

I think when we published our sulfur oxide criteria—and we gave annual averages and we also gave them daily and hourly, and we also gave the range of variability, which is standard treatment.

Mr. CARPENTER. And your criteria would also contain a cost factor and a technological feasibility factor?

Dr. MIDDLETON. Not the criteria, themselves, but under the 1967 amendments to the Clean Air Act, criteria for a pollutant will be accompanied by data on the control techniques available to abate sources of that particular pollutant, together with data on the cost of that abatement.

Mr. CARPENTER. And you are saying that the difference between one-tenth part per million sulfur oxides and two-tenths percent should not be a contested point, even though that might relate to substantial differences in the cost of achievement?

Dr. MIDDLETON. I am saying if there is clear-cut evidence that a tenth protects the people and two-tenths doesn't, there isn't any contest.

Mr. CARPENTER. And you are able to make that clear-cut distinction before you publish the criteria?

Dr. MIDDLETON. If we are not able to make that, we certainly would have expressed it in some range system so that there would be a clear understanding on the part of the reader of the document about the validity of the number.

Mr. GRISWOLD. I heard this number, John described, explained to the Federal Power Commission, under cross-examination by attorneys of the oil and coal industry, and the gas industry, and the one-tenth of 1 percent which you are talking about is the lowest number at which you can find health impairment. It couldn't find it below that because research tools are not sufficiently sensitive.

When you are getting to one-tenth of a part of pollutant at a million parts of air, you are getting down into fine numbers and fine instrumentation. They just hadn't been able to discover any health impairment under that number, at lower levels, but this did not insure that there wasn't health impairment under that level. They couldn't say that, either, under cross-examination.

Mr. CARPENTER. But, of course, they have been saying that at 0.015 on an annual average the same judgment held.

Mr. GRISWOLD. Yes.

Mr. CARPENTER. So they have measured the much more delicate tenth—

Mr. GRISWOLD. Over a longer period of time.

Mr. CARPENTER. Over a longer period of time.

Mr. GRISWOLD. Yes.

Mr. FELTON. Continue.

Mr. CARPENTER. Irv, why don't you go on with the next question?

Mr. AUERBACH. All right. [Reading]:

A common statement is that air pollution is getting worse. Does this mean that there is more contamination in the air over a specific area in a city? or that more areas in more cities are reaching a polluted level? Is there a saturation tendency corresponding to geographical density of industry, buildings and automobiles? For example, can automobile pollution get any worse in the central city?

I think we partly answered that already.