. until 2:00 p.m. on Sunday, fifty-two weeks per year. The main source of noise is the drying equipment used at the facility.

Frank's has carried out the compliance plan agreed on in PCB 76-238. Efforts made before and after the compliance plan include: a noise suppression kit was purchased from the blower manufacturer and installed; a wall approximately ten feet tall and twenty-four feet long was constructed on the west property line; and a roof was constructed between the car wash building and the noise abatement wall. These three programs resulted in lowering the noise at the nearest residence from one to thirty dB depending on the octave band. The attenuation provided by the barrier is in fair agreement with that predicted by theory.

Petitioner states he knows of no other methods for reducing the current noise levels. The Agency believes that several other techniques do exist. However, most of these do not work out well with the physical characteristics of Frank's Car Wash.

A barrier perpendicular to and connected to the existing barrier could be built at an approximate cost of \$430. However, this would make it nearly impossible to maneuver the vehicle exiting the car wash to Illinois Avenue and creates a possible safety hazard since the vehicle must maneuver three ninety-degree turns in a very small area. Acoustical foam could be applied to the barrier wall and roof, but the excess noise appears to be due to reflections from the street curb and berm located across the street. The wet environment of the car wash can bring about deterioration of the foam material over time. The Agency does not recommend this method.

The current A-weighted sound emission is 56.2 dB(A); before noise abatement it was 81 dB(A) with a measured ambient of 44 dB(A). If the car wash were to reduce its emissions to exactly meet the limits of Rule 202, the A-weighted sound level would be 54.5 dB(A).

Petitioner's business runs 65 hours per week. As defined by Chapter 8 all hours of operation are during daytime hours. The Agency estimates that the noise emitting equipment operates about 40% of the hours of operation. According to USEPA criterion steady sound levels such as those produced by the car dryer have been found to interfere with outdoor communication. The noise abatement equipment already installed by Frank's has provided substantial improvement over the original levels for conversation. If the noise were reduced to the levels of Rule 202, the improvement would be negligible. Indoors during the summer there is a small chance of speech interference and no interference during the winter. Since all car wash operations occur during daytime hours, little sleep disruption would be expected. However, if sleep interference does occur even in the summer months only minimal interference is indicated.

After Agency communications two neighbors objected to the variance, three were in favor, and the remaining eight not responding. Mr. Richard Petersen testified at the hearing. He does object to the noise. The area was zoned commercial when Mr. Petersen purchased the house in 1974 (R. 23, 26). Frank's Car Wash was being built at that time and Mr. Petersen was aware of it (R. 27). Appendix III of the Agency's recommendation also shows a heavy traffic volume on Illinois Avenue which would also contribute heavily to the ambient noise level. The traffic volume estimated per day is 12,096 cars, 1,440 medium trucks and 860 heavy trucks.

The Agency recommends the grant of a five year variance subject to certain conditions. The Board agrees. The Board finds that Frank's has made a substantial effort to resolve the problem. Further abatement procedures would be disruptive to business while giving only negligible abatement of the noise. The Board finds that arbitrary and unreasonable hardship would be suffered should this variance be denied. A five year variance is granted subject to the Agency's conditions.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

It is the order of the Pollution Control Board that Frank's Car Wash, Inc. is granted a variance from Rules 102, 202 and 204 of Chapter 8: Noise Pollution Regulations as to the operations of its car wash for five years from the date of this order subject to the following conditions:

1. That throughout the period of the Variance, Petitioner shall properly maintain existing noise control equipment presently installed on the car wash dryers, specifications of which are more particularly described in the Stipulation and Proposal for Settlement approved by the Board in EPA v. Frank's Car Wash, Inc., PCB 76-238.
2. That throughout the period of the Variance, Petitioner shall properly maintain the barrier and its roof at the car wash exit, specifications of which are more particularly described in Stipulation and Proposal for Settlement approved by the Board in EPA v. Frank's Car Wash, Inc., PCB 76-238; and, shall insure that no leaks are permitted to develop or exist either between blocks or between the barrier and its roof and the car wash building.
3. That throughout the period of the Variance, Petitioner shall not operate the car wash between the hours of 10:00 p.m. and 7:00 a.m., local time.
4. That throughout the period of the Variance, no new equipment installed and no equipment repair at the car wash shall increase the octave band sound pressure levels over those shown in Figure 1, Exhibit 4, of the Agency's recommendation hereby incorporated by reference as if fully set forth herein, measured at the residential property presently occupied by Mr. Clyde Hartman to the west of the car wash or those shown in Figure 7, Exhibit 4, of the Agency's recommendation, measured at the property of Rambling Rose Realty across the street from the car wash and to the south of it.
5. That throughout the period of the Variance, Petitioner shall report to the Agency any economically reasonable and technologically practicable means of further abatement which may become available through advances in the state of the art.
6. That Petitioner shall execute and forward to the Environmental Protection Agency, Division of Noise Pollution Control, Enforcement Section, 2200 Churchill Road, Springfield, Illinois 62706 within forty-five (45) days after the date of the Board Order herein a

Certificate of Acceptance and Agreement to be bound to all the terms and conditions of the variance. This 45 day period shall be held in abeyance for any period during which this matter is appealed. The form of said Certification to be as follows:

CERTIFICATION

Frank's Car Wash, Inc. has received and understands the Order of the Illinois Pollution Control Board in PCB 78-116 and hereby accepts said order and agrees to be bound to all the terms and conditions thereof.

\_\_\_\_\_  
NAME

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 24<sup>th</sup> day of August, 1978 by a vote of 5-0.

Christan L. Moffett  
Christan L. Moffett, Clerk  
Illinois Pollution Control Board