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Vermilion Co.- Danville/Allied Chemical

HAZARDOUS

EPA Region 5 Records Ctr.
288584

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
SPECIAL WASTE DISPOSAL APPLICATION

PERMIT ISSUED

CARD TYPE DATE _____ LPSWC AUTHORIZATION NUMBER 992086 TRANS CODE A DATE ENTERED (Agency Use) 03/18/81

WASTE HAULER USEPA # INT000646919

16 HAULER REGISTRATION NUMBER 0706 NAME Commercial Pumping & Incineration
ADDRESS P.O. Box 1798 COMMUNITY Highland,
COUNTY Lake STATE Ind. ZIP 46322 AREA CODE 219 TELEPHONE 924-2951

WASTE GENERATOR USEPA # ILD005463344

GENERATOR CODE 1830200007G NAME Allied Chemical- Specialty Chem. Div.
ADDRESS Brewer Rd. P.O. Box 13 COMMUNITY Danville
COUNTY Vermillion STATE Ill. ZIP 61832 AREA CODE 217 TELEPHONE 446-4700
GENERATOR CONTACT NAME Norman Lanter
DUNS NUMBER _____ SIC CODE _____

20 PROCESS NAME Refrigerant & Propellant Mfg.

WASTE CHARACTERISTICS

GENERIC WASTE NAME Nitromethane Waste
40 IUPAC WASTE NAME M
TOTAL ANNUAL WASTE VOLUME 1100 VOLUME UNITS 2 WASTE PHASE 3
TRANSPORT FREQUENCY 7 WASTE CLASS (Agency Use) 33

1 = CUBIC YARDS
2 = GALLONS

1 = SOLID
2 = SEMI-SOLID
3 = LIQUID
4 = GAS

1 = ONE TIME
2 = DAILY
3 = WEEKLY
4 = BI-WEEKLY
5 = MONTHLY
6 = BI-MONTHLY
7 = QUARTERLY
8 = SEMI-ANNUALLY

Drums

(Code either "1" for Low, "2" for Medium, or "3" for High as appropriate for columns 21 through 26):

50 INHALATION TOXICITY 2 DERMAL TOXICITY 2 INGESTIVE TOXICITY 3 INFECTIOUS _____ REACTIVITY _____ EXPLOSIVE _____
FLASH POINT 124°F ALPHA RADIATION _____ (pCi/L) COMPOSITION 1

1 = ORGANIC
2 = INORGANIC

PERCENT ACIDITY ___.___ PERCENT ALKALINITY ___.___ pH ___.___ PERCENT TOTAL SOLIDS ___.004 Ash Content 0.001

60

KEY COMPONENT NAME	PERCENT	KEY COMPONENT NAME	PERCENT
1 Nitromathane	100.02	2	
3		4	
5		6	
7		8	

See attached additional waste hauler: A-1 Disposal Corp.

RECEIVED
MAR 12 1981
E.P.A. -- D.L.P.C.
STATE OF ILLINOIS

RECEIVED
LPC/NPC
MAY 08 1981

Application X
Renewal ___
Additional Site ___

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
SPECIAL WASTE DISPOSAL APPLICATION

FOR AGENCY USE Log # S-707

THIS APPLICATION FOR WASTE:
Treatment ___
Disposal X
Storage ___

ARD YPE DATE 1-19-82 L P S W C AUTHORIZATION NUMBER 920365 TRANS CODE ___ DATE ENTERED (Agency Use) / /

WASTE HAULER

6 HAULER REGISTRATION NUMBER 1039 NAME M. L. KREDOVSKI/d.b.a./ APPLIED TECHNOLOGY TRANSPORTATION

ADDRESS P.O. BOX 46 COMMUNITY FRIENDENSBORG, PA.

COUNTY ___ STATE PA ZIP 17933 AREA CODE 717 TELEPHONE 865-5251

WASTE GENERATOR

GENERATOR CODE 1 8 3 0 2 0 0 0 0 7 G NAME ALLIED CHEMICAL CORP.

ADDRESS P.O. BOX 13 BREWER RD COMMUNITY DANVILLE, ILLINOIS

COUNTY ___ STATE ILL ZIP 61832 AREA CODE 217 TELEPHONE 446-4700

GENERATOR CONTACT NAME NORMAN LANTER TECHNICAL MANAGER

DUNS NUMBER ___ SIC CODE 2819 USEPA GEN. CODE ILD005463344

0 PROCESS NAME MANUFACTURE OF CHLOROFLUORO CARBONS

WASTE CHARACTERISTICS

GENERIC WASTE NAME ANTIMONY & ARSENIC SLUDGE

0 IUPAC WASTE NAME ___

TOTAL ANNUAL WASTE VOLUME 150 VOLUME UNITS 2 WASTE PHASE 2

TRANSPORT FREQUENCY 8 WASTE CLASS (Agency Use) ___

1 = CUBIC YARDS
2 = GALLONS

1 = SOLID
2 = SEMI-SOLID
3 = LIQUID
4 = GAS

1 = ONE TIME
2 = DAILY
3 = WEEKLY
4 = BI-WEEKLY
5 = MONTHLY
6 = BI-MONTHLY
7 = QUARTERLY
8 = SEMI-ANNUALLY

(Code either "1" for Low, "2" for Medium, or "3" for High as appropriate for columns 21 through 26):

0 INHALATION TOXICITY ___ DERMAL TOXICITY ___ INGESTIVE TOXICITY 3 INFECTIOUS ___ REACTIVITY ___ EXPLOSIVE ___

FLASH POINT > 200 °F ALPHA RADIATION ___ (pCi/L) COMPOSITION 2

1 = ORGANIC
2 = INORGANIC

PERCENT ACIDITY ___ PERCENT ALKALINITY ___ pH 5.0 PERCENT TOTAL SOLIDS 5.81

0

KEY	COMPONENT NAME	PERCENT	KEY	COMPONENT NAME	PERCENT
1	WATER	74.2	2	ANTIMONY (CHLORIDES)	4.2
3	ARSENIC (CHLORIDES)	1.6	4		
5			6		

USEPA HAZARDOUS WASTE NO. (If Hazardous) K021

RECEIVED
JAN 27 1982
EPA - FILE

RECEIVED
IPC/NPC
FEB 19 1982
ENVIRONMENTAL PROTECTION AGENCY

L 532-0474
DM 1067 (Rev. 1/81)

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1979, CHAPTER 111½, SECTION 1039. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN YOUR APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

Application X
Renewal ___
Additional Site ___

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
SPECIAL WASTE DISPOSAL APPLICATION

FOR AGENCY USE Log # S-906

THIS APPLICATION FOR WASTE:
Treatment ___
Disposal X
Storage ___

DATE 1-19-82 L P S W C (1–5) AUTHORIZATION NUMBER 920364 (8–13) TRANS CODE (14) DATE ENTERED (Agency Use) / / (15–20)

WASTE HAULER

HAULER REGISTRATION NUMBER 1039 (21–24) NAME M.L. KREDOVSKI / d.b.a. / APPLIED TECHNOLOGY TRANSPORT

ADDRESS P.O. BOX 46 COMMUNITY

COUNTY STATE PA ZIP 17933 AREA CODE 717 TELEPHONE 865-5251

WASTE GENERATOR

GENERATOR CODE 1 8 3 0 2 0 0 0 0 1 G (25–35) NAME ALLIED CHEMICAL CORP

ADDRESS P.O. BOX 13 BREWER RD. COMMUNITY DANVILLE ILLINOIS

COUNTY STATE ILL ZIP 61832 AREA CODE 217 TELEPHONE 446-4700

GENERATOR CONTACT NAME (36) NORMAN LANTER TECHNICAL MANAGER

DUNS NUMBER SIC CODE 2819 USEPA GEN. CODE (65) ILD005463344

PROCESS NAME (21–50) CONTAINER PAINTING

WASTE CHARACTERISTICS

GENERIC WASTE NAME (51–80) PAINT SLUDGE (CHROMIUM)

IUPAC WASTE NAME (21–50)

TOTAL ANNUAL WASTE VOLUME (51–60) 100 VOLUME UNITS (61) 2 WASTE PHASE (62) 2

TRANSPORT FREQUENCY (63) 8 WASTE CLASS (Agency Use) (64–65)

1 = CUBIC YARDS
2 = GALLONS

1 = SOLID
2 = SEMI-SOLID
3 = LIQUID
4 = GAS

1 = ONE TIME
2 = DAILY
3 = WEEKLY
4 = BI-WEEKLY
5 = MONTHLY
6 = BI-MONTHLY
7 = QUARTERLY
8 = SEMI-ANNUALLY

(Code either "1" for Low, "2" for Medium, or "3" for High as appropriate for columns 21 through 26):

INHALATION TOXICITY (21) DERMAL TOXICITY (22) 1 INGESTIVE TOXICITY (23) 3 INFECTIOUS (24) REACTIVITY (25) EXPLOSIVE (26)

FLASH POINT (27–30) < 140 °F ALPHA RADIATION (31–36) ____ (pCi/L) COMPOSITION (37) 1

1 = ORGANIC
2 = INORGANIC

PERCENT ACIDITY (38–40) ___ . ___ PERCENT ALKALINITY (41–43) ___ . ___ pH (44–46) ___ . ___ PERCENT TOTAL SOLIDS (47–51) ___ . ___

KEY	COMPONENT NAME	PERCENT	KEY	COMPONENT NAME	PERCENT
1 (21–22)	PAINT SLUDGE	90. (43–47)	2 (48–49)	WATER	10. (70–74)
3 (21–22)		. (43–47)	4 (48–49)		. (70–74)
5 (21–22)		. (43–47)	6 (48–49)		. (70–74)

USEPA HAZARDOUS WASTE NO. (If Hazardous) D 0 0 7

RECEIVED JAN 1982

532-0474
(1) 1067 (Rev. 1/81)

RECEIVED
IPC/NPC
FEB 19 1982

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1979, CHAPTER 111½, SECTION 1099. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN YOUR APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

ENVIRONMENTAL PROTECTION AGENCY

Application X Final ___ Additional Site ___	ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND/NOISE POLLUTION CONTROL SPECIAL WASTE DISPOSAL APPLICATION	FOR AGENCY USE Log # S-208 THIS APPLICATION FOR WASTE: Treatment ___ Disposal X Storage ___

RD PE DATE 1-19-82 L P S W C (1–5) AUTHORIZATION NUMBER 920366 (8–13) TRANS CODE (14) DATE ENTERED (Agency Use) (15–20) / /

WASTE HAULER

HAULER REGISTRATION NUMBER 1 0 3 9 (21–24) NAME M. L. Kredovski/d.b.a./Applied Technology ~~Transportation~~

ADDRESS P. O. Box 46 COMMUNITY Friendensburg, Pa.

COUNTY -- STATE Pa. ZIP 17933 AREA CODE 717 TELEPHONE 345-4169 or 865-5251

WASTE GENERATOR

GENERATOR CODE 1 8 3 0 2 0 0 0 0 7 G (26–35) NAME Allied Chemical Corp.

ADDRESS P.O. Box 13 Brewer Rd. COMMUNITY Danville, Illinois

COUNTY ___ STATE Ill ZIP 61832 AREA CODE 217 TELEPHONE 446-4700

GENERATOR CONTACT NAME Norman Lanter (36) Technical Manager

DUNS NUMBER ___ SIC CODE 2819 USEPA GEN. CODE ILD005463344 (65)

PROCESS NAME MANUFACTURE OF CHLOROFLUOROCARBONS (21–50)

WASTE CHARACTERISTICS

GENERIC WASTE NAME CONTAMINATED CARBON TETRACHLORIDE (51–80)

IUPAC WASTE NAME ___ (21–50)

TOTAL ANNUAL WASTE VOLUME 8 0 0 (51–60) VOLUME UNITS 2 (61) WASTE PHASE 2 (62)

TRANSPORT FREQUENCY 8 (63) WASTE CLASS (Agency Use) (64–65)

1 = ONE TIME
2 = DAILY
3 = WEEKLY
4 = BI-WEEKLY
5 = MONTHLY
6 = BI-MONTHLY
7 = QUARTERLY
8 = SEMI-ANNUALLY

1 = CUBIC YARDS
2 = GALLONS

1 = SOLID
2 = SEMI-SOLID
3 = LIQUID
4 = GAS

(Code either "1" for Low, "2" for Medium, or "3" for High as appropriate for columns 21 through 26):

INHALATION TOXICITY 2 (21) DERMAL TOXICITY 1 (22) INGESTIVE TOXICITY 3 (23) INFECTIOUS ___ (24) REACTIVITY ___ (25) EXPLOSIVE ___ (26)

FLASH POINT < 1 0 0 °F (27–30) ALPHA RADIATION ___ (31–36) (pCi/L) COMPOSITION 1 (37)

1 = ORGANIC
2 = INORGANIC

PERCENT ACIDITY ___ (38–40) PERCENT ALKALINITY ___ (41–43) pH 6.0 (44–46) PERCENT TOTAL SOLIDS 9.17 (47–51)

KEY	COMPONENT NAME	PERCENT	KEY	COMPONENT NAME	PERCENT
1 (21–22)	CARBON TETRACHLORIDE	85.0 (43–44)	2 (48–49)	ALLO-OCIMINE	7.5 (70–74)
3 (21–22)	ALPHA METHYL STYRENE	7.0 (43–44)	4 (48–49)	WATER	.5 (70–74)
5 (21–22)		(43–44)	6 (48–49)		(70–74)

TRACE METALS - SEE REVERSE SIDE

USEPA HAZARDOUS WASTE NO. (If Hazardous) U, 2, 1, 1, D004 (ARSENIC)

RECEIVED IPC/NPC

FEB 19 1982

ENVIRONMENTAL PROTECTION AGENCY STATE OF ILLINOIS

RECEIVED JAN 27 1982 EPA - DLPC

532-0474
IDM 1067 (Rev. 1/81)

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1979, CHAPTER 111½, SECTION 1039. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN YOUR APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

RECEIVED
LPC/NPC
JUL 01 1980
ENVIRONMENTAL PROTECTION AGENCY
STATE OF ILLINOIS

WASTE DISPOSAL WELL

Allied Chemical Corporation, Danville, Illinois

1. Name of Company, mailing address, county, phone number and name of persons to contact:

Allied Chemical Company
Post Office Box 1087R
Morristown, New Jersey 07960

Allied Chemical Company
Post Office Box 13
Danville, Illinois 61832

Vermilion County

Danville telephone: (217)446-4700
Morristown telephone: (201) 538-8000

Walt C. A. Schrader, Plant Manager

Norm Lanter, Plant Engineer

2. Location of well:

454.04 ft. north and 52.87 ft. west of the SE corner of the SE 1/4, SW 1/4, Section 12, T. 19 N., R. 11 W. 2nd P.M.

3. Date injection began:

Drilling started on June 24, 1972, finished at 6684' T.D. on August 15, 1972
Well completed on October 6, 1972
Injection started on March 16, 1973

4. Well data:

Total drilled depth is 6684' on August 15, 1972.

Depth, Ft.	Hole Diameter	Coring Diameter	Annular Space
0-224	17 1/2"	13 3/8"	cemented to surface
224-2780	12 1/4"	9 5/8" (at 2773')	cemented to surface
2780-6200	8 3/4"	7" (set at 5144')	cemented to 1870'
6200-6684	7 7/8"	below 5144' openhole; injection tube to 5252'	

Last 168' of 7" casing is fibercast. The rest of the casings are steel. During injection tests, it was found that the bottom two sections of fibercast casing (64 ft.) had broken off or had come unscrewed, so bottom of 7" casing is at 5080 ft. The bottom of two loqse sections is at 5249'. Injection tube is 3 1/2" diameter and of fibercast. Four anod rings are attached outside the injection tubing, at the bottom of the tube, to monitor any leakage from the injection tube into the annulus area which is filled with kerosene. No packer is installed.

The injection well plugged between 4154' and 4025' with latex cement on October 23, 1973 due to corrosion of casing and failure of injection tube. A 2 7/8" diameter of fiberglass injection tubing was installed.

On August 4, 1976 tubes were removed and pressure tested. Two sections had to be replaced. Visual inspection indicated corrosion at the inside of injection tubing (1/32" to 2/32"). Logs indicated that casing was okay.

On December 8, 9, and 10, 1976, injection tubing was removed and new fiberglass corrosion resistant injection tubing of 3642' was lowered. Logs and pressured tests were okay.

5. Geological data:

Geological Column	Interval, Ft.	Function	TDS, mg/l
Glacial drift	0-95		
Shale, Ss (Pennslyvanian)	95-374		
Shale, Silt (Mississippian)	370-1034		
New Albany, Sh (Devonian)	1034-1122		
Hanton, ls	1122-1206		
Niagrian, dolo. (Sibirian)	1206-1708		
Maquoketa (Ordovician)	1708-1982	Caprock (?)	
Galena, dolo.	1982-2150		?
Platsville, dolo.	2150-2406		?
Jochin, dolo.	2406-2566		?
Glenwood, Sh.	2566-2570		?
St. Peter, Ss	2570-2620		13,630-14,900
Prairie du Chien, dolo.	2620-3332	caprock	
Eminence, dolo. (Cambrian)	3332-3620	Injection zone	34,000

Geological Column	Interval, Ft.	Function	TDS, mg/l
Potosi, Ss and dolo.	3620-3928		26,794
U. Franconia, dolo.	3928-4012		
L. Franconia, dolo.	4012-4100		
Ironton-Galesville, Ss-dolo.	4100-4260		94,076-112,000
Eau Clair, Sh	4260-4864	Caprock	
Mt. Simon, Ss	4860-6684+	Injection zone	172,000-221,000

6. Waste data:

The waste to be disposed of is primarily by-products of the process. The main by-product is crude muriatic acid.

Amount: 40 gpm - 150 gpm; average 70 gpm.

Waste quality: pH 0.4-4.0; specific gravity 1.00-1.13; HCl up to 31.5%, HF less than 1%; inorganic chlorides 5,000-25,000 ppm; inorganic salts (CaF_2 and ALF_2) 1,000 ppm; organics less than 20 ppm. It is highly corrosive waste.

7. Operational data:

Maximum well head injection pressure: 100 psig
Maximum injection rate: 150 gpm
Waste shall be filtered through five mesh element.
Monthly operation reports are required.

8. Permits issued:

Permit #1973-EB-593, dated June 9, 1972, purpose of construction of a test hole to be used as a deep well injection facility.

Permit #1973-EA-480-OP, March 16, 1973, purpose of installing surface equipment and operating a deep waste disposal well, injection zone is Mt. Simon, one year duration, 1.0 micron filter.

Permit #1973-EA-2134-OP, dated October 22, 1973, purpose of construction and operation of a temporary holding lagoon, one year duration.

Permit #1974-EB-606-CAP (permit renewal), dated April 11, 1974, purpose of modifying and operating an industrial waste disposal well, and purpose of using the temporary pond for emergency storage, one year duration.

ENVIRONMENTAL PROTECTION AGENCY - STATE OF ILLINOIS LPC # 1838 0427

INSPECTION REPORT - DEEP (SHALLOW) WELL DISPOSAL

VERMILION Co. E.P.A. region # C Date 08/26/81

DANVILLE / ALLIED CHEMICAL Letter Sent (Yes or No) N
(Location) (Responsible Party)

Samples Taken: Yes( ) No(X) Time 2:30 Weather Cloudy 80°
Ground Water ( ) Surface ( ) Waste ( )
Photos Taken: Yes( ) No(X) Interviewed N. LANTER Inspector Rick Hessemann

Previous Inspection 08/28/80 Previous Correspondence 09/03/80

OPERATIONAL STATUS		TYPE OF OPERATION		AUTHORIZATION	
Operating	(X)	Deep Well Disposal	(X)	E.P.A. Permit	(X)
Standby	( )	Shallow Well Disposal	( )	Variance	( )
Non-Operating	( )	Other _____	( )	Board Order	( )
				NPDES Permit	( )

E.P.A. Permit #: 1980-UIC-2-OP Permit Expiration Date: 6-14-82

EVALUATION

Disposal Well: Injection rate 76 gpm, Permitted rate 150 gpm,
Injection pressure 35 psig, Permitted pressure 100 psig,
Annulus pressure 230 psi
Number of disposal wells 1
Waste discharged into the permitted well, Yes(X) No( )
Gauges operational, Yes(X) No( )
Filter operational, Yes(X) No( )
Filter by-passed, Yes( ) No(X)
Transmission pipes in good maintenance, Yes(X) No( )

Emergency Storage: (Lagoon, pond, basin, etc.)
Estimated total storage capacity 640,000 gallons
Estimated available storage capacity 640,000 gallons
Waste generation rate 60,000 gpd
Number of storage days 6
Waste ponded outside of storage Yes( ) No(X)
Waste flowing out of storage Yes( ) No(X)
Waste seeping out of storage Yes( ) No(X)
Evidence of past flow or seep Yes( ) No(X)
Flow or seep entering surface water Yes( ) No(X)
Intentional discharge Yes( ) No(X)
Levees in good maintenance Yes(X) No( )
Maximum depth of storage 5 ft.
Estimated depth to ground water _____ ft.

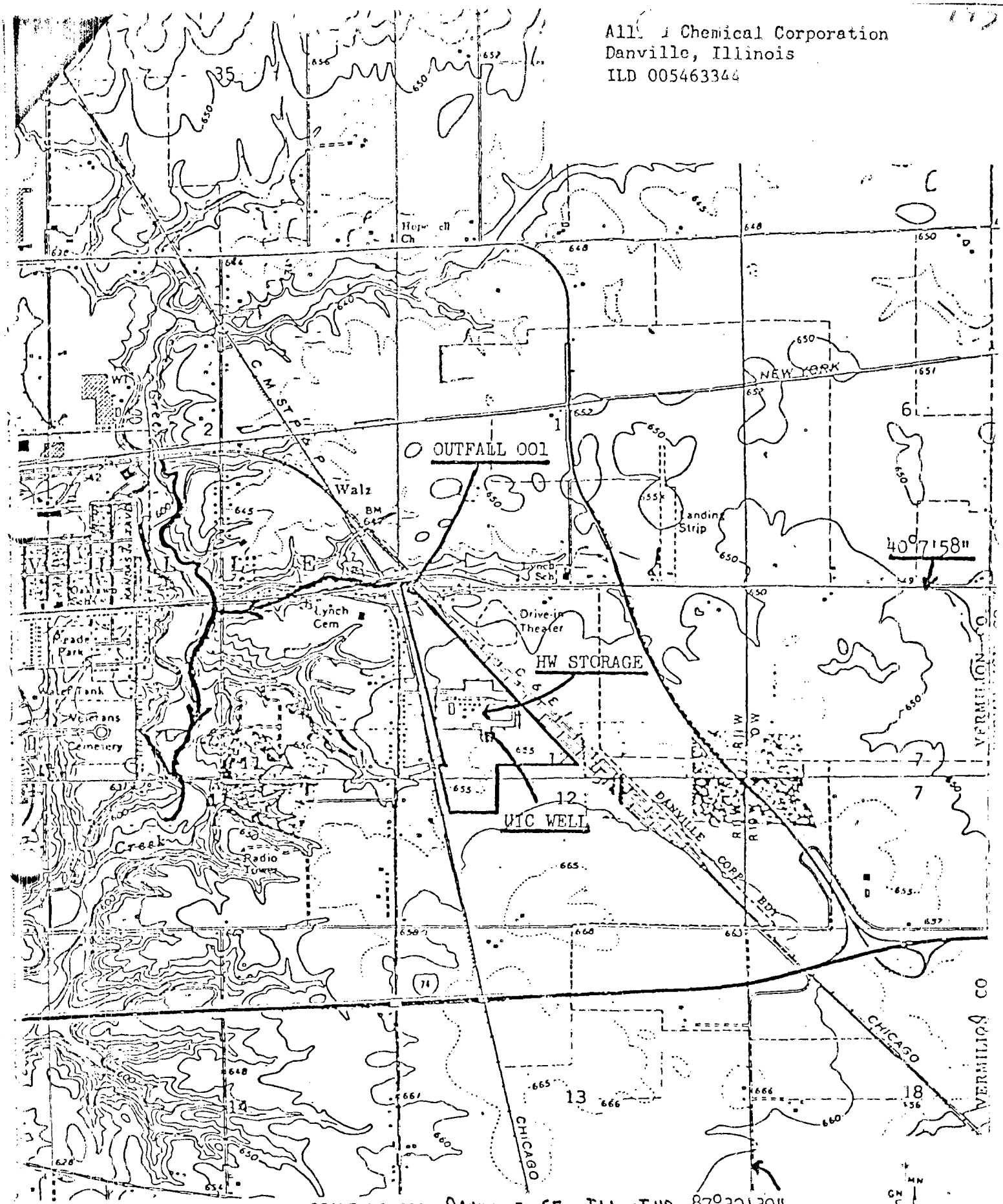
General Compliance (X) Improvement Needed ( ) Improvement Observed ( )

Signature of Inspector: Rick Hessemann

Signature of Permittee: N. A. Lanter

NOTE: (1) If necessary, use additional letter size paper signed by inspector and permittee.
(2) Signature of permittee does not necessarily imply agreement with the above-noted observations.

Allied Chemical Corporation
Danville, Illinois
ILD 005463344



SCALE 1:24000 DANVILLE SE ILL.-IND. 87°32'30"
AMS 3464 II SE Series V 863

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

GN MN
0°22' 6 MILS
2° 36 MILS

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS

UTM GRID AND 1966 MAGNETIC N
DECLINATION AT CENTER OF SH