90-1184 (11-73)

INTER-OFFICE MEMO **TENNECO CHEMICALS, INC.**

TO J. T. Sweeney AT Flemington DATE April 6, 1977

FROM P. D. Ruane AT Flemington COPY TO W. D. Bord
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TWA Only*

SUBJECT VCM Exposure Data and TWA - Flemington Plant
Area Monitoring System
March 26, 1977 to April 1, 1977

Attached are Plant summaries (Tables I-III) Table IV lists all excursions at or above 100 ppm including the number of incidents. Table V shows the TWA by job classification calculated from the data in Tables I-III. Graph #1 shows the percentage of readings above 1 and 5 ppm VCM for the Reactor Building while Graph #2 shows the weekly averages for the Reactor Building and the Pilot Plant. Also attached is an analysis of the Plant data by W. D. Bord.

The Plant was in operation seven days for this report period running at about 95% utilization. The four G. C. 's were on computer control.

Area	Total	≥1		≥5		≥25		≥100	
		N	%	N	%	N	%	N	%
Reactor Building	9,701	2833	29	423	4	38	0.4	2	0.02
Recovery Comp. Room	686	289	42	32	4.7	5	0.7	0	0
Pilot Plant	5,488	291	5.3	111	2	10	0.2	1	0.02
General Area	6,860	253	3.7	46	0.7	7	0.1	1	0.01
Parshall Flume	686	148	21.6	13	1.9	0	0	0	0

All readings greater than or equal to 100 ppm VCM are tabulated in Table IV. Four readings at or above 100 ppm occurred this report period reflecting three separate incidents. One incident occurred in the Reactor Building affecting the center aisle, 1st and 2nd floors. No incidents occurred in the Recovery Compressor Room during this report period. One incident occurred in the Pilot Plant Reactor Building affecting the centrifuge. One incident occurred in the General Area affecting the VCM transfer pumps in the tank farm.

Paul D. Ruane

P. D. Ruane

PDR:ms

TABLE I

GENERAL AREA

Period Covered 3-26/4-01-77

Monitoring Point	N	$\bar{X}$	> 1	$\bar{>}$ 5	$\bar{>}$ 25	$\bar{>}$ 100
Truck Loading Platform	686	<0.1	5	0	0	0
Quality Control Laboratory, West	686	0.9	83	17	4	0
Quality Control Laboratory, East	686	0.1	18	3	0	0
Lunchroom	686	<0.1	2	0	0	0
Bulk Loading Tower	686	<0.1	8	0	0	0
Dryer Room	686	<0.1	8	0	0	0
Bagging Room - Baggers Seat	686	<0.1	4	1	0	0
Maintenance Shop	686	0.1	7	3	0	0
MCM Transfer Pumps - Tank Farm	686	0.4	27	2	2	1
Tank Car Unloading Platform	686	0.6	91	20	1	0
TOTAL	6860 / 1	0.3	253	46	7	1

P. D. Ruane
3/10/77

TABLE II

REACTOR BEDDING

onitoring Point — Period Covered 3-26/4-01-77

	N	$\bar{X}$	> 1	$\bar{>}$ 5	$\bar{>}$ 25	$\bar{>}$ 100
enter Aisle Column #2, 1st floor	392	1.0	24	4	2	1
enter Aisle Column #4, 1st floor	490	0.7	91	4	2	0
enter Aisle Column #6, 1st floor	392	0.7	49	7	2	0
1 Slurry Transfer Pump, 1st floor	490	0.2	16	1	0	0
2 Slurry Transfer Pump, 1st floor	686	0.2	30	2	0	0
eFoamer Tanks, 1st floor	SPECIAL	←				→
CM Day Tank Area	391	0.1	8	1	0	0
enter Aisle Column #2, 2nd floor	686	1.8	208	56	3	1
enter Aisle Column #4, 2nd floor	686	2.8	297	87	9	0
enter Aisle Column #6, 2nd floor	686	1.4	319	14	2	0
tripper #2 Platform, manhole, 2nd floor	686	1.9	363	49	4	0
anel Board Column #7, 2nd floor	686	1.5	312	38	1	0
tripper #1 Platform, manhole, 2nd floor	686	2.6	357	78	9	0
nock-Out Pots, 2nd floor	686	1.4	286	33	1	0
oreman's Desk	686	1.1	205	19	1	0
ry Chemical Weigh-up Area	686	1.1	200	21	1	0
tairwell in Hallway, 2nd floor	SPECIAL	←				→
eigh Tank Chip Basket Area	686	0.5	68	9	1	0
Total	9,701	1.2	2833	423	38	2

RECOVERY COMPRESSOR ROOM

Monitoring Point

	N	$\bar{X}$	> 1	$\bar{>}$ 5	$\bar{>}$ 25	$\bar{>}$ 100
1 Recovery System	SPECIAL	←				→
2 Recovery System	686	1.7	289	32	5	0
Total	686	1.7	289	32	5	0

P. D. Ruane
3/10/77

TABLE III

PILOT PLANT

Period Covered 3-26/4-01-77

Monitoring Point	N	$\bar{X}$	> 1	> 5	> 25	> 100
Strong Scott Dryer - Process Building	686	0.3	12	10	1	0
Boiler House	SPECIAL	←				→
Pilot Plant Laboratory - Process Building	686	0.4	13	11	1	0
Centrifuge - Reactor Building	686	0.9	41	18	3	1
"F" Reactor - Reactor Building	686	0.8	60	17	3	0
Parshall Flume	686	0.9	148	13	0	0
Plastisol Tower- Reactor Building	686	0.5	34	14	0	0
VCM Storage Area - Reactor Building	686	0.6	46	14	1	0
"E" Reactor - Reactor Building	686	0.7	74	17	1	0
"B" & "C" Reactors - Reactor Building	686	0.3	11	10	0	0
* Total	5488	0.6	291	111	10	1

(* less *2 & *6)

P. D. Ruane
3/10/77

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TABLE I

ALL EXCURSIONS AT OR GREATER THAN 100 ppm VCM

PERIOD 3-26/4-01-77

DATE	TIME	AREA AFFECTED	REMARKS
3-29-77	1258	CENTRIFUGE, PILOT PLANT REACTOR BUILDING.	
3-30-77	0425	CENTER AISLE COLUMN #2, 2ND FL. Rx BLDG.	
	0426	CENTER AISLE COLUMN #2, 1ST FL. Rx BLDG.	
	1744	VCM TRANSFER PUMPS, TANK FARM.	

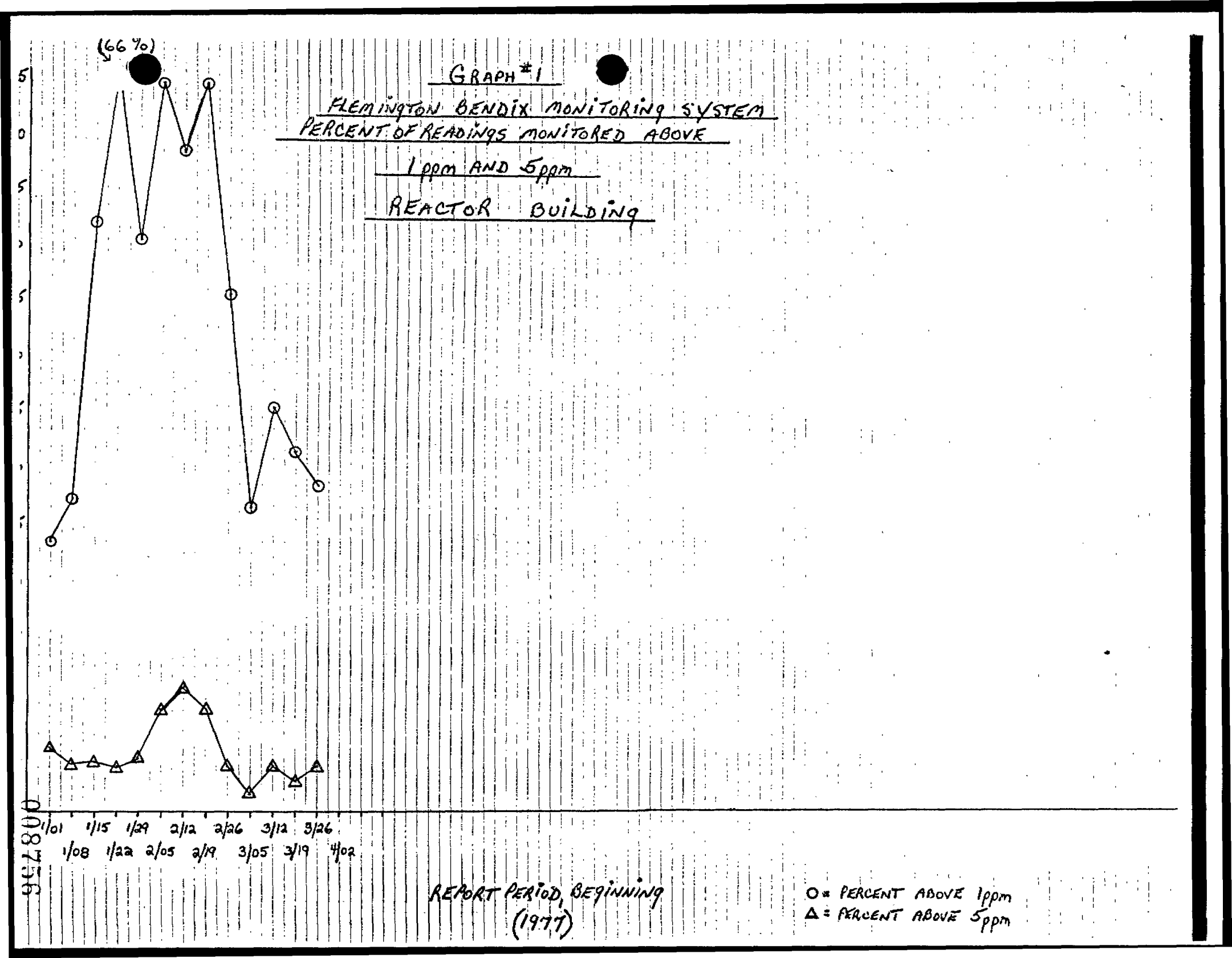
FLEMINGTON TIME-WEIGHTED EXPOSURE AVERAGES
CALCULATED FROM BENDIX MONITORING DATA

03/26/77 TO 04/01/77

TABLE V

JOB CLASSIFICATION	TWA
RESIN PLANT	
POLYFORMAN W AIR	.7
POLYFORMAN WO AIR	.9
SHIFT FORMAN W AIR	.4
SHIFT FORMAN WO AIR	1.8
REACTOR OPER-CHRG W AIR	1.1
REACTOR OPER-CHRG WO AIR	1.2
REACTOR OPER-DUMPG W AIR	.7
REACTOR OPER-DUMPG WO AIR	1.9
REACTOR OPER-RELIEF W AIR	.7
REACTOR OPER-RELIEF WO AIR	1.9
UTILITY OPER W AIR	.6
UTILITY OPER WO AIR	3.9
DRYER OPER	.1
WAREHOUSE SUPERVISOR	.1
WAREHOUSEMAN-BAGGER	.2
GENERAL AREA	
MAINTENANCE FORMAN	.2
MECHANIC SHIFT	1.2
MECHANIC DAY	.9
BOILER OPER	.1
MAINTENANCE STOREKEEPER	.2
MAINTENANCE CLERK	.1
EFFLUENT MAN W AIR	.2
EFFLUENT MAN WO AIR	.3
QC TECHNICIAN	.4
QC SUPERVISOR	.1
PILOT PLANT	
GROUP LEADER	.4
ENGINEER	.3
TECHNOLOGIST	.4
TECHNICIAN W AIR	.4
TECHNICIAN WO AIR	.5
MAINT TECHNICIAN	.4

Paul D. Keane
04/05/77


(66 %)
GRAPH #1
FLEMINGTON BENDIX MONITORING SYSTEM
PERCENT OF READINGS MONITORED ABOVE
1 ppm AND 5 ppm
REACTOR BUILDING
1/01
1/08
1/15
1/22
1/29
2/05
2/12
2/19
2/26
3/05
3/12
3/19
3/26
4/02
REPORT PERIOD, BEGINNING
(1977)
O = PERCENT ABOVE 1 ppm
Δ = PERCENT ABOVE 5 ppm