## ILLINOIS POLLUTION CONTROL BOARD February 3, 1977

ENVIRONMENTAL PROTECTION AGENCY,	)		
Complainant,	)		
V.	)	PCB	75-267
TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS, a Missouri corporation,	) ) )		
Respondent.	) )		

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

This Enforcement matter has been the subject of a previous Interim Opinion and Order of the Board adopted on October 28, 1976. We described there the circumstances which led to the filing of the Agency's Complaint regarding noise emissions from Respondent's Venice, Illinois switching yard. Our discussion there of the facts and procedural matters relevant to this case need not be repeated here.

In our October 28, 1976 Interim Opinion and Order, the Board indicated that a Stipulation and Proposed Settlement filed in the case, along with a Supplemental Stipulation, were generally acceptable in resolution of the matters raised in the Agency's Complaint. We were unable, however, to accept the unsupported findings by the parties in the Supplemental Stipulation that complete compliance by Respondent's retarding operations at the Venice switching yard could not, given the present levels of technical feasibility and economic reasonableness, achieve compliance with the relevant Noise Pollution Control Regulations of this Board. Accordingly, we remanded for further hearing limited to that subject.

A further hearing was then held on November 30, 1976, in Edwardsville, Illinois. Both Complainant and Respondent there introduced testimony and evidence supporting their earlier conclusion on the subject of technical feasibility, particularly with regard to the level of proven technology. We find that record adequate, and here approve the Stipulation and Proposed Settlement, and the Supplemental Stipulation, in their entirety.

Testimony presented by both the Agency and Respondent indicates that at the time the Complaint in this matter was filed, no similar facility in the country was known to be in compliance with the applicable Board Regulations. This was verified by both literature search and on-site inspections in Kansas City and Minneapolis, (R. 14, 21, 42). Lubrication systems, costing between \$250,000 and

\$500,000 per system (excluding maintenance and operational costs), had not been successful. The substitution of ductile iron shoes for the steel ones normally used on the retarders would cost over \$100,000, work only in limited situations with very low speed (below 6 mph) humping, and would increase wear on those shoes by a factor as high as 10. Computer control of retarders, estimated to cost \$1.5 million, would not reduce noise at all, but might decrease the frequency of noise emissions, (e.g., R. 18-21, 43, 47).

As noted in our earlier Opinion, the abatement technique actually adopted at the Venice yard was the construction of noise barriers at each of the retarders. Although, as noted there, these barriers did not achieve complete compliance with the relevant Regulations, all 65 individuals who originally complained about these noise emissions were satisfied with the noise reductions achieved, (R. 32). Those barriers were constructed at a cost of approximately \$82,000, by Respondent, based on an original design by Agency expert Gregory T. Zak.

To achieve complete compliance, these barriers would have had to achieve a reduction in noise levels of approximately 33 dB, based on measurements taken 1,000 feet or more from the noise sources, (R. 26). The best reduction achieved prior to that time had been approximately 20 dB, measured at a distance of 100 feet from the barrier, at which point the apparent noise reduction would be greater, (R. 27-28, 42). Terminal Railroad's efforts in this case have achieved a reduction in noise levels 5 dB greater than ever previously achieved, with the measurements taken at a distance which would tend to greatly decrease the amount of such reduction, (R. 28). In fact, the method used here for abatement is being used and studied for the solution of similar problems in other parts of the country, (id.).

Based on this testimony and evidence, we find that Respondent Terminal Railroad has acted in good faith to abate its admitted violation. Despite the minor violations remaining, Terminal Railroad has apparently done all that was possible under the circumstances to abate its noise emissions and eliminate any difficulties or inconveniences which those emissions may have caused to the surrounding residents. Based on that finding, and the findings in our Interim Opinion and Order of October 28, 1976, we shall enter our final Order in this matter in accord with the Proposed Settlement submitted by the parties.

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

## ORDER

IT IS THE ORDER OF THE POLLUTION CONTROL BOARD that:

- Respondent Terminal Railroad Association of St. Louis is found to have operated its railway switching yard in Madison County, Illinois, in violation of Section 24 of the Environmental Protection Act, and Rules 102(n), 202, and 207 of Chapter 7 of the Board's Regulations.
- Respondent Terminal Railroad Association of St. Louis shall comply with all provisions of the Settlement agreement submitted by the parties to this matter.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 300 day of 1977, by a vote of 5-0.

Christan L. Moffett

Illinois Pollution Control Board