

ABERDEEN CHEMICAL PLANT
INDUSTRIAL HYGIENE MONTHLY REPORT

Month: August

Date of Report: 10/4/84

Routine Chemical Dosimetry

All Sample Results:

<u>Chemical</u>	<u><</u>		<u>></u> PEL OVEREXPOSURES	
	<u>No.</u>	<u>PEL</u> <u>%</u>	<u>No.</u>	<u>%</u>
VCM	93	91.4	8	8.6
Lead	24	96.0	1	4.0
Total Particulates	6	100.0	0	0.0

Overexposures

<u>Job Class</u>	<u>Exposure</u>	<u>Source</u>
Chief Operator	1.2* ppm, VCM	Employee overexposed while changing VCM filter pack filters.
Reactor Operator	10.1** ppm, VCM	Employee overexposed while doing his regular job of reactor operator in the old unit. No specific cause for his overexposure has been determined.
Reactor Operator	1.4* ppm, VCM	Employee overexposed while sampling 745 reactor.
Reactor Operator	2.9** ppm, VCM	Employee overexposed while training a fellow employee and a reactor operator in the old unit. No specific cause for the overexposure has been identified.

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<u>Overexposures</u>	<u>Exposure</u>	<u>Source</u>
Dryer Utility	1.1** ppm, VCM	Employee overexposed while being trained as a reactor operator in the old unit. No specific cause for the overexposure has been identified.
Yard Operator	2.6* ppm, VCM	The employee was overexposed while hooking/unhooking VCM railcars at the VCM tank farm.
Mechanic	1.9** ppm, VCM	Employee overexposed while blanking out D-300 reactor condenser prior to condenser drilling.
Mechanic	6.2* ppm, VCM	Employee overexposed while changing out two Corken compressors at the VCM tank farm.
Line Compounder	44.4* microgram Lead/m ³	The product being produced during sampling time contained no lead. The source of the overexposure is not clear; it may be related to housekeeping in the area.

* Respiratory protection was worn.

** Respiratory protection was not worn.

VCM Area Monitoring

Four, forty-minute VCM area samples were taken at the top of 502 blend tank during the transfer of 5385 resin slurry from D-700 reactors using REAL "Minimonitor" badges. Wind direction was from west to east, ranging between zero and five miles per hour. The results indicate, as have previous studies, that VCM concentrations atop blend tanks may reach levels that require the use of respirators during slurry transfer, depending on a variety of variables including wind conditions. Because of this, respirators should continue to be used during work atop the tanks.

<u>No.</u>	<u>Location</u>	<u>Result (ppm, VCM)</u>
1	Top and SW of 502, on Safety Railing	< 0.1
2	Top and NW of 502, on Safety Railing	< 0.1
3	Top and SE of 502, on Safety Railing	< 0.1
4	Top and NE of 502, on Safety Railing	3.3

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Plasticizer-in-Air Monitoring

The results of plasticizer-in-air samples taken at the mills on Compound Lines I and III during July appear below. Sampling equipment consisted of Bendix BDX 44 air pumps equipped with Gelman 37MM cellulose filters. Sample analysis involved solvent extraction, followed by liquid chromatography. The single high result occurred during a period in which the "belt" of compound near the sampler was "smoking" excessively (for no obvious reason). A similar sample (#3), taken two hours later and at the same location, showed a hundred-fold decrease.

<u>No.</u>	<u>Compound Line</u>	<u>Date (Time)</u>	<u>Compound</u>	<u>Plast.</u>	<u>Location</u>	<u>Result (mg/m³)</u>
1	3	7/23/84 (1118)	38601 B1k	610P	SW Corner, E Take Off Belt	22.7
3	3	7/23/84 (1318)	38601 B1k	610P	SW Corner, E Take Off Belt	0.2
4	3	7/25/84 (1012)	3934-152-B1k	610P	SE Corner, W Take Off Belt	0.2
5	3	7/25/84 (1012)	3934-152-B1k	610P	SW Corner, E Take Off Belt	0.2
2	1	7/23/84 (1314)	34642 Nat	108P	Oper. Station at Mill "Face"	0.2
6	1	7/25/84 (1055)	34642 Nat	108P	Oper. Station at Mill "Face"	0.2

Equipment Calibration

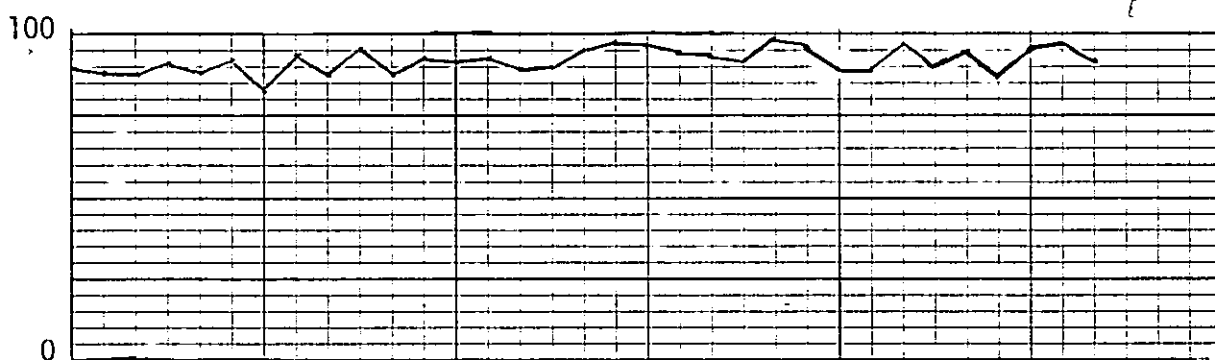
The third quarter calibration of the precision rotameter used to measure Bendix BDX 44 air pump flowrates was completed using a large "bubble tube" as a primary standard. No significant drift was seen.

GINNY BELK, R.N.
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 Plant Nurse

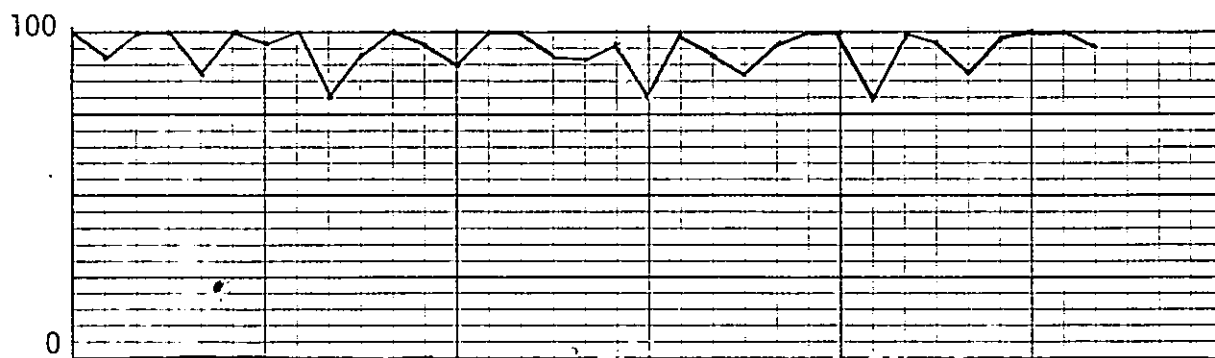
rah

cc: JF, JWW, DWH, PJK, LPS, CRS, RAF, AHS, JVV
 Tom Grumbles, J. R. Drumwright, M.D. - Houston

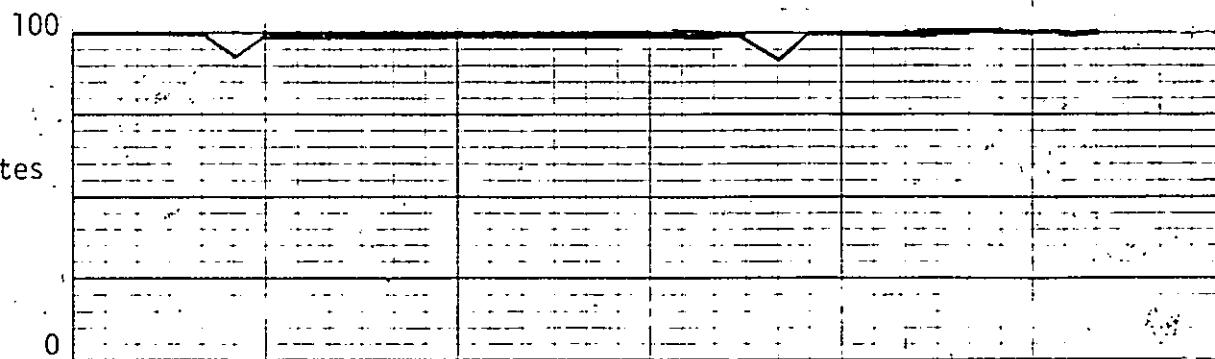
VCM



Lead



Total
Particulates



Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
19 <u>82</u>												19 <u>83</u>												19 <u>84</u>											