

DU PONT DE NEMOURS (NEDERLAND) B.V.  
DORDRECHT WORKS

PERSONAL & CONFIDENTIAL

cc: [REDACTED]

TO : [REDACTED]

FROM : [REDACTED]

Dordrecht, 30 July 1981

C-8 STATUS

This letter will summarize recent events and current status of the C-8 program.

Air Monitoring

The attached data summarize the majority of C-8 air samples taken in 1980 and 1981. Comments concerning the data are:

- In general, the results are higher than expected and in the C-8 weighing area consistently above 0,56 ppb.
- The results at the fine powder dryer, with a few exceptions, are below 0,56 ppb.
- The results in the DBC area are unexplainably high, since the amount of C-8 used in granular is low.

As a result of these air monitoring data, background samples were taken in the main office building. The results ranged from 0,9 to 2,0 ppb, which lead to a careful evaluation of the analytical method. These analyses were done using the methylene blue method, which is not specific for C-8 or for organic fluorides, but is a method to detect ionic surfactants. Therefore, this method not only detects C-8, but also common cleaning agents. We also use it for Triton analysis. We concluded the method is not reliable for detecting C-8 in the ppb range, and also determined that Parkersburg was now using a chromatographic method. (The same method is used for blood samples.)

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The method used at Parkersburg and the Experimental Station is called the C-8/GC method and is considered the most accurate for C-8 analysis. It requires an electron capture GC and a freeze-dryer. The GC is available on the plant (temporary basis and in the long run a new GC may be needed, + f 35 000) and the freeze-dryer was ordered (f 10 000), since the plant did not have one.

Meanwhile, TNO was contacted and it was determined they could run the C-8/GC method. Results are listed below:

<u>Location</u>	<u>C-8 (ppb)</u>
FP Dryer - Feed End	0,50
FP Dryer - Discharge	0,38
Next to C-8 Hood	0,34
Door into Clave Room	0,26
Wax Separator	0,45
Shift Office	0,17

The results are considerably below the earlier numbers and all below 0,56 ppb. While more samples are needed, this supports the conclusion that the methylene blue analysis was inaccurate.

The next steps are:

- Complete development of C-8/GC method at Dordrecht.
- Resurvey the "Teflon" production area (and main office building) for C-8 concentration.
- Develop continuous monitoring program based on results of the survey.

#### Blood Samples

Following the 3M announcement that C-8 caused eye defects in unborn rats, it was decided to begin blood sampling at Dordrecht. The analyses were done at the Experimental Station using the C-8/GC method. The initial samples were taken in May from polymer operators and the results were in the same range as Parkersburg for their "Teflon" operators. Background samples are now being taken at Dordrecht and results should be available in August.

The next steps are:

- Develop background data for Dordrecht site.
- Evaluate polymer operator results in relation to background data (Medical).
- Evaluate polymer operator results in relation to workplace and experience in the polymer area (operati

- Follow-up with specific programs to minimize C-8 exposure:
  - liquid C-8
  - hood exhaust improvements
  - dryer vent stack recovery
  - appropriate new programs

Att.



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