

# EXHIBIT 14

Taconic Plastics  
136 Coonbrook Rd  
PO BOX 69  
Petersburg NY 12138  
Att Malcolm Green  
Corporate Engineering Manager

Gentlemen:

As we discussed, attached is the memo from the Department Toxic Unit. You should remember when reading this that the emissions from fugitive sources such as the tops of the ovens during upset are not well known.

Sincerely,

*Robert W. ...*  
DEC

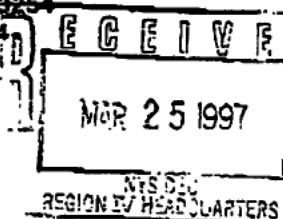
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L.B.  
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 50 Wolf Road, Room 108, Albany, New York 12233-3254  
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**John P. Cahill**  
 Acting Commissioner

**MEMORANDUM**

**TO:** Robert Warland, Regional Air Pollution Control Engineer,  
 Region Four

**FROM:** Arline Sumner, Environmental Chemist, Toxic Assessment Section,  
 Division of Air Resources *Arline Sumner*

**SUBJECT:** Taconic Plastics-Neighborhood Complaints

**DATE:** March 21, 1997

In response to the neighborhood complaints around Taconic Plastics of a disagreeable stink, reports of nausea and headaches, and visible bluish smoke, we have examined permit data and the toxicity of compounds used by the facility. Current permit data indicate that the facility is operating at 10% of the AGC for ammonium perfluorooctanoate. There is no AGC or TLV for the thermal degradation products of PTFE. The American Council of Governmental Hygienists states that "air concentrations should be controlled as low as possible" (ACGIH, 1995-96)

An evaluation of the toxicity of compounds emitted from this facility, ammonium perfluorooctanoate (CAS No. 3825-26-1) and thermal degradation products of PTFE (polytetrafluoroethylene) (CAS No. 9002-84-0) was performed. Toxicity profiles are on file with the Division and a summary of the findings is detailed below.

Regional inspection revealed PTFE heating temperatures recorded at this facility of 725 to 730 °F (385 to 388 °C.). Our review of the literature shows that at these temperatures, the possibility exists for production of thermal degradation products of PTFE of high toxicity. Thermal degradation products of high toxicity may be emitted at temperatures in excess of 300 °C or 572 °F (DuPont, 1992b). The toxicity of thermal degradation products of PTFE increases with increasing temperatures. Evaluation of workers engaged in PTFE fabrication at 350 to 380 °C (662 to 716 °F) found symptoms consistent with polymer fume fever (ACGIH 1995-96a), including chills, fever, tightness of the chest and other influenza-like symptoms. The MSDS on ICI Fluoropolymers cites a range of toxic and corrosive products due to thermal decomposition at temperatures greater than 380 °C or 716 °F and that exposure to these "must be avoided".

Toxic effects in animals from PTFE fumes are found at low inhaled concentrations. At a concentration of 0.5 ppm for 6 hours, perfluoroisobutylene, a compound liberated from PTFE at temperatures of 350 to 380 °C (662 to 716 °F), caused 100% mortality in rats. PTFE fumes generated at temperatures from 450 to 460 °C (842 to 860 °F) caused severe inflammatory pulmonary responses in rats exposed to 50 ug/m<sup>3</sup> for 15 minutes. The inflammatory effects seen

in rats and guinea pigs are consistent with pulmonary responses in humans exposed to polymer fumes. The ACGIH has set a Short-Term Excursion Limit Ceiling of  $82 \text{ ug/m}^3$  (0.01 ppm) for perfluoroisobutylene to protect exposed workers, based on respiratory responses in rats exposed for short periods to concentrations between 0.1 and 0.49 ppm.

Based on data from human studies and liver damage resulting from skin absorption in rats, the ACGIH-TLV for ammonium perfluorooctanoate is  $0.1 \text{ mg/m}^3$ . The AGC is derived by dividing the TLV by 420. The AGC is  $0.024 \text{ ug/m}^3$ .

Our review indicates that the resident complaints associated with emissions from this facility may be related to the thermal decomposition products of PTFE. You should focus on working with the facility to reduce all point and fugitive emissions of these products in an attempt to resolve the neighborhood complaints. Currently, I cannot determine if an adequate margin of safety exists without more detailed emission information.

The regional inspection indicated that the blue smoke may be related to an adhesive operation using toluene. An odor threshold for toluene is cited at 80-1900  $\text{ug/m}^3$  (Air Risc, 1992). Inhalation of 100 to 200 ppm (376 to 752  $\text{mg/m}^3$ ) has been associated with headache and mild, transient irritation of the upper respiratory tract (ACGIH 1995-96). This compound is not likely to be the source of complaints if emissions calculations show Taconic is in compliance with the AGC of  $400 \text{ ug/m}^3$ .

CC: Ed Bennett  
Tom Gentile