

MONITORING RESULTS 1984

RAW MATERIALS

	TWA	EXCURSION	SOURCE
Ethylene Oxide	1 ppm	—	ACGIH
Propylene Oxide	2 5 ppm	<u>100</u>	ACGIH Dow
Methanol	200 ppm	250 ppm	ACGIH
Butanol	50 ppm	—	ACGIH

DATE	SAMPLE DESCRIPTION	EO	PO	METHANOL	BUTANOL
3-29-84	CATALYST BEING MIXED ^{1 1/2}	—	—	—	<2.2
6-20-84	LAB AREA WHILE TESTING KOH ^{6 1/2} AND PH ON CRUDE EB AND KOH ON CATALYST MIX.	—	—	—	<0.8
10-17-84	SOUTH LAB SINK ⁸	—	—	5.7	—
11-15-84	NEAR VACUUM PUMP ON T-110 ^{6 1/2}	—	<2.4	—	—
11-20-84	P-201'S FEED EO TO THE AMINES REACTOR. ⁷	<0.13	—	—	—
12-07-84	ENTRANCE TO VENT HOOD IN LAB ⁷	—	—	3.8	—

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Propylene Glycol Methyl Ether (PM)	TWA 100 ppm	EXCURSION 150 ppm	SOURCE ACGIH
Dipropylene Glycol Methyl Ether (DPM)	100 ppm	150 ppm	ACGIH
Tripropylene Glycol Methyl Ether (TPM) N. E.		N. E.	—

DATE	SAMPLE DESCRIPTION	PM SERIES CONCENTRATION, PPM			
		<i>Time Conc</i> PM	DPM	TPM	
2-08-84	O.T. - Loading Tank Cars	7 ¹ / ₂ 6.9	—	—	
2-29-84	O.T. - Loading Tank Trucks	7 ¹ / ₂ <0.7	—	—	
3-19-84	O.T. - DOWANOL Drain Out	11 ¹ / ₂ <0.5	<0.3	—	
4-25-84	O.T. - Loading Tank Cars	4 ¹ / ₂ <1.7	<6.7	—	
5-02-84	O.T. - Loading Tank Cars	6 ¹ / ₂ 6.8	—	—	
5-10-84	O.T. - DOWANOL Lab/Outside Rounds	7 ¹ / ₂ <1.8	<1.1	—	
5-11-84	O.T. - DOWANOL Lab/Outside Rounds	7 ¹ / ₂ <1.8	<1.1	—	
5-14-84	O.T. - DOWANOL Lab/Outside Rounds	7 ¹ / ₂ <1.8	<1.1	—	
6-01-84	S.O.T. - Drumming	6 ¹ / ₂ 1.3	<0.4	—	
6-08-84	S.O.T. - SOT Rounds	7 ¹ / ₂ <0.6	<0.4	—	
6-11-84	S.O.T. - Drumming	7 ¹ / ₂ 2.7	<0.3	<0.4	
8-22-84	O.T. - Loading Tank Trucks	8 ¹ / ₂ 3.0	—	—	
8-24-84	O.T. - Loading Tank Cars	7 ¹ / ₂ 2.2	<0.4	—	
8-31-84	O.T. - Dumping Waste Drums	8 ¹ / ₂ 3.6	—	—	
9-19-84	O.T. - Routine Rounds	7 <0.6	<0.5	—	
10-22-84	S.O.T. - Routine Rounds	7 ¹ / ₂ <0.6	<0.5	—	
10-24-84	O.T. - DOWANOL Lab/Outside Rounds	7 ¹ / ₂ <0.6	<0.4	—	
10-29-84	O.T. - DOWANOL Lab/Outside Rounds	7 ¹ / ₂ <0.6	<0.4	—	
10-31-84	<u>AREA</u> - Air From Lab Into Fume Hood	7 ¹ / ₂ <0.6	<0.4	—	
11-14-84	O.T. - Loading Tank Cars	6 1.2	—	—	
12-05-84	O.S. - Loading Tank Cars	12 <0.4	<0.2	—	
12-17-84	O.S. - DOWANOL Plant Shutdown	7 ¹ / ₂ <0.6	<0.4	—	

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Ethylene Glycol n-Butyl Ether (EB)	TWA 25 ppm	EXCURSION 75 ppm	SOURCE ACGIH
Diethylene Glycol n-Butyl Ether (DB)	35 ppm	N.E.	DOW

DATE	SAMPLE DESCRIPTION	EB SERIES CONCENTRATION, PPM	
		EB	DB
2-01-84	LAB - Sink (South)	" <0.3	<0.3
2-06-84	O.T. - DOWANOL Lab and Outside Rounds	7 1/2 0.5	<0.4
2-13-84	O.T. - Loading Tank Cars	6 1/2 0.6	—
2-27-84	O.T. - Loading Tank Cars	8 —	<0.4
2-29-84	O.T. - Loading Tank Trucks	7 1/2 —	<0.4
3-07-84	<u>DRUMMING AREA</u> - Drumming in Progress	8 1/2 1.2	—
4-23-84	S.O.T. - Drumming	6 <1.6	—
4-25-84	O.T. - Loading Tank Cars	4 1/2 <2.3	—
4-30-84	S.O.T. - Drumming	6 1/2 <1.6	—
5-02-84	O.T. - Loading Tank Cars	6 1/2 <1.6	—
6-01-84	S.O.T. - Drumming	8 <0.6	<0.4
6-08-84	S.O.T. - Drumming	8 <0.5	<0.4
8-22-84	O.T. - Loading Tank Trucks	8 <0.4	—
8-29-84	O.T. - Loading Tank Cars	7 <0.4	—
8-31-84	O.T. - Dumping Waste Drums	8 1/2 <0.4	—
9-5 9-06-84	O.T. - Loading Tank Cars	7 1/2 <0.4	—
11-12-84	O.T. - Loading Tank Trucks	7 1/2 <0.4	—
11-14-84	O.T. - Loading Tank Cars	6 <0.5	—
11-16-84	S.O.T. - Drumming and Dumping Waste Drums	7 <0.4	—
11-21-84	<u>DRUMMING AREA</u>	7 <0.4	—
12-20-84	O.T. - Loading Tank Trucks	7 <0.4	—
9-5-84 O.T. Loading T/C's		7 1/2 <0.4	

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	TWA	EXCURSION	SOURCE
Monoethanolamine (MEA)	3 PPM	6 PPM	ACGIH
Diethanolamine (DEA)	3 PPM	N. E.	DOW
Triethanolamine (TEA)	10 PPM	N. E.	DOW

N. E. = Not established (evaluation based on compounds of similar biological activity.)

DATE	SAMPLE DESCRIPTION	Amines Concentration, ppm		
		MEA	DEA	TEA
12-15-83	O.T. - Firewatch in Amines Plant	<0.1	<0.1	<0.1
2-15-84	O.T. - Amines Lab and Outside Rounds 7	<0.1	<0.1	<0.1
2-22-84	S.O.T. - Drumming	7 <0.1	—	<0.1
3-19-84	O.T. - Amines Lab and Outside Rounds 4 1/2	<0.05	<0.05	<0.05
4-27-84	O.T. - Loading T/T	5 1/2 0.6	—	—
5-03-84	O.T. - Loading Ship	11 <0.05	<0.05	<0.05
5-04-84	S.O.T. - Marine Loading	14 <0.05	<0.05	<0.05
5-07-84	O.T. - Amines Lab and Outside Rounds 7 1/2	<0.1	<0.1	<0.1

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