

May 14, 1971

J. O. GRAVES
F. & F. DEPT.
D-8022

ENVIRONMENTAL QUALITY STATUS
F. & F. DEPARTMENT

- I. Organization - The following persons have pollution assignments. Individuals are responsible for keeping each other informed of their activities to insure coordination of the Department effort.
- A. C. W. Stahl, Production Mgr., - Serves as F. & F. Department representative for the Environmental Control Committee. Has overall responsibility for F. & F. Department pollution program.
 - B. A. J. Geib, F. & F. Department Coordinator, Manufacturing - Coordinates the pollution activities at all F. & F. Department plants. (Also currently serving as Chairman of Water Quality Subcommittee for the National Paint, Lacquer, and Varnish Association and is F. & F. Department's representative on Du Pont's Air Quality Standards Subcommittee.)
 - C. Plant Coordinators: An individual has been designated pollution coordinator at each plant with the responsibility for administering the plant pollution control program. The Department coordinator is kept advised of all pollution matters by the plant pollution coordinators. Communications between the plants and Wilmington is operating efficiently.
 - D. W. W. Miller, Pollution Control Coordinator, - Assists sales with pollution inquiries from customers and manufacturers using our products. Monitors pollution legislation and disseminates to proper F. & F. personnel. Works with trade association (NFVLA, CSMA) on pollution related problems.
 - E. W. S. Zimmt, Research Fellow, - Works with NFVLA in area of air pollution legislation. Serves as internal air pollution consultant.

- F. F. Klein, Staff Engineer, - Supplies engineering assistance to help plants to comply with pollution regulations. Developing information on future plant needs for waste disposal.
- G. E. J. Zinser, Research Chemist, - Provides analytical support for obtaining effluent data required by the Federal Gov't.

II. F. & F. Department problems and approach to them

- A. Hydrocarbon emissions: A practical means is needed to measure the quantity of hydrocarbons emitted from numerous plant sources to determine compliance with pending regulations. ESD is assisting in the study of available instrumentation and development of a sampling procedure. If regulations similar to Los Angeles Rule 66 are adopted, some control equipment will be required.
- B. Rule 66: Adoption of regulations by all states similar to Los Angeles Rule 66 seems likely. This will require reformulation of all non-conforming solvent systems similar to that required for California.

Customers using products having non-conforming solvents systems will need engineering assistance for developing complying disposal methods. For one GM plant a detailed analysis including recommendations for plant design changes was conducted.

- C. Mercury: A program to recycle plant tank wash water is underway to reduce the level of mercury in the effluent to less than 5 ppb. However, if zero tolerance is adopted as in the case of Illinois, the difficulty of removing small traces of 1 to 2 ppb. is not known. These levels were found in effluents from non-mercury using plants.

It is expected that all mercury (except trace contaminants) will be removed from F. & F. products by the end of 1971. This is being done in anticipation of Federal and State legislation which may prohibit the use of mercury in paints.

- D. Heavy Metals: Regulations limiting some heavy metals to extremely low concentrations have prompted customers to inquire about the trace amounts of metals which may be present in our products. The department has begun to contact our raw material suppliers to obtain information on the trace amounts of toxic metals in purchased materials. With this information, the quantity of contaminate can be computed without resorting to costly analytical work.

- E. Corps of Engineer Permits for effluents: Analysis of waste waters is being obtained as part of requirements for a permit. Legal and Engineering have been of assistance, but it has been necessary to proceed in advance of any clear instructions in order to comply with the July 1 deadline for submitting an application. It is appreciated adequate information has not been available from the Corps of Engineers to date. However, in view of the company wide involvement in obtaining permits, more company direction or guidance would be helpful.
- F. Particulate Emission: Drying operations at Fairfield result in particulate emission near residential areas. These are a possible source for complaint, and ESD is being consulted for recommended means for control.
- G. Odors:
 - 1. Solvent and resin odors are detectable from many plant sources. Two sites are near residential areas which makes control critical. A step by step approach is being taken to eliminate or reduce emissions until a satisfactory level is achieved. The varnish operation is being discontinued at Philadelphia as a result of odor complaints.
 - 2. One customer has come to us for advice on how to handle odor complaints. ESD assisted in making recommendations on how to handle this particular customer's problem, however, the cost and legal complications of this type of customer service should be further defined before we offer further engineering assistance.
- H. Solvent waste disposal: While disposal is currently being handled satisfactorily by incineration or landfill, the continued availability of these methods is subject to change. Other means of dealing with this problem are being studied by R. & D.
- I. Noise: Noise from ball mills and granulators is a problem at some sites. Several methods for reducing noise are being investigated but as yet a satisfactory solution has not been obtained.

III. Comments on the effectiveness and problems of the present Company structure of guidance and assistance in the following areas:

- A. Setting environmental quality policy: A clear statement of company position has been made by top management which has facilitated implementing programs at lower levels. However,

no ready procedure exists for obtaining Company policy on specific problems as they arise. Legal and Engineering personnel are of assistance, but avoid setting policy. As an example policy is desired on supporting the Chicago NPVLA's protest on new Illinois mercury regulation.

The newly formed Dept. representative committee is an improvement in this direction, but the committee meets only periodically.

- B. Implementing environmental quality policy: Translating overall company policy into a specific program for any plant is often difficult because of changing or lack of standards, regulations etc. Each plant has been expected to take the required initiative, but this may not always result in uniform or consistent action.
- C. Monitoring results of environmental program: Aside from occasional questionnaires and surveys which appear primarily for information little company monitoring appears to exist in the sense that safety is followed. An inspection program similar to the Company's Fire and Safety organization might be considered for more positive follow-up.

A company lab for pollution work should also be considered, depending on future need for submitting data on emissions.

- D. Collecting and transmitting environmental quality information on national policy, laws and regulations: Dissemination of the actual government publications has been good. However, there is a need for assistance in interpreting the action required based not only on the publication but also on the information available from personnel contacts with officials, etc. In view of the rapid developments taking place, there appears to be a need for more frequent and extensive briefing. More inter-departmental communications might also be of assistance in solving common problems.
- E. Objectives for Du Pont's environmental quality program: While the Company position on pollution has been adequately stated, it is not clear what specific program objectives are considered in effect.

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AJG/WWM:ps