



Rule 2-2.22. Thus it is to the alleged emission violation that we now turn.

On the basis of rough boiler and fuel information supplied by N&W employees who were not experts, and on the basis of standard emission factors taken from a federal publication, the Agency first estimated particulate emissions of 5.66 pounds per million btu input (R. 20), nearly ten times the allowable 0.6 (Rules & Regulations, supra, Rule 3-3.112). The Agency revised its estimate to 1.72 lb/mbtu, on the basis of evidence that there was no reinjection of fly ash, as previously assumed, on the N&W boilers (R. 196, 204). As we held in EPA v. Lindgren Foundry Co., # 70-1 (Sept. 25, 1970), in the absence of rebuttal such evidence would suffice to establish a violation, since it is based on test data for average conditions. The burden is on the respondent to show that its equipment is not typical. The motion to dismiss for want of proof at the end of the Agency's case (R. 59) is therefore denied.

But the railroad presented evidence to show that the standard emission factors did not give an accurate picture of its particular operations. The company's witness testified that emissions are affected by a number of factors admittedly not taken into account by the Agency. Most significantly, he testified, emissions are substantially reduced when, as in N&W's operation, the coal used has a low percentage of small particles (R. 108, 111) and the "burning rate"--btu's per square foot of grate--is low (R. 110, 119, 123). Small particles are more likely to become airborne, and high burning rates require more air, which increases turbulence and thus emissions. The Company's witness then introduced the results of tests performed with equipment similar to its own and operating with similar fuel size and burning rate, showing emissions from the boiler itself to 0.5 lb/mbtu (R. 123). Conceding that variations in btu content of the coal could have made N&W's boiler emissions 0.625 lb/mbtu on this basis, (R. 157), he stated (R. 124, 157), and EPA also assumed (R. 196), that 40% of the dust settled out in the stack, so that even with the btu correction the company's evidence indicates there was no violation.

Since the N&W testimony was based on tests of facilities other than those in question here, it too was subject to rebuttal by evidence as to emissions from the N&W boilers themselves, as well as by evidence showing that the tests introduced were not comparable. But no such evidence was forthcoming. No stack test was taken by either party, and the Agency's witness did not know whether the factors brought forward by the railroad were relevant (R. 41-42, 198-99).

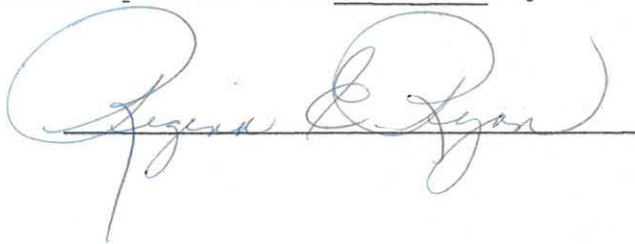
In our opinion the railroad has, in the absence of such additional evidence, successfully rebutted the Agency's case.



The tests introduced by N&W are, so far as the evidence shows, more nearly representative of the actual emissions in this case than are the more generalized standard factors offered by EPA. No violation has been shown. We add that N&W is nevertheless proceeding with the replacement of its coal-fired boilers; by May 15, which has since passed, the boilers were to be shut down, and oil-fired replacements that will cause no particulate problem are to be installed in time for the next heating season (R. 58). Moreover, during the last months of operation of the coal boilers, their emissions were reduced by the use of a higher-quality coal with high btu content, low ash, and no small particles (R. 57, 104-08). From the record we cannot say the company ever viola the regulations; but we can say the company has embarked upon a progra that will avoid any such violation in the future.

We hold that no violation has been proved. This opinion constitutes the Board's findings of fact, conclusions of law, and order.

I, Regina E. Ryan, Clerk of the Pollution Control Board, certify that the Board adopted the above Opinion this 26 day of May, 1971.

A handwritten signature in blue ink, appearing to read "Regina E. Ryan", is written over a horizontal line.