

CELANESE CHEMICAL COMPANY
TECHNICAL CENTER
Corpus Christi, Texas

PLAINTIFF'S
EXHIBIT
CEL-595

ESR-298-76

Technical Center Air Monitoring Summary

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Office Memorandum

(Name and Location) Mr. R. M. Guedin - CCCTC	DATE September 13, 1976
(Name and Location) E. S. Ramey - CCCTC	REFERENCE NO ESR-298-76

Technical Center Air Monitoring SummaryAir Monitor Samples

Fifteen air monitor samples were processed during the three month period ending September 1. All of these were taken in the laboratories of Building 130. Except for some of the asbestos fiber counts, all have been reported. The filters on which air borne asbestos fibers were collected will be sent to National Loss Control Service Corporation, Long Grove, Illinois for asbestos fiber count using Phase Microscopy. The 15 air monitor samples are given in Table I.

Stairwell Odors - Room 106

Follow up on a reported odor complaint in the west basement stairwell of Tech Center Building 130 was made between June 4 and 11. During this time no odors were found. This area is a source of stagnant air. Air at the top of the stairwell circulates only when the doors at the top are opened for entry. I monitored this area at the top landing for detectible odors on six consecutive work days at 1100 and 1500. Any air contaminants present at the top of the stairs were below my odor threshold. No measurable readings were found using the Photoionization Analyzer (HNU Model PI-101). This area has been visited almost daily (I was on vacation for two weeks) with no odors found. No additional complaints have been reported to the Safety Department.

This area will be examined by the Engineering Department as a part of the air conditioning problem in the Corrosion Control Department. A request for this work has been written (EVK-81-76).

Miscellaneous

Six reports have been written (ESR-290 through 295) during this period. These are listed in Table II. ESR-294-76 is a report on the air conditioning and air flow data for the laboratories in Tech Center Building 130.

563

Unit terms

Air Monitoring
OSHA
TLV

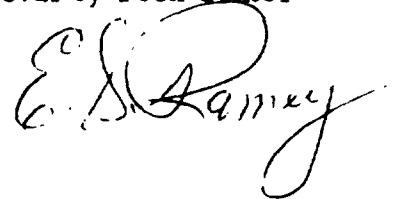
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The amount of air contamination for acetone, hexane, benzene, and some other compounds over an 8 hour work shift (for TWA) can be measured using the HNU PI-101 Photoionization Analyzer and a recorder. This was demonstrated in Lab 65 (IH 37-76) using the n-hexane being sewerer from the Varian Liquid Chromatograph (n-hexane is not a potential problem and this was done for demonstration only). A portable recorder (Hewlett Packard 7155 A) was borrowed from Mr. Henry Farek for this work. Eight hour runs are possible using the battery packs of the two instruments. The concentration of hexane in the air near the lab sink was continuously measured and recorded for a six hour period. The analyzer was calibrated at the 50 ppm level using a prepared air blend. The level of air contamination found due to n-hexane was well below 50 ppm which is 0.1 the Threshold Limit Value (TLV). The Photoionization Analyzer will prove to be a very useful tool in the air monitoring work here at the Tech Center. I feel sure it would be just as useful at the Chemical Company Production Plants.

A new method for the examination of insulation material for the presence or absence of asbestos is now in use using the Scanning Electron Microscope (ESR-29). This type of data will be useful to maintenance supervisors in the planning of their health and safety requirements. This service is now in use at Bay City and the Tech Center and has been offered to the Industrial Health Chemists at the production plants.

A new table of Tech Center Air Monitoring Data containing a consecutive presentation of all air monitoring at the Tech Center has been developed. It was patterned after the one used by Ann Retherford, the Bishop plant Industrial Health Chemist, and will be proposed as a standard form for all plants as well as the Tech Center.

A master plan of needed air monitoring for demonstrating OSHA compliance and Chemical Company regulations for insuring safe industrial health of our employees has been written and submitted for approval by Tech Center management.



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TABLE I
TECH CENTER AIR MONITOR SAMPLES

<u>IH No.</u>	<u>Component Monitored</u>	<u>Location</u>	<u>Date of Monitoring</u>	<u>ppm Found</u>	<u>TLV ppm</u>
25-76	NOx	Lab 113	6/1/76	<0.5	5
26-76	NOx	Lab 113	6/9/76	<0.5	5
27-76	CO	Rm 106	7/16/76	<5	50
28-76	Asbestos	Lab 69	7/19/76	*	2#
29-76	Pyridine	Lab 69	7/19/76	2	5
30-76	Asbestos	Lab 77	7/21/76	*	2#
31-76	Dust (for presence asbestos)	Lab 287	7/23/76	Report in print_shop. See PBG 181 and 182.	
32-76	Benzene	Lab 280	7/23/76	5	10
33-76	Asbestos	Lab 62	7/29/76	*	2#
34-76	Asbestos	Lab 114	7/29/76	*	2#
35-76	Asbestos	Lab 113	7/30/76	*	2#
36-76	Asbestos	Lab 113	8/9/76	*	2#
37-76	Hexane	Lab 65	8/27/76	<50	500
38-76	Benzene	Lab 283	8/27/76	<1	10
39-76	Benzene	Lab 283	8/26/76	<1	10

*Filters will be analyzed by National Loss Control Service Corp.

#Two fibers per cubic centimeter of air.

008388

TABLE II
LISTING OF REPORTS

ESR-290-76	June 4	Respirable Asbestos Fibers - Lab 114
ESR-291-76	July 20	Analysis of Bay City Plant Insulation Samples - Asbestos
ESR-292-76	August 3	Oil Mist Analysis
ESR-293-76	August 16	Bishop Celcon Process Vent Samples
ESR-294-76	August 16	Industrial Health Survey - Laboratory Air Conditioning and Ventilation
ESR-295-76	Sept 1	Bishop Celcon Unit Vent Samples

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