

LOUISIANA DIVISION INDUSTRIAL HYGIENE REPORT
THE DOW CHEMICAL COMPANY

LAD-95-1981-2
File Number

12/28/95
Date

Title: Results of Monitoring Conducted at the Dowanols Facility for
Diethanolamine, Monoethanolamine, Triethanolamine, Dowanol EM, Dowanol Pm,
Mercury, Potassium Hydroxide and Noise During 1981.

SUMMARY:

During 1981 monitoring was performed for Diethanolamine, Monoethanolamine,
Triethanolamine, Dowanol EM, Dowanol Pm, Mercury, Potassium Hydroxide and Noise
at the Dowanols Facility.

Results are presented in the attached tables.

Coversheet prepared by:

J. Paul

DISTRIBUTION:

None

Restricted for Use Within The Dow Chemical Company

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All samples reported to be
below the level of determination
which is 10 micrograms per
sample.

The Dow Chemical Company
Louisiana Division
Industrial Hygiene

Date 1-9-81
Location Dowood / Ethanol amines

SURVEY REPORT

Calibrated YES NO

SAMPLE NO.	SAMPLE DATE	CONCENTRATION	UNITS	CHEMICAL SAMPLED	DURATION	SAMP. TYPE	REMARKS (CLASSIFICATION, DESCRIPTION, EMP. NAME, WEATHER, ETC.)
340	4-28-80	<0.13	ppm	MEA	420 min	Pers. TWA	Joe Hage, OT, Loading MEA and DEA T/C
		<0.08	ppm	DEA			
283	3-4-80	<0.11	ppm	MEA	490 min	Pers. TWA	Dwayne Legue, OTT, catching samples and analyzing them in lab.
		<0.06	"	DEA			
		<0.03	"	TEA			
289	3-13-80	<0.11	ppm	MEA	495 min	Pers. TWA	Alton Corbarn, OTT, Lab and outside rounds, swapped 2 pumps, swapped 250 overhead flow.
350	10-7-80	<0.06	ppm	TEA	72 min.	Pers. Excursion	Gary Reese, OT, loading TEA T/T.
352	10-7-80	<0.13	ppm	MEA	420 min	Pers. TWA	Walter LeJeune, 50T, Drumming
		<0.08	ppm	DEA			MEA, DEA and DPM
308	12-4-80	<0.09	ppm	MEA	158 min.	Pers. Excursion	Gary Reese, OT, loading MEA and
		<0.03	"	TEA			TEA T/T.

EMPLOYEE EXPOSURE SUMMARY

FILLED IN BY W E LefordDR# 9999-0.17QUARTER 4th YEAR 81
IHG 25 ppmPLANT Ethanolamine BLOCK 55STRESS Dowanol
EBMINIMAL DETECTABLE
LIMIT AND UNIT 0.1 ppm

PERSONNEL

EXCURSION

AREA

NO.	JOB CLASS	AREA/TASK	*PT EQ.	TWA BASIS	NO. SAMP.	AVG.	HIGH	** C	EXCUR. DURATION	NO. SAMP.	AVG.	HIGH	** C	SAMPLE DURATION	NO. SAMP.	AVG.	HIGH	** C
02	OT	8							60 min	1	20.1	20.1	20 ^①					
01	OT																	
02	OT	8							60 min	1	20.1	20.1	20 ^②					
02	OT	8							60 min	1	0.3	0.3	20 ^③					
03	SOT																	
02	OT	8							75 min	1	20.1	20.1	20 ^④					
04	OS																	
02	OT								80 min	1	1.1	1.1	20 ^⑤					
05	SS																	
02	OT								30 min	1	20.1	20.1	20 ^⑥					
06	EDO																	
02	OT								75 min	1	0.4	0.4	20 ^⑦					
07	LAB																	
09	CLER.																	
10	INSTR																	
11	LABORER																	
	CONT																	
13	MAINT																	
	MATL																	
16	CONT																	
	MGRS/NON-																	
19	OP																	
	AREA SAMP																	
20	(NO JC)																	
	MFG.																	
24	MGR.																	
	MFG																	
26	TECH																	
28	CHEMIST																	
	SET																	
29	SUPV.																	
	SHIP																	
30	COORD.																	

put on a separate entry for 1st quarter 1982

*PROTECTIVE EQUIPMENT: (1) MOUTHBIT (2) FULL FACE (3) HALF FACE OR DUST (4) AIR SUPPLY (5) HEARING PROTECTION

**COMMENTS (Use reverse side)

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EMPLOYEE EXPOSURE SUMMARY

FILLED IN BY W E LedfordDR# 9999-0020QUARTER 4th YEAR 81PLANT Ethanolamines BLOCK 55STRESS Downed MINIMAL DETECTABLE
PM LIMIT AND UNIT 0.3 ppmIHG 100 ppm

PERSONNEL									EXCURSION					AREA				
NO.	JOB CLASS	AREA/TASK	*PT EQ.	TWA BASIS	NO. SAMP.	AVG.	HIGH	** C	EXCUR. DURATION	NO. SAMP.	AVG.	HIGH	** C	SAMPLE DURATION	NO. SAMP.	AVG.	HIGH	** C
02	OT								80 mi	1	10.3	10.3	20					
01	OT								75 mi	1	10.3	10.3	20					
02	OT																	
03	SOT																	
04	OS																	
05	SS																	
06	EDO																	
07	LAB																	
09	CLER.																	
10	INSTR																	
11	LABORER																	
13	CONT MAINT																	
16	MATL CONT																	
19	MGRS/NON-OP																	
20	AREA SAMP (NO JC)																	
24	MFG. MGR.																	
26	MFG TECH																	
28	CHEMIST																	
29	SET SUPV.																	
30	SHIP COORD.																	

*PROTECTIVE EQUIPMENT: (1) MOUTHBIT (2) FULL FACE (3) HALF FACE OR DUST (4) AIR SUITLY (5) HEARING PROTECTION

**COMMENTS (Use reverse side)

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FILLED IN BY W E Ladford

EMPLOYEE EXPOSURE SUMMARY

DR# 9999-0107QUARTER 3rdYEAR 1981

✓

PLANT Dowanol0551BLOCK 55STRESS Mercury

MINIMAL DETECTABLE

LIMIT AND UNIT 0.5 mg/m³

IHG

0.05 mg/m³

PERSONNEL

EXCURSION

AREA

NO.	JOB CLASS	AREA/ TASK	*PT EQ.	TWA BASIS	NO. SAMP.	AVG.	HIGH	** C	EXCUR. DURATION	NO. SAMP.	AVG.	HIGH	** C	SAMPLE DURATION	NO. SAMP.	AVG.	HIGH	** C
01	OTT	9												5 min	1	<0.05	<0.05	20*
02	OT																	
03	SOT																	
04	OS																	
05	SS																	
06	EDO																	
07	LAB																	
09	CLER.																	
10	INSTR																	
11	LABORER																	
13	CONT MAINT																	
16	MATL CONT																	
19	MGRS/NON- OP																	
20	AREA SAMP (NO JC)																	
24	MFG. MGR.																	
26	MFG TECH																	
28	CHEMIST SET																	
29	SUPV. SHIP																	
30	COORD.																	

*PROTECTIVE EQUIPMENT: (1) MOUTHBIT (2) FULL FACE (3) HALF FACE OR DUST (4) AIR SUPPLY (5) HEARING PROTECTION

**COMMENTS (Use reverse side)

* Lab — after broken thermometer was cleaned up.

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EMPLOYEE EXPOSURE SUMMARY

FILLED IN BY W E LedfordDR# 9999-0032QUARTER 2nd YEAR 81PLANT Ethanolamine BLOCK 55STRESS Potassium Hydroxide MINIMAL DETECTABLE LIMIT AND UNIT 0.001 mg/m³IHG C-2 mg/m³RDT M
ALREADY

PERSONNEL

EXCURSION

AREA

NO.	JOB CLASS	AREA/ TASK	*PT EQ.	TWA BASIS	NO. SAMP.	AVG.	HIGH	** C	EXCUR. DURATION	NO. SAMP.	AVG.	HIGH	** C	SAMPLE DURATION	NO. SAMP.	AVG.	HIGH	** C
01	OTT													45 min	1	0.001	0.001	20 ^①
02	OT													8 h	1	<0.001	<0.001	20 ^③
03	SOT													8 h	1	0.001	0.001	20 ^③
04	OS																	
05	SS																	
06	EDO																	
07	LAB																	
09	CLER.																	
10	INSTR																	
11	LABORER																	
13	CONT MAINT																	
16	MATL CONT																	
19	MGRS/NON- OP																	
20	AREA SAMP (NO JC)																	
24	MFG. MGR.																	
26	MFG TECH																	
28	CHEMIST SET																	
29	SUPV. SHIP																	
30	COORD.																	

*PROTECTIVE EQUIPMENT: (1) MOUTHBIT (2) FULL FACE (3) HALF FACE OR DUST (4) AIR SUPPLY (5) HEARING PROTECTION

**COMMENTS (Use reverse side)

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FILLED IN BY WE Ledford

EMPLOYEE EXPOSURE SUMMARY

DR# 9999-0006QUARTER 1 YEAR 81PLANT Ethanolamine BLOCK SSSTRESS NoiseMINIMAL DETECTABLE
LIMIT AND UNIT 1%IHG 90dB

PERSONNEL									EXCURSION					AREA				
NO.	JOB CLASS	AREA/ TASK	*PT EQ.	TWA BASIS	NO. SAMP.	AVG.	HIGH	** C	EXCUR. DURATION	NO. SAMP.	AVG.	HIGH	** C	SAMPLE DURATION	NO. SAMP.	AVG.	HIGH	** C
01	OTT													8 hr.	1	15	15	20 ^②
02	OT			8 hr.	2	24	47											
03	SOT			8 hr.					3 hr.	1	1	1						
04	OS																	
05	SS																	
06	EDO								139 mi	1	18	18	20 ^①					
06	EDO								210 mi	1	20	20	20 ^①					
09	CLER.																	
10	INSTR																	
11	LABORER																	
13	CONT MAINT			8 hr.	1	951	951	18										
16	MATL CONT			8 hr.	1	25	25											
19	MGRS/NON- OP																	
20	AREA SAMP (NO JC)																	
24	MFG. MGR.																	
26	MFG TECH																	
28	CHEMIST SET																	
29	SUPV. SHIP																	
30	COORD.																	

*PROTECTIVE EQUIPMENT: (1) MOUTHBIT (2) FULL FACE (3) HALF FACE OR DUST (4) AIR SUPPLY (5) HEARING PROTECTION

**COMMENTS (Use reverse side)

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FILLED IN BY WE Ledford

EMPLOYEE EXPOSURE SUMMARY

DR# 9999-0006QUARTER 1st YEAR 81IHG 901BPLANT Ethanolamine BLOCK 55STRESS NoiseMINIMAL DETECTABLE
LIMIT AND UNIT 1 %

PERSONNEL										EXCURSION					AREA				
NO.	JOB CLASS	AREA/TASK	*PT EQ.	TWA BASIS	NO. SAMP.	AVG.	HIGH	** C		EXCUR. DURATION	NO. SAMP.	AVG.	HIGH	** C	SAMPLE DURATION	NO. SAMP.	AVG.	HIGH	** C
01	OTT			8h 24											8h	3	24	70	20 ^①
02	OT			8h	4	11.5	42								9h	1	41	41	20 ^②
03	SOT																		
04	OS																		
05	SS																		
06	EDO																		
07	LAB																		
09	CLER.																		
10	INSTR																		
11	LABORER																		
13	CONT MAINT																		
16	MATL CONT																		
19	MGRS/NON- OP																		
20	AREA SAMP (NO JC)																		
24	MFG.																		
26	MGR. MFG																		
28	TECH																		
29	CHEMIST SET																		
30	SUPV. SHIP COORD.																		

*PROTECTIVE EQUIPMENT: (1) MOUTHBIT (2) FULL FACE (3) HALF FACE OR DUST (4) AIR SUPPLY (5) HEARING PROTECTION

**COMMENTS (Use reverse side)

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