



PPG Industries, Inc. Chemicals P.O. Box 1000 Lake Charles, Louisiana 70602

TO: Distribution

DATE: Jan. 3, 1990

FROM: Max Hekmat *MH*

SUBJECT: Noise monitoring

The Lake Charles Noise Monitoring began in late August 1989 and continued to the end of the year. The purpose of the monitoring was to:

- evaluate jobs not previously monitored,
- insure that job classes not previously included in the Audiometric testing program remain so classified, and
- evaluate jobs currently included in the Audiometric testing program.

To accomplish these goals, two samples were taken for every job description. This included both eight hour and twelve hour shifts. The equipment used for the monitoring was the MK-1 Audiodosemeter. It was calibrated before and after each sample was taken.

Since all the data needed to be on an eight hour basis, the "twelve hour shift" samples were converted to equivalent eight hour readings. This was done using the formula:

$$T_t/T_s \times D_s = D_A$$

where:

T_t is the total time

T_s is the total sample time

D_s is dose calculated by the MK-1

D_A is the dose used in the TWA formula.

D_A replaces D in the following formula to calculate TWA

$$TWA = 16.61 \log(D/100) + 90$$

where:

TWA is the eight hour time weighted average

D is actual accumulated dose in percent exposure.

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