US EPA RECORDS CENTER REGION 5
492746

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ecology and environment, inc.

SITE SAFETY PLAN

Version 988

A. GENERAL INFORMATION

Project Title: Logan Storage Site

Project No.: FT 1305

TDD/Pan No.: F05-890-089 / FIL 07055B

Project Manager: Stan Senger

Project Dir.:

Location(s): Box 216 State Street Franklin Grove IL

Prepared by: Jeff Taylor

Date Prepared: 8/2/90

Approval by: Sherrie Stevenson

Date Approved: 8/15/90

Site Safety Officer Review: Karen M. Sanger

Date Reviewed: 8/14/90

Scope/Objective of Work: Perform magnetometry work and collect 5 soil samples

Proposed Date of Field Activities: Aug 21, 22 1990

Background Info: Complete [ ] Preliminary (No analytical data available) [✓]

Documentation/Summary:

Overall Chemical Hazard: Serious [ ] Moderate [ ] Low [ ] Unknown [✓]

Overall Physical Hazard: Serious [ ] Moderate [ ] Low [ ] Unknown [✓]

B. SITE/WASTE CHARACTERISTICS

Waste Type(s):

Liquid [✓] Solid [✓] Sludge [✓] Gas/Vapor [ ]

Characteristic(s):

Flammable/Ignitable [✓] Volatile [✓] Corrosive [ ] Acutely Toxic [✓]

Explosive [ ] Reactive [ ] Carcinogen [✓] Radioactive* [ ]

Other: Persistent, Skin absorber

Physical Hazards:

Overhead [ ] Confined* Space [ ] Below Grade [ ] Trip/Fall [✓]

Puncture [✓] Burn [ ] Cut [✓] Splash [ ]

Noise [ ] Heat/Cold Stress [✓] Other:

*Requires completion of additional form and special approval from the Corporate Health/Safety Group. Contact RSC or HQ.

Site History/Description and Unusual Features (see Sampling Plan for detailed description): See Next Page. The area of the site is currently used as pasture land for grazing horses, according to site representatives.

Locations of Chemicals/Wastes: Wastes were documented to have been removed from the site (drums) and disposed of at off-site locations.

Estimated Volume of Chemicals/Wastes: Unknown. Approximately 1400 drums were removed from the property. According to PRP, any spilled material and contaminated soil had been excavated and removed along with the waste.

Site Currently in Operation Yes [ ] No [X]

C. HAZARD EVALUATION

List Hazards by Task (i.e., drum sampling, drilling, etc.) and number them. (Task numbers are cross-referenced in Section D)

Physical Hazard Evaluation: 1. Interview with Site representative

2. Recon - Trip/fall, Heat Stress

3. Geophysics - magnetometry — Trip/fall, Heat Stress

4. Soil Sampling - Trip/fall, Heat Stress

5.

6.

7.

8.

Chemical Hazard Evaluation:

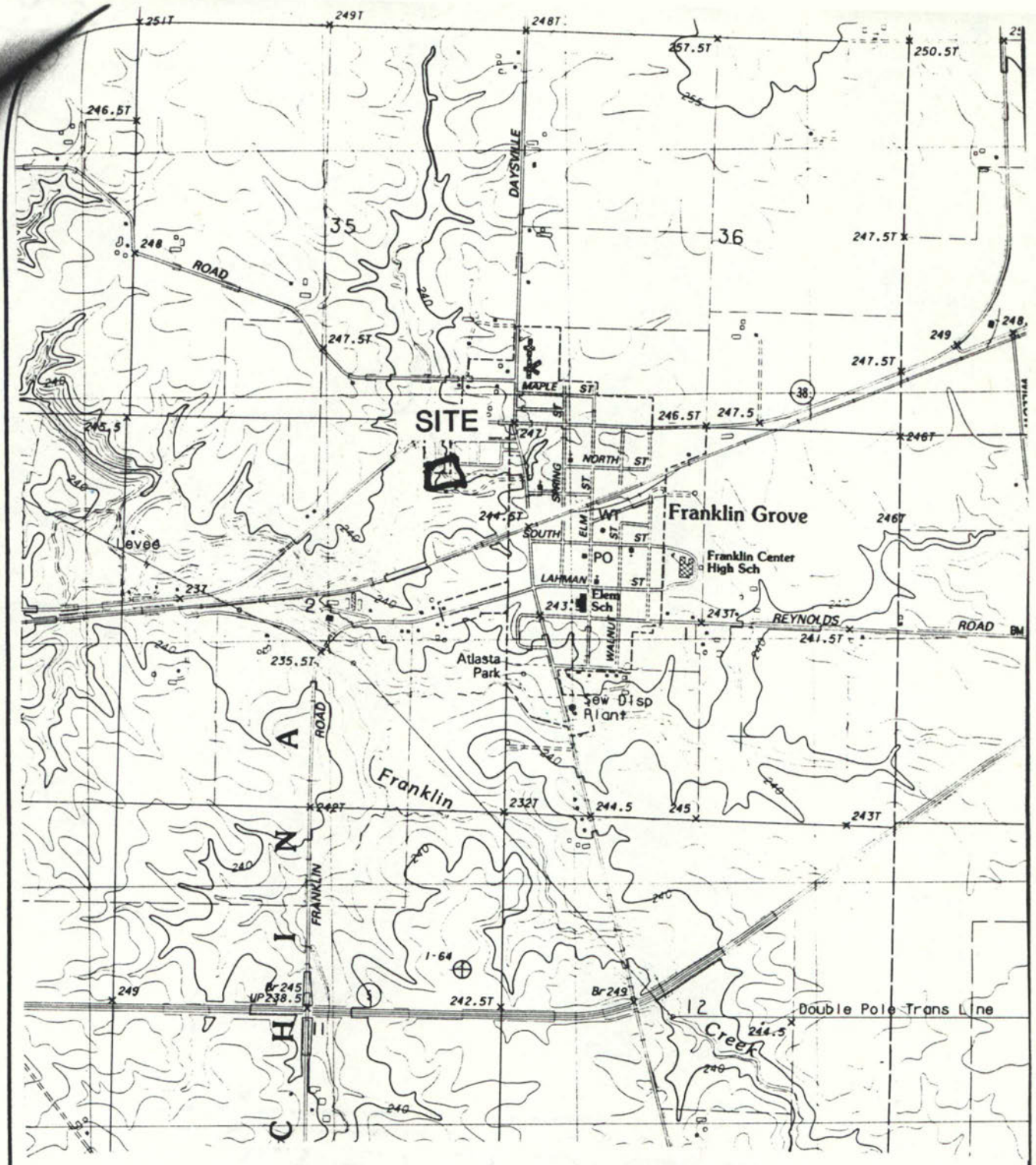
Compound	PEL/TWA	Route of Exposure	Acute Symptoms	Odor Threshold	Odor Description
Lead	30 ppm/.01ppm	Inhal. Eye Skin Ingest.	Vomiting diarrhea	—	—
Cadmium	.04 ppm/.01ppm	Inhal Eye Skin Ingest	nau/vomiting	—	—
Chromium	.47ppm/.23ppm	Inhal Eyes Ingest Skin	Contact Dermatitis	—	—
Xylene	100ppm	Inhal Eyes Ingest Skin	dizziness headache	5.00 ppm	aromatic sweet
Toluene	100ppm	Inhal. Eyes Ingest. Skin	eye skin Irritation dizziness	1.2ppm	Pungent Sour
Benzene	10 ppm	Inhal Eyes Ingest Skin	dizziness headache	5.00 ppm	Aromatic sweet

Note: Complete and attach a Hazard Evaluation Sheet for major known contaminant.

FIL070553
Logan Storage Site
F05-8912-089/[redacted]

SITE HISTORY (Continued)

During the mid 1970's Mr Bob Logan began storing drums of Paint sludge and paint waste solvents at his place of business in Franklin Grove, Illinois. This waste originated from the Valspar Corporation of Rockford, Illinois. By 1976, Mr Logan had accepted approximately 1400 drums of this paint waste. On May 29, 1980 the Illinois Environmental Protection Agency (IEPA) conducted a site investigation and observed drums on this site. Another site investigation by the IEPA on June 25 1980, discovered that some drums were leaking. According to Mr. Logan he was in the process of getting rid of the drums. Over the next two years the IEPA conducted numerous site investigations and observed that the drums were being removed. File information indicates that the drums were sent to various locations, some to BFI/Davis Junction IL. landfill, some to Huckill Chemical and Solvent Recovery Corporation, and others to a Landfill in North Dakota. File information also indicates that by October 30 1982 the drums had been removed along with any spilled material and contaminated soil. According to the IEPA Regional office that there was a report that drums were alleged to have been buried on site.



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TITLE: SITE LOCATION MAP	FIGURE # 1
SITE: LOGAN STORAGE SITE	SCALE: 1:24000
CITY: FRANKLIN GROVE STATE: IL	P.A.N.: FIL0705SA B
SOURCE: USGS TOPOGRAPHIC MAP FRANKLIN GROVE IL	DATE: 1983 REVISED:

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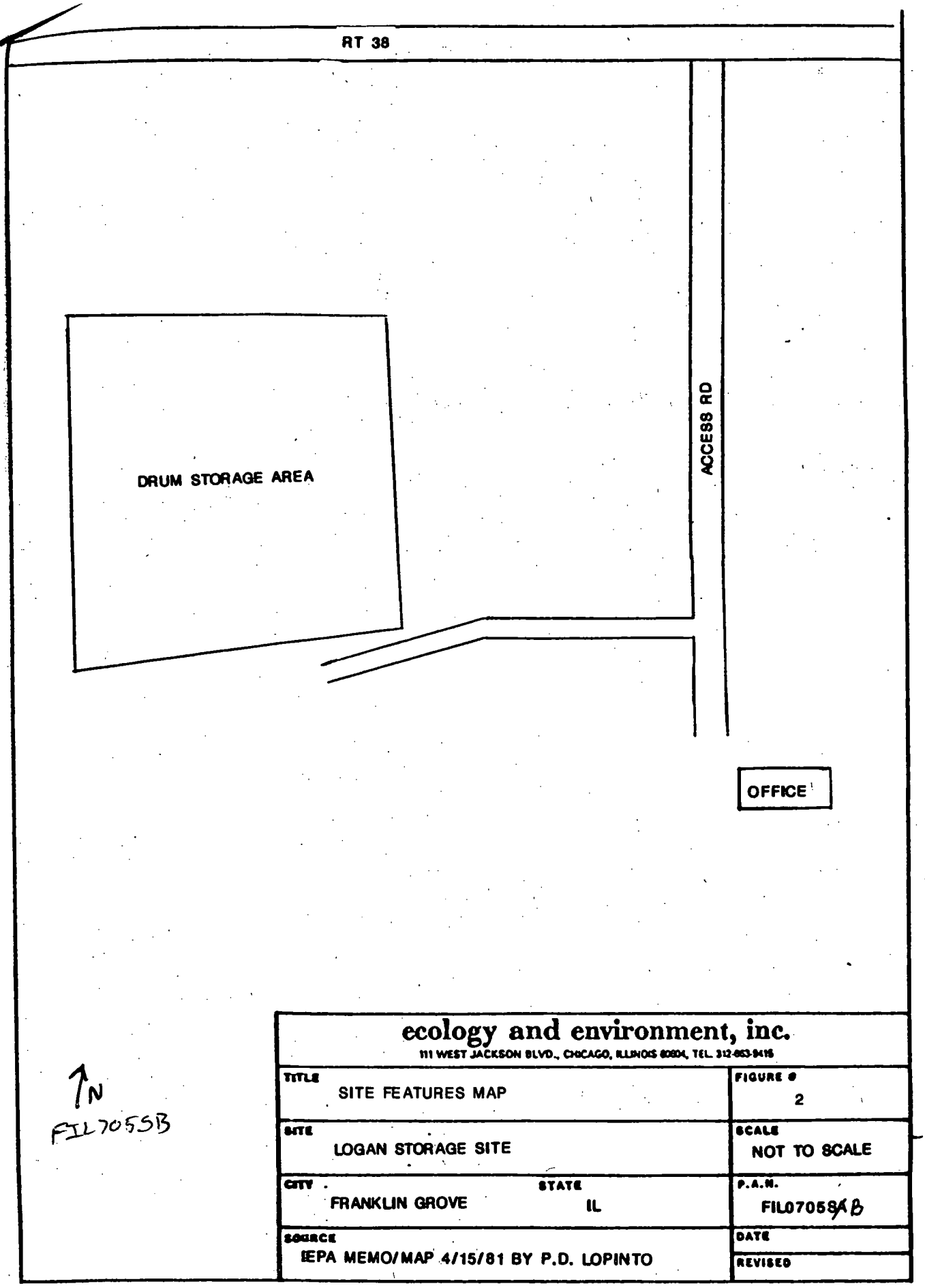
Pg 1 of 2



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TITLE: SITE FEATURES MAP	FIGURE #: 2
SITE: LOGAN STORAGE SITE	SCALE: NOT TO SCALE
CITY: FRANKLIN GROVE STATE: IL	P.A.N.: FIL0705~~8~~B
SOURCE: IEPA MEMO/MAP 4/15/81 BY P.D. LOPINTO	DATE:
	REVISED:

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D. SITE SAFETY WORK PLAN

Site Control: Attach map. or sketch of site showing hot zone, contamination reduction, zone, etc.

Perimeter identified? Yes [ ] No [✓] Site secured? Yes [ ] No [✓]

Work Areas Designated? Yes [ ] No [✓] Zone(s) of Contamination Identified? Yes [ ] No [✓]

Personnel Protection: TLD badges required for all field personnel.

Anticipated Level of Protection (Cross-reference task numbers to Section C):

	TASK DESCRIPTION	A	B	C	D
Task 1	Interview				✓
Task 2	Recon				✓
Task 3	Magnetometry				modified level D
Task 4	Soil Sampling				✓
Task 5					
Task 6					
Task 7					
Task 8					

After the recon. is performed in level D, Magnetometry will be done in modified level D (latex booties over steel toed boots) with ability to upgrade to level C/D as site entry equipment indicates need to do so.

Modifications: Rad-Mini >0.1 mR/hr (alarm sounds) and/or Monitox readings >0 ppm, evacuate work zone and then call Health and Safety Staff. Upgrade to level C if action levels are reached, or if dry/windy conditions are present.

Action Levels for Evacuation of Work Zone Pending Reassessment of Conditions: CONTACT HEALTH AND SAFETY STAFF IF EVACUATION OCCURS.

- Level D: O_2 <19.5% or >25%, explosive atmosphere >10% LEL, organic vapors above background levels, particulates >N/A mg/m^3, other N/A.
- Level C: O_2 <19.5% or >25%, explosive atmosphere >25% LEL (California-20%), unknown organic vapor (in breathing zone) >5 ppm, particulates >N/A mg/m^3, other N/A.
- Level B: O_2 <19.5% or >25%, explosive atmosphere >25% LEL (California-20%), unknown organic vapors (in breathing zone) >500 ppm, particulates >N/A mg/m^3, other N/A.
- Level A: O_2 <19.5% or >25%, explosive atmosphere >25% LEL (California-20%), unknown organic vapors >500 ppm, particulates >N/A mg/m^3, other N/A.

Air Monitoring (daily calibration unless otherwise noted):

Contaminant of Interest	Type of Sample (area, personal)	Monitoring Equipment	Frequency of Sampling
Organics	area	OVA/HNU	Constant
Radiation	area	Rad-mini	Constant

Decontamination Solutions and Procedures for Equipment, Sampling Gear, etc.:

All contaminated equipment will be washed in an alconox solution and triple rinsed with distilled water. All wash and rinse water will be left on site with prior permission of the site representative.

Personnel Decon Protocol: Gloves and boots will be washed in an alconox and distilled water solution, and rinsed with distilled water. Disposeable Clothing will be deconned, double bagged and left on site with prior permission of the site owner.

Decon Solution Monitoring Procedures, if Applicable: N/A

Special Site Equipment, Facilities, or Procedures (Sanitary Facilities and Lighting Must Meet 29 CFR 1910.120):

Follow site safety requirements at a minimum

Site Entry Procedures and Special Considerations: Permission will be obtained prior to site entry. Stay upwind of contamination when possible. The buddy system will be maintained at all times.

Work Limitations (time of day, weather conditions, etc.) and Heat/Cold Stress Requirements:

Work is restricted to daylight hours only and workers are to be monitored for heat/cold stress. When vermiculite is used to pack samples, dust masks will be worn.

General Spill Control, if applicable: N/A

Investigation-Derived Material Disposal (i.e., expendables, decon waste, cuttings):

Investigative-derived materials will be decontaminated in accordance with procedures listed above. The decontaminated material will be bagged and left on-site in appropriate waste containers with prior permission of site owner/operator.

Sample Handling Procedures Including Protective Wear:

After samples have been collected, the outside of the sample bottles will be decontaminated by washing (not submerging) the bottles in an Alconox solution and rinsing in distilled water. The protective clothing level (i.e. suits, gloves, boots) worn during on-site job activities will be maintained while decontaminating the bottles. Respiratory protection will be worn based on professional judgment. Latex gloves, at a minimum, will be worn, while handling the bottles after decontamination.

Team Member*	Responsibility
Stan Senger	Team Leader
Karen Spangler	Site Safety Officer
Jeff Taylor	Sampler
Deneen Benford	Team member

*All entries into exclusion zone require Buddy System use. All E & E field staff participate in medical monitoring program and have completed applicable training per 29 CFR 1910.120. Respiratory protection program meets requirements of 29 CFR 1910.134, and ANSI Z88.2 (1980).

E. EMERGENCY INFORMATION

(Use supplemental sheets, if necessary)

LOCAL RESOURCES

(Obtain a local telephone book from your hotel, if possible)

Ambulance Advance EMS of Dixson (815) 288-6898

Hospital Emergency Room Kathrine Shaw Bethea Hospital 403 E 1st Dixon IL (815) 288 5531

Poison Control Center Peoria 1800 322-5330

Police (include local, county sheriff, state) Local (815) 456-2209 / (815) 284 6631 Lee County Sheriff

Fire Department Local 815 456 2121

Airport Greater Rockford Airport (815) 963 8639

Agency Contact (EPA, State, Local USCG, etc.) Don Josif 312 886 0393

Local Laboratory N/A

UPS/Fed. Express 3230 Pyramid dr 8-7p.m Rockford IL

Client/EPA Contact Don Josif 312 886 0393

Site Contact Robert Logan [redacted]

SITE RESOURCES

Site Emergency Evacuation Alarm Method Verbal

Water Supply Source To be supplied by FIT

Telephone Location, Number To be determined after arrival

Cellular Phone, if available N/A

Radio N/A

Other N/A

EMERGENCY CONTACTS

1. Dr. Raymond Harbison (Univ. of Florida) ..... (501) 221-0465 or (904) 462-3277, 3281
   Alachua, Florida [redacted]

2. Ecology and Environment, Inc., Safety Director
   Paul Jonmaire ..... (716) 684-8060 (office)
   [redacted]

3. Laura D. Evans, Manager of Health and Safety, Chicago .. [redacted]

4. Jerry Oskvarek, Office Manager, Chicago ..... [redacted]

HS018A(05/30/89)

MEDTOX HOTLINE

1. Twenty-four hour answering service: (501) 370-8263

   What to report:

   - State: "this is an emergency."
   - Your name, region, and site.
   - Telephone number to reach you.
   - Your location.
   - Name of person injured or exposed.
   - Nature of emergency.
   - Action taken.

2. A toxicologist, (Drs. Raymond Harbison or associate) will contact you. Repeat the information given to the answering service.

3. If a toxicologist does not return your call within 15 minutes, call the following persons in order until contact is made:

   a. 24 hour hotline - (716) 684-8940
   b. Corporate Safety Director - Paul Jonmaire - home # (716) 655-1260
   c. Assistant Corp. Safety Officer - Steven Sherman - home # (716) 688-0084

EMERGENCY ROUTES

(NOTE: Field Team must Know Route(s) Prior to Start of Work)

Directions to hospital (include map) Exit Site going North on Daysville Rd 2 blocks, Turn left on ILL Route 38 ~ 9 miles, Turn Right on Dixon Av. 6 blocks Hospital at Dixon and 1st. 403 E 1st Dixon IL (815) Total distance ~ 10 miles 288-5531

Emergency Egress Routes to Get Off-Site Exit access road to daysville road

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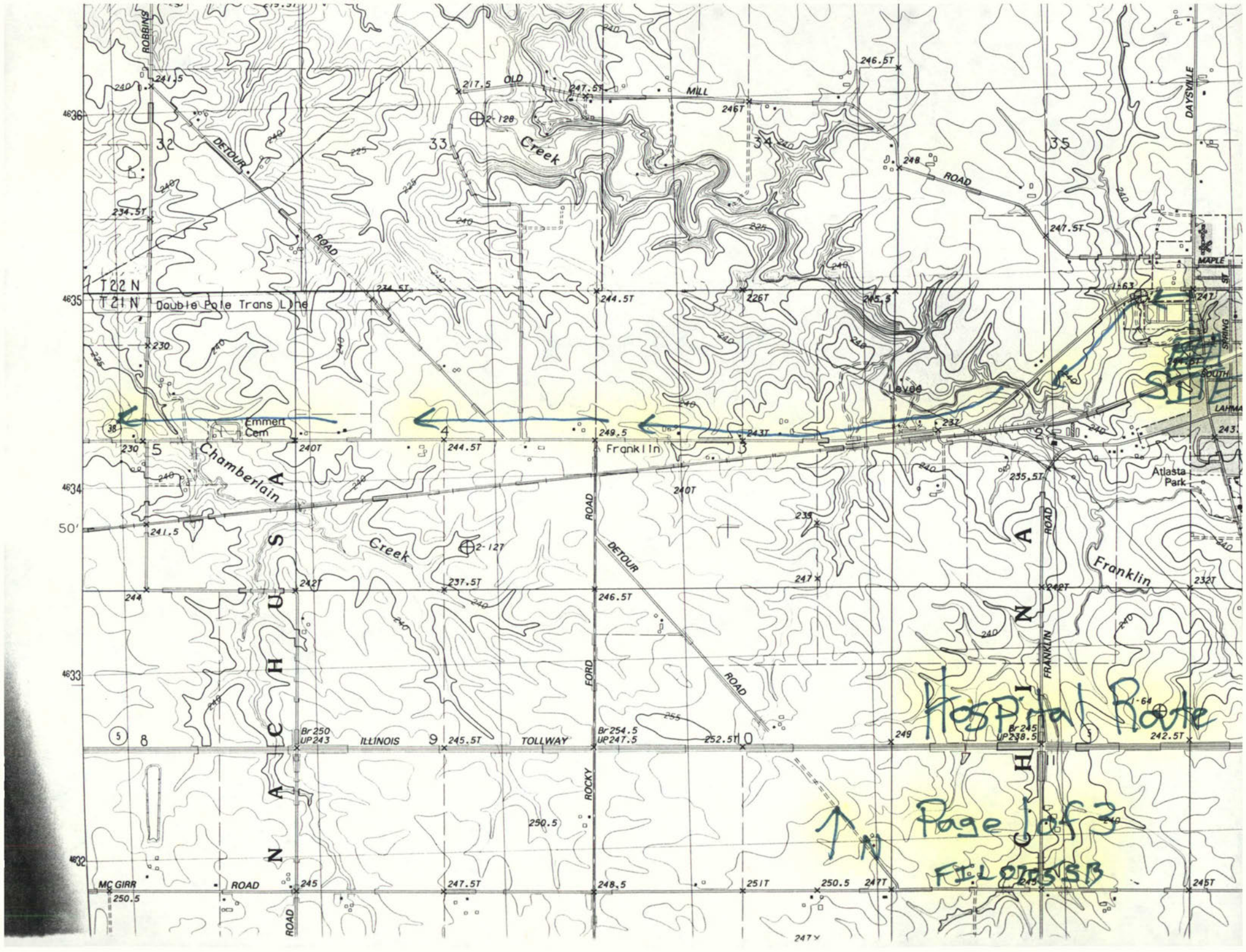
Hospital Katerine Shaw Bethea Hospital
403 E 1st
Dixon IL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DETOUR
ROAD
OLD
MILL
Creek
T22N
T21N
Double Pole Trans Line
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Chamberlain
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ROAD
DETOUR
ROAD
FORD
ROCKY
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Atlasta Park
DAYSVILLE
MAPLE
SPRING
SOUTH
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TOLLWAY
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Hospital Route
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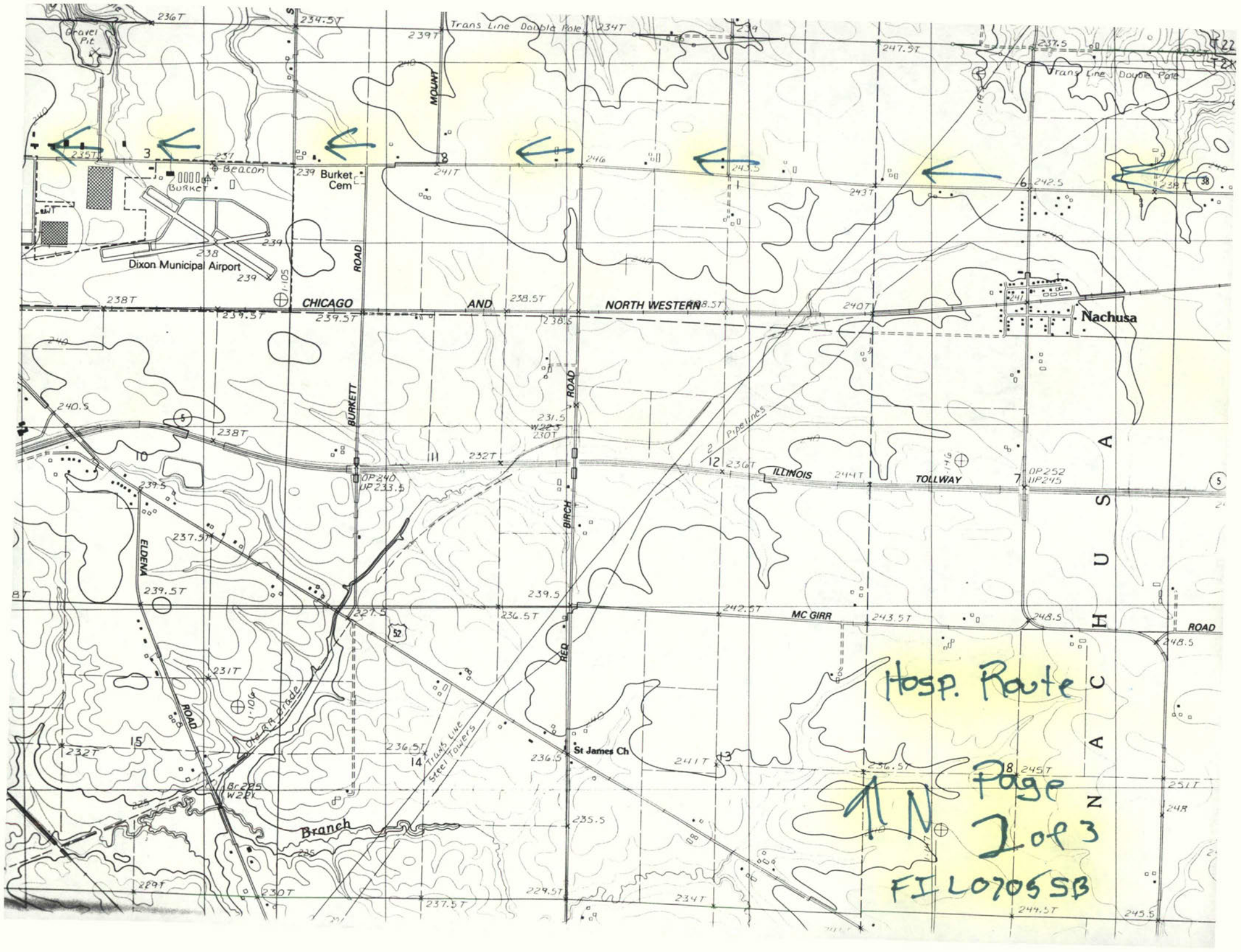
Gravel Pit
Trans Line Double Pole
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Beacon
BURKET
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Dixon Municipal Airport
ROAD
CHICAGO AND NORTH WESTERN
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Pipelines
ILLINOIS TOLLWAY
ELDENA
MC GIRR
ROAD
RED
St James Ch
Trans Line Steel Towers
Branch
NACHUSA
Hosp. Route
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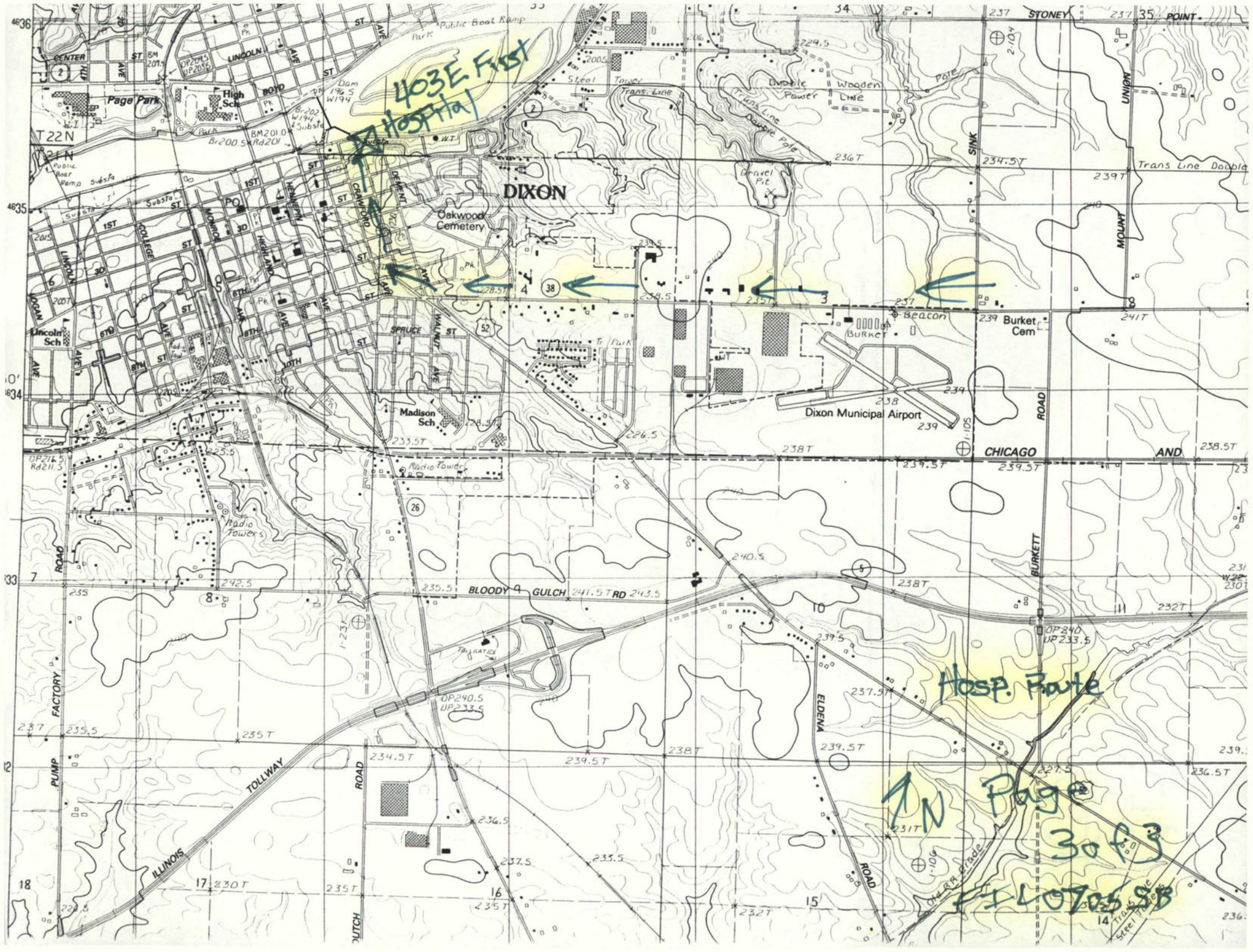
Page 1 of 3
FIL0705SB


403E First
Hospital
DIXON
Page Park
High Sch
Public Boat Ramp
Dam 196.5 W194
Oakwood Cemetery
Lincoln Sch
Madison Sch
Dixon Municipal Airport
Burket Cem
Beacon
Radio Towers
Gravel Pit
Trans Line Double Pole
Wooden Power Line
Steel Tower Trans. Line
Tollgates
Hosp. Route
1N Page
30 R3
FIL 0705 98

Ecology and Environment, Inc.
Hazard Evaluation of Chemicals
Region V - Chicago

ATE : 8/2/90
B NO: FIL07055B

CHEMICAL NAME: Benzene

SYN : Benzol, Benzole, Benzolene, Coal Tar Naphtha
CAS NO: 71-43-2 FORMULA: C6H6
DOT CLASS: 1114

CHEMICAL PROPERTIES

ys St: Liquid	Boil Pt: 176.00°F	Ionz Pot : 9.25ev	Fl Pt: 12:00°F
l Wt : 78.11	Melt Pt: 41.03°F	Vap Press: 75.00000mmHg	LFL : 1.30%
Gr : 0.88	Frz Pt : 42.03°F	Odr Thr : 5.00ppm	UFL : 7.90%

lor : aromatic, pleasant, sweet
COMPAT/REACT: nitric acid, oxidizing agents, chlorine, bromine
OLUBILITY : Water-slightly, soluble in organic solvents

TOXICOLOGICAL PROPERTIES

cposure Limits: TLV-TWA (ACGIH): 10.00003ppm PEL (OSHA): 10.00000ppm
STEL: -- IDLH: 2003.00000ppm
THER PROPERTIES : CEILING: 25PPM/15MIN. ACCEPT MAX PEAK ABOVE CEIL
ox Data: INHAL : rat LC50: 1000ppm/7hr
DERMAL : skn rbt 500mg/24H MODERAT
ORAL : rat LD50: 4994mg/kg
CARCIN : human positive
MUTAGEN : exper
REPRO TOX: exper
AQUATIC : 5ppm/6hr/minnow/lethal/distilled water
OTHER TOX: TARGET ORGANS: Blood, CNS, Skin, Bone Marrow, Eyes, Resp Sys
ROUTES OF EXP: Ingestion, Eye(Ocular), Dermal Absorption, Skin Contact, Inhalation

PERSONAL PROTECTIVE MEASURES

ESPIRATORS : APR: dusty/windy condit or known high concent or >1 but <5ppm; SCBA: >5ppm
ARTRIDGE TYPE : GMC-H or AP3 (RACAL)
OTECTIVE CLOTHING: Coverall: Saranex Gloves: Silvershield-8hr, PVA-6hr, Viton-6hr (PVA degrade in water)
PEC PRECAUTIONS : OSHA REGULATED CARCINOGEN.

FIRST AID

HALATION: move to fresh air, give O2/CPR if nec, SEEK MEDICAL ATTENTION
E/SKIN : remove contaminated clothes, flush areas w/water for 15 min, SEEK MEDICAL ATTENTION
GESTION : Treat for shock, CPR if nec., SEEK MEDICAL ATTENTION

SYMPTOMS

UTE : dizziness,weakness,euphoria,headache,nau/vomt,tight chest,staggering, visual blurring,tremors,skin irritation/scaling/cracking
RONIC: loss of appetite, drowsy, nervous, pallor, anemia, petechiae, abnml bleeding, aplasia of bone marrow, leukemia, encephalopathy w/ataxia, tremulousness, emotional lability, diffuse cerebral atrophy

DISPOSAL, FIRE, SPILLS (see attached sheet)

SPOSAL: D FIRE: 6,7 LEAKS & SPILLS: 3,4,5,6,9
COMPOSITION PRODUCTS: carbon monoxide, carbon dioxide

REFERENCES CONSULTED

GSH/OSHA Pocket Guide, Chris(vol. III), ACGIH TLV Booklet, RTECS
HER REFERENCES: Sigma-Aldrich, Handbook of Poisoning, OSHA

EMICAL CLASSIFICATION: Aromatic Hydrocarbon

LAST REVISION DATE:
10/18/89

Ecology and Environment, Inc.
Hazard Evaluation of Chemicals
Region V - Chicago

ATE : 8/2/90
DB NO: FIL070559B

CHEMICAL NAME: Cadmium (dust)

SYN : C.I. 77180
CAS NO: 7440-43-9 FORMULA: Cd
DOT CLASS:

CHEMICAL PROPERTIES

hys St: Solid	Boil Pt: 1412.00°F	Ionz Pot : —	Fl Pt: —
ol Wt : 112.40	Melt Pt: —	Vap Press: —	LFL : —
p Gr : 8.64	Frz Pt : 609.00°F	Odr Thr : —	UFL : —
dor :			

NCOMPAT/REACT: sulfur,selenium,tellurium,zinc,hydrazoic acid,ammonium nitrate, potassium,oxidizing agents & acid
OLUBILITY : insoluble in H20; soluble in acids, non-reactive with alkalies

TOXICOLOGICAL PROPERTIES

xposure Limits: TLV-TWA (ACGIH): 0.01 ppm PEL (OSHA): 0.04 ppm
STEL: — IDLH: —
THER PROPERTIES : CEILING: 0.6 mg/mg3
ox Data: INHAL : human LClo 39mg/m3/20M
DERMAL :
ORAL : rat LD50: 225mg/kg
CARCIN : animal pos.,human suspect
MUTAGEN : exper
REPRO TOX: exper teratogen
AQUATIC :
OTHER TOX: TARGET ORGANS: Resp Sys, Kidney, Prostate, Blood
ROUTES OF EXP: Ingestion, Dermal Absorption, Inhalation

PERSONAL PROTECTIVE MEASURES

ESPIRATORS : APR: dusty/windy condit or known high concent or >1 but <5ppm; SCBA: >5ppm
ARTRIDGE TYPE : GMC-H or AP3 (RACAL)
ROTECTIVE CLOTHING: Coverall: Tyvek Gloves: Butyl
PEC PRECAUTIONS :

FIRST AID

NHALATION: move from area, O2/artf resp if nec, SEEK MEDICAL ATTENTION.
YE/SKIN : Flush w/water at least 15min, SEEK MEDICAL ATTENTION.
NGESTION : Give milk, SEEK MEDICAL ATTENTION.

SYMPTOMS

CUTE : nau/vomt,diarrhea,headache,musc. aches,salivation,abdom. pain,cough(foam/blood sputum),weakness,leg pain

HRONIC: no sense of smell,cough,dyspnea,weight loss,anemia,irritability,yellow-stained teeth, liver/kidney damage

DISPOSAL, FIRE, SPILLS (see attached sheet)

ISPOSAL: P FIRE: 13 LEAKS & SPILLS: 7,10
ECOMPOSITION PRODUCTS: toxic fumes

REFERENCES CONSULTED

IOSH/OSHA Pocket Guide, Merck Index, ACGIH TLV Booklet, RTECS
THER REFERENCES: Sigma-Aldrich, Handbook of Poisoning, OSHA

HEMICAL CLASSIFICATION: Heavy Metal

LAST REVISION DATE:
04/19/89

Ecology and Environment, Inc.
Hazard Evaluation of Chemicals
Region V - Chicago

ATE : 8/2/90
DB NO: FIL070553

CHEMICAL NAME: Chromium-metal

SYN : Insoluble salts
CAS NO: 7440-47-3 FORMULA: Cr
DOT CLASS:

CHEMICAL PROPERTIES

hys St: Solid	Boil Pt: 4784.00°F	Ionz Pot : —	Fl Pt: 0.23°F
ol Wt : 52.00	Melt Pt: 3452.00°F	Vap Press: —	LFL : —
p Gr : 7.20	Frz Pt : 3339.00°F	Odr Thr : —	UFL : —

dor : none
INCOMPAT/REACT: strong oxidizers, powdered metal is explosive
OLUBILITY : insoluble

TOXICOLOGICAL PROPERTIES

xposure Limits: TLV-TWA (ACGIH): 0.23 ppm PEL (OSHA): 0.47 ppm
STEL: — IDLH: 235.57 ppm

THER PROPERTIES :
ox Data: INHAL : -
DERMAL : -
ORAL : -
CARCIN : -
MUTAGEN : -
REPRO TOX: -
AQUATIC : -
OTHER TOX: TARGET ORGANS: Respiratory System
ROUTES OF EXP: Ingestion, Eye(Ocular), Skin Contact, Inhalation

PERSONAL PROTECTIVE MEASURES

ESPIRATORS : APR: dusty/windy condit or known high concent or >1 but <5ppm; SCBA: >5ppm
ARTRIDGE TYPE : GMC-H, AP3 (RACAL)
ROTECTIVE CLOTHING: Coverall: Tyvek Gloves: Butyl
PEC PRECAUTIONS :

FIRST AID

NHALATION: move to fresh air, artf resp if nec, SEEK MEDICAL ATTENTION
YE/SKIN : Flush w/water 15 min, wash skin w/soap & water, SEEK MEDICAL ATTENTION.
NGESTION : Give lg amts of water, induce vomiting, SEEK MEDICAL ATTENTION

SYMPTOMS

CUTE : conctact dermatitis, ulceration of skin/nasal mucosa, irritation of eyes/mucous membranes

HRONIC: pulmonary disease

DISPOSAL, FIRE, SPILLS (see attached sheet)

ISPOSAL: P FIRE: 13 LEAKS & SPILLS: 3,4,6-9
ECOMPOSITION PRODUCTS:

REFERENCES CONSULTED

IOSH/OSHA Pocket Guide, ACGIH TLV Booklet
THER REFERENCES: NIOSH Guides, Sigma-Aldrich, OSHA

LAST REVISION DATE:
10/19/89

HEMICAL CLASSIFICATION: Heavy metal

Ecology and Environment, Inc.
Hazard Evaluation of Chemicals
Region V - Chicago

DATE : 8,2,90
JOB NO: FIL070553

CHEMICAL NAME: Lead

SYN : White lead, Plumbum, Inorganic Lead
CAS NO: 7439-92-1 FORMULA: Pb
DOT CLASS:

CHEMICAL PROPERTIES

Phys St: Solid	Boil Pt: 3164.00°F	Ionz Pot : —	Fl Pt: —
Mol Wt : 207.00	Melt Pt: 620.00°F	Vap Press: —	LFL : —
Sp Gr : 11.30	Frz Pt : —	Odr Thr : —	UFL : —

Odor : none
INCOMPAT/REACT: strong oxidizers, peroxides, active metals
SOLUBILITY :

TOXICOLOGICAL PROPERTIES

Exposure Limits: TLV-TWA (ACGIH): 0.01 ppm PEL (OSHA): —
STEL: — IDLH: —
OTHER PROPERTIES : PEL - 50ug/m3
Tox Data: INHAL : -
DERMAL : -
ORAL : rat TDLo: 790mg/kg
CARCIN : indefinite
MUTAGEN : -
REPRO TOX: exper teratogen
AQUATIC : -
OTHER TOX: TARGT ORGNS: GI Trct,CNS,Kid,Bld,Gingival Tissue
ROUTES OF EXP: Ingestion, Eye(Ocular), Skin Contact, Inhalation

PERSONAL PROTECTIVE MEASURES

RESPIRATORS : APR: dusty/windy condit or known high concent or >1 but <5ppm; SCBA: >5ppm
CARTRIDGE TYPE : GMC-H, AP3 (RACAL)
PROTECTIVE CLOTHING: Coverall: Saranex Gloves: Nitrile
SPEC PRECAUTIONS :

FIRST AID

INHALATION: move to fresh air, artf resp if nec, SEEK MEDICAL ATTENTION
EYE/SKIN : flush w/water 15 minutes, wash skin with soap/water, SEEK MEDICAL ATTENTION
INGESTION : give water, induce vomiting, SEEK MEDICAL ATTENTION IMMEDIATELY

SYMPTOMS

ACUTE : cumulative neurotoxin (prolong expos), stomach distress, vomtg, diarrhea, black stools, anemia, nervous system effects
CHRONIC: alimentary: abdm pain/discomf,constptn,diarrh neuromusc: musc weaknss,joint/musc pain,dizzy,insom, encephalic: brain involvment, stupor, coma,death-rare reprod: poison to m/f germ cells

DISPOSAL, FIRE, SPILLS (see attached sheet)

DISPOSAL: P FIRE: 13 LEAKS & SPILLS: 7,8,10
DECOMPOSITION PRODUCTS: toxic fumes of lead

REFERENCES CONSULTED

NIOSH/OSHA Pocket Guide, ACGIH TLV Booklet, RTECS
OTHER REFERENCES: Sigma-Aldrich, OSHA 1910., Handbook of Poisoning

CHEMICAL CLASSIFICATION: Heavy Metal

LAST REVISION DATE:
04/18/89

Ecology and Environment, Inc.
Hazard Evaluation of Chemicals
Region V - Chicago

DATE : 8/2/90
JOB NO: FIL07055B

CHEMICAL NAME: Toluene

SYN : Toluol, Methylbenzene
CAS NO: 108-88-3 FORMULA: C6H5CH3
DOT CLASS: 1294/FLAM LIQ 3

CHEMICAL PROPERTIES

Phys St: Liquid	Boil Pt: 231.10°F	Ionz Pot : 8.82ev	Fl Pt: 40.00°F
Mol Wt : 92.14	Melt Pt: -139.00°F	Vap Press: 22.00 mmHg	LFL : 1.27%
Sp Gr : 0.87	Frz Pt : -139.00°F	Odr Thr : 1.20ppm	UFL : 7.00%

Odor : pungent, aromatic, benzene-like, sour
INCOMPAT/REACT: nitric acid, strong oxidizers, peroxides
SOLUBILITY : water-slightly

TOXICOLOGICAL PROPERTIES

Exposure Limits: TLV-TWA (ACGIH): 100.00 ppm PEL (OSHA): 100.00 ppm
STEL: 150.00 ppm IDLH: 2000.00 ppm
OTHER PROPERTIES : CEILING: 300ppm, MAX PEAK: 500ppm/10M/8H shift, IRRITANT
Tox Data: INHAL : human Tclo: 200ppm
DERMAL : skn rbt: LD50 12124 mg/kg
ORAL : rat: LD50 5000mg/kg
CARCIN : exper
MUTAGEN : exper
REPRO TOX: exper teratogen
AQUATIC : 1180mg/l/96hr/sunfish/TLm/fresh water
OTHER TOX: TARGET ORGANS: CNS, Liver, Skin, Kidney
ROUTES OF EXP: Ingestion, Eye(Ocular), Skin Contact, Inhalation

PERSONAL PROTECTIVE MEASURES

RESPIRATORS : APR: dusty/windy condit or known high concent or >1 but <5ppm; SCBA: >5ppm
CARTRIDGE TYPE : GMC-H
PROTECTIVE CLOTHING: Coverall: Saranex Gloves: Viton
SPEC PRECAUTIONS :

FIRST AID

INHALATION: move to fresh air, artf resp if nec, SEEK MEDICAL ATTENTION
EYE/SKIN : flush w/water 15 minutes, SEEK MEDICAL ATTENTION
INGESTION : DO NOT INDUCE VOMITING, SEEK MEDICAL ATTENTION IMMEDIATELY

SYMPTOMS

ACUTE : eye/respiratory/skin irritation, fatigue, weakness, confusion, headachedizziness, drowsiness, tingling skin, numbness, vision disturbances, mild macrocytic anemia, narcotic in high concentrations,coma
CHRONIC: drying & cracking of skin, fatty degeneration of the heart, liver, and adrenals, and hemorrhages, anemia

DISPOSAL, FIRE, SPILLS (see attached sheet)

DISPOSAL: D FIRE: 6,7 LEAKS & SPILLS: 3,4,5,6,9
DECOMPOSITION PRODUCTS: CO2, CO

REFERENCES CONSULTED

NIOSH/OSHA Pocket Guide, Chris(vol. III), ACGIH TLV Booklet, RTECS
OTHER REFERENCES: NIOSH Guides, Sigma-Aldrich

LAST REVISION DATE: 05/10/89

CHEMICAL CLASSIFICATION: Aromatic Hydrocarbon

Ecology and Environment, Inc.
Hazard Evaluation of Chemicals
Region V - Chicago

DATE : 8/2/90
JOB NO: FIL070553

CHEMICAL NAME: Xylene, all isomers

SYN : Dimethylbenzene, Xylol
CAS NO: 1330-20-7 FORMULA: C6H4(CH3)2
DOT CLASS: FLAMMABLE

CHEMICAL PROPERTIES

Phys St: Liquid Boil Pt: — Ionz Pot : 8.56ev Fl Pt: 81.00°F
Mol Wt : 106.20 Melt Pt: — Vap Press: 9.00 mmHg LFL : 1.00%
Sp Gr : 0.86 Frz Pt : — Odr Thr : 20.00ppm UFL : 7.00%
Odor : aromatic odor, sweet
INCOMPAT/REACT: strong oxidizers
SOLUBILITY : practically insoluble in water

TOXICOLOGICAL PROPERTIES

Exposure Limits: TLV-TWA (ACGIH): 100.00 ppm PEL (OSHA): 100.00 ppm
STEL: 150.00 ppm IDLH: 1000.00 ppm

OTHER PROPERTIES :
Tox Data: INHAL : hum TClo: 200ppm
DERMAL : -
ORAL : rat LD50: 4300 mg/kg
CARCIN : -
MUTAGEN : exper
REPRO TOX: exper teratogen
AQUATIC : -
OTHER TOX: TARGET ORGANS: CNS, Eyes, GI Tract, Blood, Liver, Kidneys, Skin
ROUTES OF EXP: Ingestion, Eye(Ocular), Dermal Absorption, Skin Contact, Inhalation

PERSONAL PROTECTIVE MEASURES

RESPIRATORS : APR: dusty/windy condit or known high concent or >1 but <5ppm; SCBA: >5ppm
CARTRIDGE TYPE : GMC-H or AP3 (RACAL)
PROTECTIVE CLOTHING: Coverall: PE Tyvek Gloves: PVA, Viton (PVA degrades in water)
SPEC PRECAUTIONS :

FIRST AID

INHALATION: move to fresh air, artf resp if nec, SEEK MEDICAL ATTENTION
EYE/SKIN : flush w/water 15 minutes, wash skin with soap/water, SEEK MEDICAL ATTENTION
INGESTION : DO NOT INDUCE VOMITING, SEEK MEDICAL ATTENTION IMMEDIATELY

SYMPTOMS

ACUTE : vapor cause dizziness, headache, cough, pulmonary distress/edema, nausea/vomiting, abdominal cramps, narcotic in high concent, mild skin irritant
CHRONIC: possible liver and/or kidney damage, pulmonary congestion. Ingestion may be fatal.

DISPOSAL, FIRE, SPILLS (see attached sheet)

DISPOSAL: D FIRE: 6,7 LEAKS & SPILLS: 3,4,5,6,9
DECOMPOSITION PRODUCTS: CO, CO2

REFERENCES CONSULTED

NIOSH/OSHA Pocket Guide, Merck Index, Chris(vol. III), ACGIH TLV Booklet, RTECS
OTHER REFERENCES: NIOSH Guides, Sigma-Aldrich

CHEMICAL CLASSIFICATION: Hydrocarbons, Aromatic

LAST REVISION DATE:
05/10/89

THE SIGMA-ALDRICH LIBRARY OF CHEMICAL SAFETY DATA

Explanation of Codes

PROCEDURES FOR SPILLS OR LEAKS

1 Absorb on sand or vermiculite and place in closed container for disposal.
2 Cover with dry lime, sand, or soda ash. Place in covered containers using nonsparking tools and transport outdoors.
3 Shut off all sources of ignition.
4 Evacuate area.
5 Cover with an activated carbon adsorbent, take up and place in closed container. Transport outdoors.
6 Ventilate area and wash spill site after material pickup is complete.
7 Sweep up, place in a bag and hold for waste disposal.
8 Avoid raising dust.
9 Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.
10 Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.
11 Cover with dry lime or soda ash, pick up, keep in a closed container and hold for waste disposal.
12 Carefully sweep up and remove.
13 Flush spill area with copious amounts of water.
14 Mix with solid sodium bicarbonate.
15 Place in appropriate container.
16 Wear protective equipment.
17 Wash spill site with soap solution.
18 Please contact the Technical Services Department. Be sure to mention the name and catalog number of the material.

FIRE-EXTINGUISHING MEDIA

1 Carbon dioxide.
2 Dry chemical powder.
3 Water spray.
4 Alcohol or polymer foam.
5 Class D fire-extinguishing material only.
6 Water may be effective for cooling, but may not effect extinguishment.
7 Carbon dioxide, dry chemical powder, alcohol or polymer foam.
8 Foam and water spray are effective but may cause frothing.
9 Do not use dry chemical powder extinguisher on this material.
10 Do not use carbon dioxide extinguisher on this material.
11 Noncombustible.
12 Do not use water.
13 Use extinguishing media appropriate to surrounding fire conditions.

Z14,866-0

Sigma-Aldrich Corporation, P.O. Box 355, Milwaukee, Wisconsin 53201 USA
(Sigma: 314-771-5765; Aldrich: 414-273-3850)

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WASTE-DISPOSAL METHODS

The disposal methods outlined below are intended only as guides. We do not assume responsibility for their use. Careful consideration must be given to the chemical and physical properties of the substance. In addition, local laws and regulations may preclude the use of these methods which are primarily designed for small quantities. Observe all federal, state, and local laws.

The disposal of some chemicals may require deactivation or modification of the material by chemical means. Chemical waste-disposal reactions must be handled with the same care and consideration used with synthetic procedures. Appropriate consideration must be given to reaction conditions, *i.e.*, stoichiometry, order and rate of addition, heat of reaction, evolution of gaseous products, pH, efficiency of stirring, rate of reaction, atmospheric sensitivity, etc.

Chemical waste-disposal reactions should be carried out in a chemical fume hood and in appropriate laboratory glassware. Because these reactions are often vigorous, protective safety equipment such as safety goggles, respirator, gloves, face and/or safety shield and other protective equipment must be used.

Initial reactions in a disposal sequence should be carried out on a small scale (5-10g). The reactant concentrations should not exceed 10% of the reaction volume and the final reaction volume should not exceed 50% of the working capacity of the reaction vessel, regardless of the reaction scale. Larger quantities of the material should be handled in several small-size reactions. To ensure completion of reaction, the waste disposal procedure should be run for at least an additional 4 to 8 hours after all materials have been mixed.

All reactions should be run by technically qualified persons familiar with the potential hazards of the chemical reactions.

A Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

B The material should be ignited in the presence of sodium carbonate and slaked lime (calcium hydroxide). The substance should be mixed with vermiculite and then with the dry caustics, wrapped in paper and burned in a chemical incinerator equipped with an afterburner and scrubber.

C This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.

D Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

E To a solution of the product in water, add an excess of dilute sulfuric acid. Let stand overnight. Remove any insolubles and bury in a landfill site approved for hazardous-waste disposal.

F Cautiously dissolve the material in water. Neutralize immediately with sodium carbonate or, if the material does not dissolve completely, add a little hydrochloric acid followed by sodium carbonate. Add calcium chloride in excess of the amount needed to precipitate the fluoride and/or carbonate. Separate the insolubles and bury in a landfill site approved for hazardous-waste disposal.

G Under an inert atmosphere, cautiously add the material to dry butanol in an appropriate solvent. The chemical reaction may be vigorous and/or exothermic. Provisions must be made for venting of large volumes of highly flammable hydrogen and/or hydrocarbon gases. Neutralize the solution with aqueous acid. Filter off any solid residues for disposal as hazardous waste. Burn the liquid portion in a chemical incinerator equipped with an afterburner and scrubber.

H Neutralize the solution and add filtering agent (10g per 100ml). Evaporate the liquid and bag the residual solid for burial in a landfill site approved for hazardous-waste disposal.

I Dissolve the solid in (or dilute the solution with) a large volume of water. Carefully add a dilute solution of acetic acid or acetone to the mixture in a well ventilated area. Provisions should be made to vent safely the hydrogen gas given off during the decomposition. Check acidity of the solution and adjust to pH 1 if necessary. Let stand overnight. Neutralize the solution (pH 7). Evaporate the solution and bury the residue in a landfill site approved for hazardous-waste disposal.

J Cautiously acidify a 3% solution or a suspension of the material to pH 2 with sulfuric acid. Gradually add a 50% excess of aqueous sodium bisulfite with stirring at room temperature. An increase in temperature indicates that a reaction is taking place. If no reaction is observed on the addition of 10% of the sodium bisulfite solution, initiate it by cautiously adding more acid. If manganese, chromium, or molybdenum is present, adjust the pH of the solution to 7 and treat with sulfide to precipitate for burial as hazardous waste. Destroy excess sulfide, neutralize and flush solution down the drain.

K Please contact the Technical Services Department. Be sure to mention name, catalog number and quantity of the material.

L The material should be dissolved in 1) water; 2) acid solution or 3) oxidized to a water-soluble state. Precipitate the material as the sulfide, adjusting the pH of the solution to 7 to complete precipitation. Filter the insolubles and dispose of them in a hazardous-waste site. Destroy any excess sulfide with sodium hypochlorite. Neutralize the solution before flushing down the drain.

M A slurry of the arenediazonium salt with water can be disposed of by adding it gradually to a stirred solution of 5-10% excess 2-naphthol in 3% aqueous sodium hydroxide at 0-20°C. After 12 hours, the resulting azo dye is filtered and either incinerated or buried in a landfill site approved for hazardous-waste disposal. Neutralize the remaining solution before disposal.

N For small quantities: cautiously add to a large stirred excess of water. Adust the pH to neutral, separate any insoluble solids or liquids and package them for hazardous-waste disposal. Flush the aqueous solution down the drain with plenty of water. The hydrolysis and neutralization reactions may generate heat and fumes which can be controlled by the rate of addition.

O Bury in a landfill site approved for the disposal of chemical and hazardous waste.

P Material in the elemental state should be recovered for reuse or recycling.

Q Cautiously make a 5% solution of the material in water or dilute acid. There may be a vigorous, exothermic reaction and fumes may be generated due to the hydrolysis of the material. Control any reaction by cooling and by the rate of addition of the material. Gradually add dilute ammonium hydroxide to pH 10. Filter off any precipitate for disposal in a chemical landfill. If there is no precipitation, gradually adjust the pH from 10 to 6, stopping when precipitation occurs.

R Catalysts and expensive metals should be recovered for reuse or recycling.

S Treat a dilute basic solution (pH 10-11) of the material with a 50% excess of commercial laundry bleach. Control the temperature by the addition rate of bleach and adjust pH if necessary. Let stand overnight. Cautiously adjust solution to pH 7. Vigorous evolution of gas may occur. Filter any solids for burial in a chemical landfill. Precipitate any heavy metals by addition of sulfide and isolate for burial. Additional equivalents of hypochlorite may be needed if the metal can be oxidized to a higher valence state. For metal carbonyls, the reaction should be carried out under nitrogen.

T Cautiously make a 5% solution of the product in water; vent because of possible vigorous evolution of flammable hydrogen gas. Acidify the solution to pH 1 by adding 1*M* sulfuric acid dropwise. Acidification will cause vigorous evolution of hydrogen gas. Allow the solution to stand overnight. Evaporate the solution to dryness and bury the residue in a landfill site approved for hazardous-waste disposal.

U Take the material (or a solution) and make a 5% solution in tetrahydrofuran. Cautiously add the solution dropwise to an ice-cooled, stirred basic solution of commercial bleach. Oxidation may release flammable hydrocarbon gases which must be vented. Let stand overnight. Adjust the pH to 7 and destroy excess hypochlorite with sodium bisulfite before disposal of the solution.

V Under an inert atmosphere cautiously add dry butanol or a mixture of dry butanol in an appropriate solvent, to a solution of the material in tetrahydrofuran. The chemical reaction may be vigorous and/or exothermic. Provisions must be made for the venting of a large volume of flammable hydrogen gas. When gas evolution ceases, cautiously add a basic hypochlorite solution dropwise to the reaction solution. Let stand overnight. Neutralize the solution and treat with sodium bisulfite to destroy any excess hypochlorite. Filter any solids for burial in a landfill site approved for hazardous-waste disposal.

These recommendations are intended only as guides. Sigma-Aldrich shall not be held liable for any damage resulting from their use. See Foreword of the Sigma-Aldrich Library of Chemical Safety Data for more information.

SITE DOSIMETER LOG

PROJECT/PAN # FIL07055B SITE NAME Logan Storage Site

SITE SAFETY OFFICER Spangler WEEK OF Aug 20-22

NAME AND DOSIM. #	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Stan Senger 217							
Deneen Bamford 274							
Jeff Taylor 269							
Karen Spangler 216							

To the nearest half-hour, record time spent downrange as "S" (e.q., S:2.5hrs), time spent in active PDS operation as "P", and any time spent downrange in rescue activity as "R".

HS005(2/24/89)

LEAVE Aug 01
RETURN Aug 22nd '89

Warehouse Phone (312) 775-7763

F. EQUIPMENT CHECKLIST

Job/FAN FILO705 SB

Team Leader SENGER

PROTECTIVE GEAR

Level A	No.
SCBA	
SPARE AIR TANKS	
ENCAPSULATING SUIT (Type _____)	
SURGICAL GLOVES (Latex)	
NEOPRENE SAFETY BOOTS	
BOOTIES (Latex)	
GLOVES: Type _____	
SM _____ M _____ L _____	
OUTER WORK GLOVES	
CASCADE SYSTEM	
5-MINUTE ESCAPE MASK	
COOLING VEST	
HARD HAT	
Level C	
ULTRA-TWIN RESPIRATOR	All Members
POWER AIR PURIFYING RESPIRATOR	
CARTRIDGES (Type GMC-H)	
PROTECTIVE COVERALL: Type Saranex	
SM _____ M 10 L 10	
BUTYL APRON	
SURGICAL GLOVES (LATEX)	2 boxes
GLOVES: Type Vitons or Silvershield	
SM _____ M 2 L 5	
OUTER WORK GLOVES	
HARD HAT	Personal
FACE SHIELD	
HARDHAT	Personal
RAIN SUIT	Personal
NEOPRENE SAFETY BOOTS	
BOOTIES (LATEX)	16
STEEL TOED BOOTS	Personal

Level B	No.
SCBA	
SPARE AIR TANKS	
PROTECTIVE COVERALL: Type _____	
SM _____ M _____ L _____	
BUTYL APRON	
SURGICAL GLOVES (LATEX)	
GLOVES: Type _____	
SM _____ M _____ L _____	
NEOPRENE SAFETY BOOTS	
BOOTIES (LATEX)	
HARD HAT	
FACE SHIELD	
MANIFOLD SYSTEM WITH AIRLINE	
CASCADE SYSTEM	
RAIN SUIT	
OUTER WORK GLOVES	
Level D	
ULTRA-TWIN RESPIRATOR (Available)	all Members
CARTRIDGES (Type GMC-H)	
5-MINUTE ESCAPE MASK (Available)	2
PROTECTIVE COVERALL: Type Tyvek	
SM _____ M 10 L 10	
OUTER WORK GLOVES Silvershield / Viton	
HARD HAT	Personal
FACE SHIELD	
RAIN SUIT	Personal
WINTER BOOTS	
BOOTIES (LATEX)	16
NEOPRENE SAFETY BOOTS	
STEEL TOED BOOTS	Personal
SAFETY GLASSES	Personal

HS017(03/07/89)

INSTRUMENTATION	No.
OVA	1
THERMAL DESORBER	
O2/EXPLOSIMETER W/CAL. KIT	
PHOTOVAC TIP	
HNu (Probe 10.2 OR 11.7)	1
MAGNETOMETER W/ ATTACHMENTS	1
PIPE LOCATOR	
WEATHER STATION	
DRAEGER PUMP, TUBES HCN	1
BRUNTON COMPASS	
MONITOX CYANIDE	1 or
HEAT STRESS MONITOR	
NOISE EQUIPMENT _____	
PERSONAL SAMPLING PUMPS (Type_____)	
DUST MONITOR (MDA OR GCA System)	
RADIATION EQUIPMENT	
TLD BADGES	Personal
DOCUMENTATION FORMS	
PORTABLE RATEMETER	
SCALER/RATEMETER	
NaI Probe	
ZnS Probe	
GM Pancake Probe	
GM Side Window Probe	
MICRO R METER / RAD-KON	1
ION CHAMBER	
ALERT DOSIMETER	
POCKET DOSIMETER	
FIRST AID EQUIPMENT	
FIRST AID KIT	1
OXYGEN ADMINISTRATOR	
STRETCHER	
PORTABLE EYE WASH	1
BLOOD PRESSURE MONITOR	
FIRE EXTINGUISHER	1

DECON EQUIPMENT	No.
WASH TUBS	2
BUCKETS	1
SCRUB BRUSHES	2
PRESSURIZED SPRAYER	
DETERGENT (Type Alconox)	1
SOLVENT (Type _____)	
PLASTIC SHEETING	
TARPS AND POLES	
TRASH BAGS	✓
TRASH CANS	
MASKING TAPE	
DUCT TAPE	
PAPER TOWELS	
DUST MASK	8
FACE MASK SANITIZER	1
FOLDING CHAIRS	
STEP LADDERS	
DISTILLED WATER	
SAMPLING EQUIPMENT	
80 OZ. AMBER GLASS BOTTLES	
1 L. AMBER GLASS BOTTLES	
40 ML. VIALS	
1 L. PLASTIC	
8 OZ. GLASS	12
120 ML. GLASS	12
SPOONS	1
KNIVES	
FILTER PAPER	
PERSONAL SAMPLING PUMP SUPPLIES	
BUCK CALIBRATOR	
HAND BAILERS	
THIEVING RODS WITH BULBS	
DIOXIN SAMPLE KIT	
PRESERVATIVES: HNO3___ NaOH___ Other___	
STRING	

HS017(03/07/89)

VAN EQUIPMENT	No.
TOOL KIT	
HYDRAULIC JACK	
LUG WRENCH	
TOW CHAIN	
VAN CHECK OUT Large Van	
Gas and 1 Suburban	
Oil	
Antifreeze	
Battery	
Windshield Wash	
Tire Pressure	
~~MISCELLANEOUS~~ Compass	1
CHALK	
LEVEL/TRIPOD AND ROD	
BOWLS	3
PITCHER PUMP	
SURVEYOR'S TAPE 100ft/200ft	1
100 FIBERGLASS TAPE	
300 NYLON ROPE	
NYLON STRING	1 roll
SURVEYING FLAGS	10
FILM	2 rolls
WHEEL BARROW	
BUNG WRENCH	
SOIL AUGER	2 ea
PICK	
SHOVEL	1
CATALYTIC HEATER	
PROPANE GAS	
BANNER TAPE	
SURVEYING METER STICK	
CHAINING PINS & RING	10
TABLES	
WEATHER RADIO	
BINOCULARS	
MEGAPHONE	

MISCELLANEOUS (Cont.)	No.
HEARING PROTECTION	
LIFE VESTS	
WALKIE-TALKIE w/ rechargers	2 ea
CONDUCTIVITY METER	
PH METER	
CAMERA	1 ea
WATER-LEVEL INDICATOR	
SPLIT SPOON SAMPLERS	
PVC HAND PUMP	
RESISTIVITY METER	
WELL POINT SAMPLER	
ROBAIR PUMP SYSTEM	
THERMOMETER	
MASTERFLEX PUMP & FILTER APPARATUS	
SHIPPING EQUIPMENT	
COOLERS (2 large)(2 small)	4
PAINT CANS WITH LIDS, 7 CLIPS EACH	
VERMICULITE	3# bags
SHIPPING LABELS	
DOT LABELS: "DANGER"	
"UP"	
"INSIDE CONTAINER COMPLIES ..."	
"HAZARD GROUP"	
STRAPPING TAPE	
BOTTLE LABELS	
BAGGIES	
CUSTODY SEALS	
CHAIN-OF-CUSTODY FORMS	
FEDERAL EXPRESS FORMS	
CLEAR PACKING TAPE	
~~Hand held Radios~~	~~2~~
~~(with rechargers)~~	

HS017(03/07/89)

ecology and environment, inc.

ON-SITE SAFETY MEETING

Project Logan Storage Site TDD/Pan F05-8912-089/FIL0205 SB

Date _____ Time _____ Job No. _____

Address _____

Specific Location _____

Type of Work _____

SAFETY TOPICS PRESENTED

Protective Clothing/Equipment _____

Chemical Hazards _____

Radiation Hazards _____

Physical Hazards _____

Emergency Procedures _____

Hospital/Clinic _____ Telephone _____

Hospital Address _____

Special Equipment _____

Other _____

Checklist

1. Emergency information reviewed? _____ and made familiar to all team members? _____
2. Route to nearest hospital driven? _____ and its location known to all team members? _____
3. Site safety plan readily available and its location known to all team members? _____

Meeting shall be attended by all personnel who will be working within the exclusion area. Daily informal update meetings will be held when site tasks and/or conditions change.

ATTENDEES
(Expand on back of sheet if necessary)

Name Printed	Signature
Stan Senger	
Jeff Taylor	
Deneen Benford	
Karen Spangler	

Meeting Conducted by: _____ (Print) _____ (Signature)

_____ (Site Safety Coordinator) _____ (Team Leader)

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ECOLOGY AND ENVIRONMENT, INC. - CHICAGO
ON-SITE SAFETY LOG

Name: Logan Storage Site
Date: Aug 21, 22 1990

PAN #/Job #: FIL07055B
Weather

	Equipment (Circle All Used)	ID#	Calibration/ Operation Check	Initials and Date	Background Readings	On-Site Readings
1.	OVA					
	HNu					
	Photovac Tip					
2.	O_2 Meter					
	Explosimeter					
	Combo Meter					
3.	Rad-Mini					
	Monitor 4					
4.	HCN Draeger					
	Monitox					
5.	Other:					

Attendees At Site:

Protective Clothing Worn:

Comments on Monitoring or Protective Clothing:

Team Leader Stan Sanger
Name

Signature/Date

Site Safety Officer Karen Spangler
Name

Signature/Date

Please submit original to Paul Moss, and a copy to the project file.

HS018E(12/27/89)

Vehicle Safety Checklist
Ecology & Environment, Inc.
Chicago Office

Date: _____ Time: _____ Odometer: _____

Vehicle Model: _____ Color: _____ License Plate No. _____

INTERIOR:
____ All Safety Belts-Proper Locking
____ Parking Brake

START ENGINE:
____ Oil Pressure
____ Instrument Panel (Warning Lights or Buzzers)
____ Horn
____ Windshield Wiper & Washer
____ Heater/Defroster
____ Mirrors
____ Steering (Loose)
____ Interior Lights
____ Emergency Flashers
____ Starts Properly

FRONT:
____ Headlights (Dim/Bright)
____ Turn Signals
____ Emergency Flashers

REAR:
____ Tail Lights
____ Brake Lights
____ Back up Lights
____ Turn Signals
____ Emergency Flashers

MECHANICAL OPERATION:
____ Engine (misses, knocks, etc.)
____ Check Oil
____ Water/Anti-freeze
____ Wiper Fluid
____ Brake Fluid

OUTSIDE:
____ Tires (properly inflated)
____ Gas Tank Cap

EMERGENCY EQUIPMENT:
____ Fire Extinguisher
____ First Aid Kit
____ Flags, Flares,
____ Spare tire (properly inflated)
____ Tire Changing Kit (jack, tools, etc.)

REMARKS:
_____
_____
_____
_____
_____
_____
_____
_____

TEAM MEMBER/OPERATOR: _____ / _____
(print name) signature

SITE NAME/ADDRESS: Logan Storage Franklin Grove IL
PAN/JOB NUMBER: FIL07059B

RETURN OF VEHICLE TO DUTY STATION

Vehicle Cleanliness: _____
Remarks: _____
_____
_____
_____

Corrections Necessary: _____
_____

TEAM MEMBER/OPERATOR: _____ / _____
(print name) signature

Date: _____ Time: _____ Odometer: _____

9/88
1372:/