



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

MAR 31 1975

VOL 16-ETH ENV. SCIENCE

APR 2 - 1975

Mr. W. P. Anderson, Director
Environmental Sciences
Tenneco Chemicals
Organic & Polymers Division
Piscataway, New Jersey 08854

Dear Mr. Anderson:

As you know, the United States Environmental Protection Agency (EPA) is in the process of developing standards to limit vinyl chloride emissions to the atmosphere from polyvinyl chloride and vinyl chloride monomer plants. The dispersion process for making polyvinyl chloride resins apparently has some unique problems in applying control techniques generally applicable to the industry. We would like to examine a few of these problems in greater detail. Please provide the information outlined below by April 14, 1975.

Dispersion Resin

I. Stripping

A. Current Status

Please describe the current (3/75) state of dispersion resin stripping in the following manner.

1. Describe the major grades of dispersion resins produced by each plant within your company. (Use ASTM classification if possible.) Specify the total number of grades produced at each plant.
2. Give percent of the company's production for each grade of resin and estimate what percent of total U.S. production is represented by each type resin.
3. For each grade of resin give description of most effective stripping procedure and equipment. This should include type of evaporator, residence time, vacuum, and temperature applied to the resin. Describe the state of the technology (laboratory, pilot, commercial, etc.).
4. For each grade of resin give ppm vinyl chloride in the resin (on a dry basis) after the stripping operation described above.

5. Very briefly describe end use, residual monomer in finished resin, and substitutes (if any) for each of the resin grades.

B. Future Forecast (2 1/2 years from present)

1. For each grade of resin, predict ppm residual vinyl chloride in the resin after the stripping step. Describe the basis of the estimate including status of current research.

2. If possible, outline the expansion expected for the industry in the grades of dispersion resins discussed before.

II. Comparison to Other Resins

It may be necessary to develop a standard which averages emissions between different types of resins within the same plant. In other words, a weighted average of suspension resin capable of being stripped to 200 ppm and a dispersion resin capable of being stripped to 2000 ppm (80% and 20% of production respectively) would be 560 ppm. Please comment on the practicality of such a regulation at your plant. Are a number of grades of suspension resins made? Are the plants in the same general location? What special problems do you see with sampling and enforcement of such a standard? Please list all types and grades of resin made, percentage of production for each grade, and residual vinyl chloride monomer for each using best technology presently available.

III. Energy

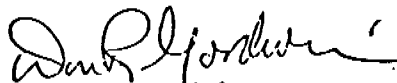
Describe the base energy use of the existing plant. Discuss present stripping energy demands. Describe increased energy consumption with improved stripping.

IV. Other Control Techniques

Describe the alternatives which have been considered by your company in the event that stripping is not possible to 400 ppm residual vinyl chloride on a dry basis leaving the stripper. Are any of these alternative controls feasible? Discuss in detail your opinions.

For your convenience I have enclosed a synopsis of EPA's legal authority and procedures for handling sensitive information. We sincerely appreciate your cooperation. Should you need further information, please contact the project officer, Leslie Evans, at 919-688-8146, extension 295.

Sincerely yours,



Don R. Goodwin
Director

Emission Standards and
Engineering Division

Enclosure

ENCLOSURE

LEGAL IMPLICATIONS OF THE REQUEST

The Environmental Protection Agency has broad authority to secure any information deemed necessary for development of standards under the Federal Clean Air Act (42 U.S.C. section 1857, et. seq.). Section 114 of the Act (42 U.S.C. section 1857c-9) authorizes this agency to make inspections, conduct tests and require owners or operators of any emission source to submit information for the purpose of developing emission standards. This letter and the requests for information contained herein are being sent pursuant to section 114.

Any records or information obtained during an investigation shall be available to the public unless a satisfactory showing has been made to the Administrator that the release of the information obtained would divulge a trade secret. Information requested pursuant to section 114 cannot be withheld from EPA on the grounds that you consider it to be confidential.

If you believe that any of the information we are requesting would reveal a trade secret if divulged, you should clearly identify that information, and set forth reasons for your claim, including supportive data or legal authority. Your reasons and supportive data should be presented separately for each item of information. Unsupported statements that you consider certain information confidential will not be accepted. Emission data, however, will always be available to the public. Any information determined to constitute a trade secret will be covered by 18 U.S.C., section 1905.