

AR226-3416

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ADDITIONAL INFORMATION FOR SUPERVISION

A 1976 report⁽¹⁾ indicates that the blood serum of the general population in the U.S. contains trace quantities of fluorine in both organic and inorganic form. The concentration of inorganic fluorine has been found to be related to fluoride ion in water supplies (natural and added). There is no ready explanation for the presence of organic fluorine.

A recent study by the 3M Company of their workers who manufacture and handle fluorosurfactants and their intermediates has revealed organic fluorine levels in their blood plasma in excess of those not engaged in these operations. 3M reported that a preliminary review of the medical histories and current health status of affected employees has not revealed any unusual health conditions. A more detailed epidemiological study of 3M workers has been initiated.

3M has identified two probable key sources of employee exposure in their operations. These are associated with (1) electrolytic cells in which key intermediates are manufactured, and (2) packaging operations involving powdered products.

The specific products implicated in the 3M study are not manufactured nor used on the Chambers Works. Different fluorosurfactants are manufactured on Chambers Works in the Chemicals and Development Manufacturing areas and are sold under the [REDACTED] trademark. The Chambers Works processes do not involve electrolytic fluorination and the products are handled throughout in liquid forms and are also sold in liquid forms. Despite the dissimilarity between the Du Pont and 3M technology, all handling procedures for fluorosurfactants and intermediates should be reviewed for adequacy. Assistance may be obtained from [REDACTED].

A special medical program will be initiated for all employees currently engaged in fluorosurfactants operations. This program will not be extended to personnel who have previously worked with fluorosurfactants, but who are no longer involved, unless the results of the initial program indicate that necessity. Similarly, Engineering Department, Environmental & Service Department and General Analytical Laboratory employees will not be included in the initial program though they should be advised of the program.

The initial special medical program will include (1) a review of the medical records of the employee, and (2) special blood analyses at the time of the employee's regular physical examination.

This program is concerned only with fluorosurfactants and their intermediates. Other fluorinated substances such as [REDACTED] fluorocarbons and fluoropolymers (e.g., [REDACTED], [REDACTED], etc.) are not implicated.

⁽¹⁾ W. S. Guy, et.al.: Proceedings Amer. Chem. Soc., Fluorine and Biological Chemistry Symposium, Chicago, 26 August 1975, Paper 7, page 117.

Company Sanitized. Does not contain TSCA CBI

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