

May 24, 1949

Mr. Harvey Jordan
American Steel and Wire Co.
Hockefeller Building
Cleveland 13, Ohio

Dear Mr. Jordan:

We have been giving thought to your position and that of the Steel Industry in general in relation to air pollution, its appraisal and control. While you have not specifically solicited our views on the subject, and while the analysis of the Denora problem is incomplete, we feel nevertheless that our opinions may be of value to you. From time to time we have seen various industries faced with problems similar to yours and have taken some part in the solution of such problems. We have seen mistakes made, and we have not always known what was best to do, since there was but little precedent to follow, and since we have not been equipped with the engineering talent that could deal with a variety of situations. However, we consider our problems only partially unique, and believe the experience we have gained elsewhere may be applied with advantage to them.

Of first importance, in our opinion, is a clear understanding of the fact that there are valid hygienic, political, economic, and aesthetic considerations which, increasingly, are focusing public attention upon the need for control of air pollution. Unfortunately factual information from which sound regulatory or legislative measures could be derived is woefully lacking, and therefore what is said and done is likely to serve the purposes of the vocal seekers of publicity and political prestige. Premature legislation may well be virtually punitive in character, involving thereby exorbitant and unreasonable expenditures on the part of industry, without, necessarily, providing effective measures of control. Indeed, some legislation of dubious worth has already appeared in certain parts of the country.

In this situation, it would seem to be the better part of wisdom and self-preservation for industrial organizations, generally, to undertake, without further delay, to set in motion the means of solving the many problems of air contamination. Many of these problems are of general occurrence in a wide variety of industries, while others arise only out of specific industrial processes. They are a serious threat, however, to all industry. If such problems are attacked, piecemeal,

and by individual industrial organizations, each industrial plant attempting to solve its own problems, the results, in our opinion, will be meager and unsatisfactory. The experimental work will, frequently, be poorly planned and executed, few authentic data will be obtained and disseminated for general use, and there will be much duplication of effort to very little purpose. Little acceptable information on which intelligent legislation can be built will, in all probability, be forthcoming, and millions of dollars will be wasted. The price of control of air pollution so purchased will be terrific and the control probably inadequate. Concerted action by all industry or at least by groups of related industries, carefully coordinated and intelligently directed, is a stern necessity, if adequate control is to be accomplished at a price approaching that which industry can afford. Many of the problems will require long range approach, while some will have to be solved by the methods of trial and error, but certainly if industry is not to be handicapped by inept legislation which cannot wait for facts, the attempt will have to be made, responsibly and in good faith, to establish recognized and trustworthy sources of information for the guidance of legislative and regulatory agencies. Research - medical, toxicological, meteorologic, mechanical (ventilation, dust and fume disposal) and economic (immediate and ultimate operational expense) - of the best quality is needed. The experience of industry in cooperative research in other fields should be useful in setting up the organized approach to this problem.

Attention may be called to an example of a community problem which is so similar to that of air contamination as to require no detailed explanation, that of stream and water pollution. Here, the results of inadequate planning and scanty information have been evident for some time. There is scarcely a city of any size in the country in which the problem is not urgent. Only recently have cooperative efforts been made on a fairly broad scale to solve some of the outstanding problems. The cost of belated measures speaks for itself. If the magnitude of this problem had been realized earlier, it is reasonable to believe that proper means of preventing the pollution of streams and rivers would have been developed long since, and at much lower cost than will now be entailed.

A sound mechanism in the steel industry for dealing with situations of the scope and magnitude of the air contamination problem would seem to exist in the Steel Institute, if the experience of the American Petroleum Institute, in relation to the oil industry, with which we have some familiarity, can be regarded as illustrative. We do not imply that the API has developed a comprehensive and adequate program for dealing with air pollution as it is related to the petroleum industry, but it is organized to cope with the problem and has made a start toward its solution. Any group, committee or committees which may undertake to design and administer a program for the appraisal and control of air contamination for any industry, must have medical,

chemical, meteorological and engineering personnel capable of (1) understanding the complete program, (2) setting up the various means for its execution, (3) administering the program once set up, (4) evaluating accomplished research, (5) translating the results of research into practical application, and (6) cooperating with other industry to assist in the development of satisfactory legislation. The organization should have the full support of its associated companies, both in its research and in the applications of research to practical situations. Its budget will of necessity be sizeable and its mandate must be on a reasonably long term basis. Specifically its functions would be (a) to determine the significance of air contamination and (b) to effect control measures. The control measures might well be placed first in importance, because whatever can be done to effect control lessens somewhat the need for other measures. The design of stacks, collectors, washers and precipitators will be the subjects of research, but, in addition to finding new methods of control, the economy of existing methods will have to be evaluated critically and the price reduced through simplification, standardization, mass production or other means. The crux of the problem is the cost of control. Control is possible in most cases now, but the cost is exorbitant - not from the standpoint of employee or public protection, where the control unit safeguards health, but from the standpoint of what the unit does in a mechanical sense. The appraisal measures embody the research into medical, chemical, physical and engineering matters such as chemical methods of analysis, toxic limits of individual compounds and combinations of compounds, the toxicity of dusts, mass concentration of contaminants, plant location in relation to dwellings, meteorological and other considerations. The United States Public Health Service is interested in these problems and may, of course, be expected to contribute much to the general problem. Specific problems will continue to be investigated by agencies now engaged in this type of work, and the results will, in all probability, be available to all through the normal channels of scientific publication.

As mentioned earlier the attitude taken by an industry or by industry in general toward reforms of this nature is important. Everyone will agree that concentrations of contaminants that are detrimental to health should not be tolerated. A mixed reaction, definitely leaning toward correction, will be manifest when opinions are expressed on concentrations which can be shown to be a nuisance only. Almost everyone will agree that atmospheric contamination neither detrimental to health nor productive of nuisance is inevitable under the conditions of modern life. It is, and should be, we believe, the policy of industry to so establish control of air pollution as to keep it far below levels at which nuisance is evident, insofar as this achievement is commensurate with productive economy. Whatever reasonable policy is adopted should be followed consistently throughout the industry. When unduly stringent demands are made through legislation, such legislation should be discouraged, and

if possible, restrained by appropriate means. When legislation provides for less than adequate control, industry should follow the proper course according to its own knowledge and responsibilities. In other words decisions on what is true and right should be arrived at, and attempts made to follow such decisions if possible. Cases may arise where a nuisance is being created or where there is evidence of danger to health. Once the facts are known, prompt and effective action is indicated, which while temporarily embarrassing, will show proper regard for human health and safety. The memory of such action will live long after the condition has been corrected. A case in point is the experience of the Ethyl Corporation in 1925 when the decision was made voluntarily to withdraw a potentially hazardous product from the market pending a comprehensive investigation of the public hazard.

Within the industry the attitude or policy decided on should be understood and implemented by management, so as to be applied consistently in all operations and activities, including those involving litigation, public relations, and advertising. In time of stress there is often a tendency to take a defensive attitude toward anything which bears upon a matter in which an industry is under attack or, perhaps, at fault. Under such circumstances mountains are made of molehills, issue is taken where none, in reality, exists, and instinctive reactions takes over at the very time that intellectual poise is most needed. As part of such defensive thinking, the public relations department is often called in to explain the situation or the action taken. So long as the statements issued are concise and factual, and have an understandable message to convey to the public, they may serve their purpose. On the other hand when they attempt to explain technical matters, or to popularize scientific investigation, or, in general, to appeal to the public in an overt and systematic manner, it has been our impression that they fail consistently, do more harm than good, and confuse the issue. This is not an objection to public relations departments per se; it is an objection to their attempts to make use of prestige which they do not possess. In such situations only facts and obviously disinterested expert opinions are likely to be of any avail. It is our considered opinion that concerted efforts undertaken along the lines under discussion, should be dominated in their every aspect by mature judgment and an honest search for the facts, without concurrent or associated efforts to curry favor thereby. Only on such a basis can a program of fact-finding be attended by that fairness and respect for unvarnished truth that will provide for its public acceptance.

Very truly yours,

WRS

Robert A. Kenoe, M.D.

cc: Dr. Ashe
Mr. Roberts

0002649