PERSONAL AND CONFIDENTIAL

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TO: T. L. SCHRENK/R. J. ZIPFEL

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C-8 INVESTIGATION AT THE INCINERATOR

As a result of a recent industrial hygiene investigation conducted at the incinerator, personal exposures to C-8 were found to be well below the provisional acceptable exposure limit (AEL) of 0.56 mpb* (Table 2). Any restrictions placed on incinerator personnel because of C-8 are no longer necessary. All three personal samples collected in May showed essentially zero C-8 exposure. One air sample collected on a forklift truck showed a measurable amount of C-8 but the concentration was only 12% of the AEL.

The investigation was initiated because of employee concerns. All air samples collected in April were analyzed for C-8 by the methylene blue method. This method is prone to interferences by other anionic surfactants as well as certain other compounds present in the air. In other words, the methylene blue method is not specific for C-8 since certain compounds can give false C-8 readings. All personal samples collected in April showed C-8 exposures in excess of the AEL (See Table 1). The next step was to locate the source of C-8. The Teflon® fine powder dryer exhaust emissions were ruled out since on at least one of the sampling days, winds were from the east. No C-8 sources were located at the incinerator. By ruling out the two most likely candidates, the April figures became very questionable.

More air sampling was performed in May and this time they were analyzed by the C-8 specific method (See Table 2). As a result of this sampling, it was determined that:

* mpb = moles of C-8 per billion moles of air.

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- Personal exposures to C-8 at the incinerator are minimal (essentially zero).
- Source of C-8 was not at the incinerator.
- With Teflon® plant running and winds from the west, a small amount of C-8 was measured. Therefore, any C-8 measured at the incinerator is most likely due to Teflon® fine powder dryer emissions when winds are from the west.
- April air sample results are invalid.

Attachment

JGL/nsw

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