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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

MONTH OF: January, 1982

DATE OF REPORT: February 11, 1982

c: JF, CRM, PEM, PJK, RDJ, WFH, SJV, RAF, RAM, AHS
T. G. Grumbles - Houston, L. A. Legendre - Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL		≥ PEL OVEREXPOSURES	
	No.	%	No.	%
VCM	79	87	12	13
Lead	12	92	1	8
Antimony	13	100	0	0
Total Particulates	6	100	0	0

OVEREXPOSURES:

Job Class		Exposure	Source
Color Weigh Compounder		57.3* Micrograms Lead/M^3	-Employee did normal job of color weigh up. Specific cause not determined.
Reactor Operator	√	1.1 ppm, VCM	-Employee worked in area where coarse batches were being dumped.
Dryer Utility	√	1.2 ppm, VCM	-Specific cause not determined.
Mechanical Engineer		1.3 ppm, VCM	-Employee worked near dump tank during "delumper" test run.
Reactor Operator	√	1.3 ppm, VCM	-Specific cause not determined.
Maintenance Helper		1.8 ppm, VCM	-Employee helped install new manway on D-700 Rx.
Vinyl Shift Supervisor	√	1.8 ppm, VCM	-Specific cause not determined.
Vinyl Shift Supervisor	√	1.9 ppm, VCM	-Specific cause not determined.
Chief Operator	√	2.3 ppm, VCM	-Specific cause not determined.
Reactor Operator	√	2.3 ppm, VCM	-Specific cause not determined.
General Mechanic		2.4 ppm, VCM	-Employee tightened S. end of new unit recovery condenser(leaking).
General Mechanic		5.2 ppm, VCM	-Employee repaired high pressure water pump in V-11.
General Mechanic		9.1*ppm,VCM	-Employee repaired vacuum pump in V-11.

* Respiratory protection worn.

Gerald Uptain

VAB.0001040246

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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

MONTH OF: February, 1982

DATE OF REPORT: March 11, 1982

c: JF, CRM, PEM, PJK, RDJ, WFH, SJV, RAF, RAM, AHS
T. G. Grumbles - Houston, L. A. Legendre- Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL No.	< PEL %	≥ PEL OVEREXPOSURES No.	≥ PEL OVEREXPOSURES %
VCM	68	87	10	13
Lead	8	100	0	0
Antimony	8	100	0	0
Total Particulates	5	100	0	0

OVEREXPOSURES:

Job Class		Exposure	Source
Dryer Operator		1.0 ppm, VCM	Specific cause not determined.
Dryer Utility		1.0 ppm, VCM	" " " "
Chief Operator	√	1.3* ppm, VCM	Employee prepared old unit emission recovery system for maintenance.
Maintenance Helper		1.4 ppm, VCM	Employee helped blank and drill 745 reactor condensor.
General Mechanic		1.4 ppm, VCM	Specific cause not determined.
Maintenance Helper		4.0 ppm, VCM	Employee helped drill 745 reactor condensor.
Maintenance Helper		4.9 ppm, VCM	Employee helped drill 745 reactor condenser.
Chief Operator	√	6.4 ppm, VCM	Employee worked near a leaking VCM charge line in the new unit.
Reactor Operator	√	6.6* ppm, VCM	Employee changed all of the VCM filters in the new unit.
Reactor Operator	√	7.3* ppm, VCM	Employee discovered that a new unit vacuum pump seal had blown out. He then shut off the pump.

* Respiratory protection worn.

Jerald Uptain /tp

Jerald Uptain

VAB.0001040247

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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

MONTH OF: March, 1982

DATE OF REPORT: April 2, 1982

c: JF, CRM, PEM, PJK, RDJ, WFH, SJV, RAF, RAM, AHS
T. G. Grumbles - Houston, L. A. Legendre- Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL		≥ PEL OVEREXPOSURES	
	No.	%	No.	%
VCM	96	91.4	9	8.6
Lead	10	100.0	0	0
Antimony	10	100.0	0	0
Total Particulates	9	100.0	0	0

OVEREXPOSURES:

Job Class		Exposure	Source
Chief Operator	√	1.1* ppm, VCM	Employee unplugged drain on 702 tank, emission recovery system.
General Mechanic		1.2* ppm, VCM	Employee changed out a leaking, 3" valve on a vacuum pump in the old unit recovery system.
Maintenance Helper		1.7 ppm, VCM	Employee replaced seal on Chem wash pump in new unit recovery area.
Chief Operator	√	2.2* ppm, VCM	Employee helped change filters in new unit VCM filter packs.
Reactor Operator	√	3.6* ppm, VCM	Employee recovered a subcooler in new unit.
Reactor Operator	√	4.1* ppm, VCM	Employee changed filters in old unit VCM filter packs.
General Mechanic		4.7* ppm, VCM	Employee removed and rebuilt the catalyst valve on D-700 and tightened the bolts around the agitator drive seal.
Reactor Operator	√	30.1* ppm, VCM	Employee changed VCM filters in VCM filter packs.
General Helper		30.4* ppm, VCM	Employee helped blank out 744 reactor.

* Respiratory protection worn.

Jerald Uptain

VAB.0001040248

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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

MONTH OF: April, 1982

DATE OF REPORT: May 5, 1982

c: JF, CRM, PEM, PJK, RDJ, WFH, SJV, RAF, RAM, AHS
T. G. Grumbles - Houston, L. A. Legendre- Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL		≥ PEL OVEREXPOSURES	
	No.	%	No.	%
VCM	91	88.3	12	11.7
Lead	6	85.7	1	14.3
Antimony	7	100	0	0
Total Particulates	6	100	0	0

OVEREXPOSURES:

Job Class		Exposure	Source
Color Weigh Compounder		94.7 Micrograms of Lead/M^3	Employee did normal job of color weigh up.
— Yard Supervisor	√	1.1 ppm, VCM	Employee checked a compressor leak at VCM tank farm.
General Mechanic		2.8* ppm, VCM	Employee removed plugged VCM line at 744 reactor.
— Reactor Operator	√	1.3 ppm, VCM	Employee unknowingly worked near a leaking VCM charge pump in new unit.
General Mechanic		1.1*ppm, VCM	Employee removed blanks at 744 reactor, following condensor cleaning.
General Mechanic		1.3* ppm, VCM	Employee changed a safety disc on D-500 reactor.
Maintenance Helper		1.1* ppm, VCM	Employee changed a safety disc on 745 reactor.
Maintenance Helper		2.4 ppm, VCM	Employee pulled blanks and closed the recovery subcooler in the old unit.
Maintenance Helper		3.6 ppm, VCM	Employee drilled the recovery subcooler in the old unit.
General Helper		3.7* ppm, VCM	Employee pulled and cleaned north and south K.O. pumps in new unit.
— Chief Operator	√	5.1* ppm, VCM	Employee flushed K.O. Tank and recovery system in new unit.
— Yard Operator	√	1.2* ppm, VCM	Employee hooked up VCM railcars.
— General Helpers		3.9 ppm, VCM	Employee pulled and cleaned both blowdown tank pumps in new unit.

* Respiratory protection worn.

VAB.0001040249

Jerald Uptain

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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

MONTH OF: May, 1982

DATE OF REPORT: June 9,1982

c: JF, CRM, PEM, PJK, RDJ, WFH, SJV, RAF, RAM, AHS
T. G. Grumbles - Houston, L. A. Legendre- Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL No.	< PEL %	≥ PEL OVEREXPOSURES No.	≥ PEL OVEREXPOSURES %
VCM	92	92.0	8	8.0
Lead	13	100.0	0	0
Antimony	13	100.0	0	0
Total Particulates	12	92.3	1	7.7

OVEREXPOSURES:

Job Class		Exposure	Source
Dry Blend Utility		23.9* Milligrmas/M^3	Employee hand dumped raw materials during experimental Dry Blend run.
Reactor Operator	√	1.2 ppm, VCM	Employee checked D-600 area for VCM leak - found to be a broken "transmitter" line.
Reactor Operator	√	1.3* ppm, VCM	Employee changed VCM filter pack filters in new unit.
Maintenance Helper		1.4 ppm, VCM	Employee repaired valve in old unit recovery area.
General Mechanic		1.6* ppm, VCM	Employee rodded out all of the vinyl reactor AMS nozzles.
Chief Operator	√	3.0 ppm, VCM	Employee overexposed during incident involving a new unit steam header pluggage.
General Mechanic		5.3* ppm, VCM	Employee removed the south knock-out pump in new unit.
Reactor Operator	√	6.4* ppm, VCM	Employee changed new unit VCM filters.
Dryer Utility	√	7.7* ppm, VCM	Employee changed an "O" ring on D-400 Lenape during reactor operator OJT.

* Respiratory protection worn.

Jerald Uptain

VAB.0001040250

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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

MONTH OF: June, 1982

DATE OF REPORT: July 1, 1982

c: JF, CRM, PEM, PJK, RDJ, WFH, SJV, RAF, RAM, AHS
T. G. Grumbles - Houston, L. A. Legendre- Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL		≥ PEL OVEREXPOSURES	
	No.	%	No.	%
VCM	82	83.7	16	16.3
Lead	29	96.7	1	3.3
Antimony	29	100	0	0
Total Particulates	4	100	0	0

OVEREXPOSURES:

Job Class	Exposure	Source
Color Weigh- Compounder	73.1* Micrograms Lead/M^3	Employee did normal job of color weigh-up, including Halbase 100EP.
General Mechanic	1.1 ppm, VCM	Employee helped drill 743 reactor condenser.
General Mechanic	1.2 ppm, VCM	Employee exposed during the D-700 reactor release of 6/7/82. He was working downwind of the release, near D-745 reactor.
Chief Operator ✓	1.3 ppm, VCM	Employee cleaned the blowdown tank strainer in the new unit.
General Mechanic	1.5 ppm, VCM	Employee exposed while pulling and inspecting 705 emission recovery compressor for pluggage and wear.
Reactor Operator ✓	1.6 ppm, VCM	Employee exposed while recovering the old unit, east VCM charge pump in preparation for maintenance.
General Mechanic	1.7* ppm, VCM	Employee pulled and cleaned the west VCM charge pump strainer in the old unit.

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OVEREXPOSURES (Continued)

	Job Class		Exposure	Source
—	Reactor Operator	✓	2.2* ppm, VCM	Employee flushed out the new unit recovery system.
—	Vinyl Shift Supervisor	✓	2.3 ppm, VCM	Employee exposed during the 6/7/82, D-700 release noted above. He was in the new unit area when the release was detected.
—	Reactor Operator	✓	3.7 ppm, VCM	Employee worked near two maintenance jobs in the old unit: 1. Changeout of the east VCM charge pump strainer. 2. Changeout of the east vacuum pump.
—	Vinyl Operations Supt.	✓	3.9* ppm, VCM	Employee performed a visual inspection of the old unit VCM charge header.
—	Reactor Operator	✓	5.3 ppm, VCM	Employee worked in the old unit, downwind of maintenance work on the blowdown tank transfer pump in the new unit. He reports having smelled VCM coming from that direction.
—	Chief Operator	✓	6.8 ppm, VCM	Employee exposed during the 6/7/82, D-700 release noted above. He was working in the new unit when the release was detected.
—	Dryer Operator	✓	9.0 ppm, VCM	Employee hooked up flex lines at the VCM rail silos.
	General Mechanic		9.3* ppm, VCM	Employee changed the seals on 705 and 706 emission recovery compressors.
—	Reactor Operator	✓	9.5* ppm, VCM	Employee changed filters in the old unit filter packs.
—	Reactor Operator	✓	14.2 ppm, VCM	Employee made up "PVA" in the old unit.

Jerald Uptain

* Respiratory Protection Worn.

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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

MONTH OF: July 1982

DATE OF REPORT: August 9, 1982

c: JF, CRM, PEM, PJK, RDJ, WFH, SJV, RAF, RAM, AHS
T. G. Grumbles - Houston, L. A. Legendre- Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL		≥ PEL OVEREXPOSURES	
	No.	%	No.	%
VCM	65	94.2	4	5.8
Lead	17	100	0	0
Antimony	0	-	0	-
Total Particulates	0	-	0	-

OVEREXPOSURES:

Job Class		Exposure	Source
Reactor Operator	✓	1.0 ppm, VCM	Employee worked entire shift as a firewatch in the old unit.
General Mechanic		1.3 ppm, VCM	Employee pulled and checked lines for pluggage - from the old unit K.O. tank to the RVCM receivers.
Vinyl Shift Supervisor	✓	1.4* ppm, VCM	Employee helped change out VCM filter pack filters.
Reactor Operator	✓	4.5*, ppm VCM	Employee changed out VCM filter pack filters.

* Respiratory protection worn.

Jerald Uptain

VAB.0001040253

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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

MONTH OF: August 1982

DATE OF REPORT: September 10, 1982

c: JF, CRM, PEM, PJK, RDJ, WFH, CRS, RAF, RAM, AHS
T. G. Grumbles - Houston, L. A. Legendre- Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL		≥ PEL OVEREXPOSURES	
	No.	%	No.	%
VCM	82	86.3	13	13.7
Lead	4	80	1	20
Antimony	0	-	0	-
Total Particulates	3	100	0	0

OVEREXPOSURES:

Job Class	Exposure	Source
Color Weigh Compounder	340* Micrograms lead/M^3	Employee helped clean out the compound vacuum system hopper.
General Mechanic	1.6 ppm, VCM	Employee did leak repairs during a VCM leak survey conducted by Process Engineering. He also helped change out the 745 VCM charge valve.
General Mechanic	9.9* ppm, VCM	Employee helped open the north VCM receiver in the old vinyl unit in preparation for maintenance.
Electrician	77.6 ppm, VCM	Employee exposed while doing greasing work near the knockout tanks on the 2nd floor of the new unit recovery building. VCM was being evolved from the sewer at that point. The source of the VCM has not yet been determined.

Overexposures (Continued)

Job Class		Exposure	Source
Maintenance Helper		11.0 ppm, VCM	Employee headed up the north recovery condenser in the old unit and changed a safety disc on 903 compressor (new vinyl unit).
Chief Operator		3.9* ppm, VCM	Employee changed VCM filter pack filters.
Chief Operator		1.1 ppm, VCM	Employee worked near VCM leaks occurring in several lines, flanges, etc. during the start-up of the old vinyl unit on 8/10/82.
Chief Operator		2.5 ppm, VCM	Employee worked in new vinyl unit the bulk of his shift. The cause of his exposure is not certain. He assisted in manually operating the new unit inlet valve to the recovery compressors and also worked near the dump system during a long dump from 743 ("chunk" lodged in manifold, requiring flush out).
Reactor Operator		1.3 ppm, VCM	Same as Chief Operator having 2.5 ppm, VCM, except this employee also took slurry samples at the Sweco.
Reactor Operator		19.7* ppm, VCM	Employee changed VCM filter pack filters.
Reactor Operator		1.9 ppm, VCM	Same as Chief Operator having 1.1 ppm, VCM
Reactor Operator		3.5* ppm, VCM	Employee drained a knockout tank in the new unit.
Reactor Operator		5.7* ppm, VCM	Employee changed out seal water filters in the old unit.

Overexposures (Continued)

Job Class	Exposure	Source
Vinyl Shift Supervisor	1.0 ppm, VCM	Same as Chief Operator having 2.5 ppm, VCM, except he did not assist in the manual operation of the inlet valve to the recovery compressors. He also switched lines at the resin silos.

*Respiratory Protection Worn.

Jerald Uptain

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ABERDEEN CHEMICAL PLANT

ROUTINE CHEMICAL DOSIMETRY SUMMARY

MONTH OF: September, 1982

DATE OF REPORT: October 6, 1982

c: JF, CRM, PEM, PJK, RDJ, WFH, CRS, RAF, RAM, AHS
T. G. Grumbles - Houston, L. A. Legendre- Ponca City

ALL SAMPLE RESULTS:

Chemical	< PEL		≥ PEL OVEREXPOSURES	
	No.	%	No.	%
VCM	85	95.5	4	4.5
Lead	13	92.9	1	7.1
Antimony	0	-	0	-
Total Particulates	3	100	0	0

OVEREXPOSURES:

Job Class		Exposure	Source
Dry Blend Utility		37.0* Micorgrams Lead/M^3	Employee overexposed while helping a Line III Compounder charge a blender. He picked up a torn bag of lead stabilizer, causing an evolution of the material into the air.
Maintenance Helper		1.8*ppm VCM	Employee helped replace seals in a VCM charge pump in the new unit and changed a safety disc on 745 reactor.
Chief Operator	✓	1.2ppm VCM	Employee unplugged VCM charge lines in the new module.
Chief Operator	✓	11.7*ppm,VCM	Employee overexposed while replacing a leaking plug on 905 compressor in the new unit.
Reactor Operator	✓	1.3ppm, VCM	Employee overexposed while trying to locate a leak, finding it in the recovery valve on D600 evacuation line.

* Respiratory protection worn.

Jerald Uptain

VAB.0001040257