

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION I
SITE NUMBER MA 00360
ed by HQ

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME Silresim Chemical Corp.		B. STREET (or other identifier) 86 Tanner Street		
C. CITY Lowell	D. STATE MA	E. ZIP CODE 01853	F. COUNTY NAME Essex	

475452

G. SITE OPERATOR INFORMATION		2. TELEPHONE NUMBER		
1. NAME Dr. John Miserlis - former owner				
3. STREET	4. CITY	5. STATE	6. ZIP CODE	

H. REALTY OWNER INFORMATION (if different from operator of site)		2. TELEPHONE NUMBER		
1. NAME Former chem. Corp. new bankrupt - left 30,000 drums and other waste - site partially cleaned up.				
3. CITY	4. STATE	5. ZIP CODE		

I. SITE DESCRIPTION

J. TYPE OF OWNERSHIP


1. FEDERAL 2. STATE 3. COUNTY 4. MUNICIPAL 5. PRIVATE

II. TENTATIVE DISPOSITION (complete this section last)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.)	B. APPARENT SERIOUSNESS OF PROBLEM			
	<input type="checkbox"/> 1. HIGH	<input checked="" type="checkbox"/> 2. MEDIUM	<input type="checkbox"/> 3. LOW	<input type="checkbox"/> 4. NONE

C. PREPARER INFORMATION		2. TELEPHONE NUMBER		3. DATE (mo., day, & yr.)	
1. NAME B. Rickerby - EPA		223-5632		7/3/80	

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION		
1. NAME	2. TITLE	
3. ORGANIZATION		
		SDMS DocID 475452

B. INSPECTION PARTICIPANTS		
1. NAME	2. ORGANIZATION	3. TELEPHONE NO.

C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, residents)		
1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS

INSPECTION INFORMATION (continued)

D. GENERATOR INFORMATION (sources of waste)

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENER

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORT

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS

G. DATE OF INSPECTION (mo., day, & yr.) H. TIME OF INSPECTION I. ACCESS GAINED BY: (credentials must be shown in all cases)

1. PERMISSION 2. WARRANT

J. WEATHER (describe)

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN (mark 'X')	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER	X	State - May 1978	Now
c. WASTE			
d. AIR	X	Sampled by State in June 1978	Now
e. RUNOFF			
f. SPILL			
g. SOIL			
h. VEGETATION			
i. OTHER (specify)			

B. FIELD MEASUREMENTS TAKEN (e.g., radioactivity, explosivity, PH, etc.)

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS

a. GROUND b. AERIAL

2. PHOTOS IN CUSTODY OF:

State

D. SITE MAPPED?

YES. SPECIFY LOCATION OF MAPS:

E. COORDINATES

1. LATITUDE (deg.-min.-sec.)

4

2. LONGITUDE (deg.-min.-sec.)

V. SITE INFORMATION

A. SITE STATUS

1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

2. INACTIVE (Those sites which no longer receive wastes.)

3. OTHER (specify):
(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

1. NO 2. YES (specify generator's four-digit SIC Code):

C. AREA OF SITE (in acres)

Area

D. ARE THERE BUILDINGS ON THE SITE?

1. NO 2. YES (specify): Office, plant facilities.

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

<input checked="" type="checkbox"/>	A. TRANSPORTER	<input checked="" type="checkbox"/>	B. STORER	<input checked="" type="checkbox"/>	C. TREATER	<input checked="" type="checkbox"/>	D. DISPOSER
	1. RAIL	<input checked="" type="checkbox"/>	1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE	<input checked="" type="checkbox"/>	3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK	<input checked="" type="checkbox"/>	4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND	<input checked="" type="checkbox"/>	5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):	<input checked="" type="checkbox"/>	6. OTHER (specify): On ground		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY	<input checked="" type="checkbox"/>	8. OTHER (specify):
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

1. STORAGE 2. INCINERATION 3. LANDFILL 4. SURFACE IMPOUNDMENT 5. DEEP WELL
 6. CHEM/BIO/PHYS TREATMENT 7. LANDFARM 8. OPEN DUMP 9. TRANSPORTER 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

1. LIQUID 2. SOLID 3. SLUDGE 4. GAS

B. WASTE CHARACTERISTICS

1. CORROSIVE 2. IGNITABLE 3. RADIOACTIVE 4. HIGHLY VOLATILE
 5. TOXIC 6. REACTIVE 7. INERT 8. FLAMMABLE

9. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

WASTE RELATED INFORMATION (contin)

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE		b. OIL		c. SOLVENTS		d. CHEMICALS		e. SOLIDS		f. OTHER	
AMOUNT		AMOUNT		AMOUNT		AMOUNT		AMOUNT		AMOUNT	
In excess of one million gallons total prior to commencement of cleanup.											
UNIT OF MEASURE		UNIT OF MEASURE		UNIT OF MEASURE		UNIT OF MEASURE		UNIT OF MEASURE		UNIT OF MEASURE	
<input checked="" type="checkbox"/>	(1) PAINT, PIGMENTS	<input checked="" type="checkbox"/>	(1) OILY WASTES	<input checked="" type="checkbox"/>	(1) HALOGENATED SOLVENTS	<input checked="" type="checkbox"/>	(1) ACIDS	<input checked="" type="checkbox"/>	(1) FLYASH	<input checked="" type="checkbox"/>	(1) LABORATORY, PHARMACEUT.
	(2) METALS SLUDGES	<input checked="" type="checkbox"/>	(2) OTHER(specify): Oil sludge and others	<input checked="" type="checkbox"/>	(2) NON-HALOGNTD. SOLVENTS		(2) PICKLING LIQUORS		(2) ASBESTOS		(2) HOSPITAL
	(3) POTW				(3) OTHER(specify):		(3) CAUSTICS		(3) MILLING/MINE TAILINGS		(3) RADIOACTIVE
	(4) ALUMINUM SLUDGE						(4) PESTICIDES		(4) FERROUS SMELTING WASTES		(4) MUNICIPAL
<input checked="" type="checkbox"/>	(5) OTHER(specify):						(5) DYES/INKS		(5) NON-FERROUS SMLTG. WASTES		(5) OTHER(specify):
							(6) CYANIDE		(6) OTHER(specify):		
					(7) PHENOLS						
					(8) HALOGENS						
					(9) PCB						
					(10) METALS						
					(11) OTHER(specify):						

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (mark 'X')			3. TOXICITY (mark 'X')				4. CAS NUMBER	5. AMOUNT	6. UNIT
	a. SO-LID	b. LIQ.	c. VA-POR	a. HIGH	b. MED.	c. LOW	d. NONE			
Many types and varieties (e.g., solvents, waste oils toxic metals, chlorinated hydrocarbons, PCB's pesticides, various sludges).										

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

A. HUMAN HEALTH HAZARDS

From combustion of other hazards.

III. HAZARD DESCRIPTION (continued)

B. NON-WORKER INJURY/EXPOSURE

During an office, fire fighters were overcome by fumes.

C. WORKER INJURY/EXPOSURE

Before closure two workers were overcome by Toluene.

D. CONTAMINATION OF WATER SUPPLY

Potential via surface runoff to tributaries of Merrimack River.

E. CONTAMINATION OF FOOD CHAIN

F. CONTAMINATION OF GROUND WATER

On site.

G. CONTAMINATION OF SURFACE WATER

Potential via storm runoff.

VIII. HAZARD DESCRIPTION (continued)

H. DAMAGE TO FLORA/FAUNA

I. FISH KILL

J. CONTAMINATION OF AIR

Air quality poor due to presence of volatile substances.

K. NOTICEABLE ODORS

L. CONTAMINATION OF SOIL

Chemicals stored on ground-leaking, ruptured drums, disposal to ground on site, etc.

M. PROPERTY DAMAGE

VIII. HAZARD DESCRIPTION (continued)

N. FIRE OR EXPLOSION

An office fire (believe to have been arson) caused the explosion of drums.

O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

Ruptured drums.

P. SEWER, STORM DRAIN PROBLEMS

Improper discharge to sewer/

Q. EROSION PROBLEMS

R. INADEQUATE SECURITY

S. INCOMPATIBLE WASTES

Potential in any of the 30,000 unmarked drums.

VIII. HAZARD DESCRIPTION (continued)

T. MIDNIGHT DUMPING

4

U. OTHER (specify):

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. IN RESIDENTIAL AREAS	Unknown - but there is a residential area nearby.			
2. IN COMMERCIAL OR INDUSTRIAL AREAS				
3. IN PUBLICLY TRAVELLED AREAS				
4. PUBLIC USE AREAS (parks, schools, etc.)				

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify unit)	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
D. POTENTIAL YIELD OF AQUIFER	E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure)	F. DIRECTION TO DRINKING WATER SUPPLY
G. TYPE OF DRINKING WATER SUPPLY		
<input type="checkbox"/> 1. NON-COMMUNITY < 15 CONNECTIONS*	<input type="checkbox"/> 2. COMMUNITY (specify town): _____ > 15 CONNECTIONS	
<input type="checkbox"/> 3. SURFACE WATER	<input type="checkbox"/> 4. WELL	

X. WATER AND HYDROLOGICAL DATA (continued)

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-COM- MUNITY (mark 'X')	5. COMMUN- ITY (mark 'X')

I. RECEIVING WATER

1. NAME

2. SEWERS

3. STREAMS/RIVERS

Merrimack River

4. LAKES/RESERVOIRS

5. OTHER (specify):

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

XI. SOIL AND VEGETATION DATA

LOCATION OF SITE IS IN:

A. KNOWN FAULT ZONE

B. KARST ZONE

C. 100 YEAR FLOOD PLAIN

D. WETLAND

E. A REGULATED FLOODWAY

F. CRITICAL HABITAT

G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK (specify below)	'X'	C. OTHER (specify below)
	1. SAND				
	2. CLAY				
	3. GRAVEL				

XIII. SOIL PERMEABILITY

A. UNKNOWN

B. VERY HIGH (100,000 to 1000 cm/sec.)

C. HIGH (1000 to 10 cm/sec.)

D. MODERATE (10 to .1 cm/sec.)

E. LOW (.1 to .001 cm/sec.)

F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

1. YES

2. NO

3. COMMENTS:

H. DISCHARGE AREA

1. YES

2. NO

3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.

J. OTHER GEOLOGICAL DATA

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1. YES	2. NO	3. UNKNOWN
	4						

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

 NONE YES (summarize in this space)

Silresim come into contention with the state frequently, starting in 1973. In July '75 DWPC threatened to revoke license. The 1976 permit stipulated specific conditions. In May '76 Silresim received notice of non-compliance from DWPC (requested Attorney General to enforce). Jan/Feb 1977 - State inspection finds non compliance - State considers reweiving permit. Permit okayed in April with several conditions. June inspection reveals non-compliance. In July DWPC began action to revoke licnese. In late Oct. Silresim notified that they accepted pesticides in violation of permit. On Dec. 28, 1977 Silresim declares backruptcy and permit revoked.

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition (Section II) information on the first page of this form.

NOTE: The State appropriated \$1.5 million for cleanup and removal of wastes. About 80% of cleanup was accomplaished before funds ran out. State estimates an additional \$600,000 needed to complete cleanup.



POTENTIAL HAZARDOUS WASTE SITE
FINAL STRATEGY DETERMINATION

REGION I SITE NUMBER MA 00360

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME Silresim Chemical Corp.		B. STREET 86 Tanner Street	
C. CITY Lowell		D. STATE MA	E. ZIP CODE 01853

II. FINAL DETERMINATION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY			
		EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED					
B. REMEDIAL ACTION NEEDED, BUT NO RESOURCES AVAILABLE <i>(If yes, complete Section III.)</i>	X				
C. REMEDIAL ACTION <i>(If yes, complete Section IV.)</i>	X		X		
D. ENFORCEMENT ACTION <i>(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)</i>					

E. RATIONALE FOR FINAL STRATEGY DETERMINATION

State cleanup of site, spent \$1.5 million and ran out of money with only about 80% of the job finished. Additional funding of \$600,000 requested to complete cleanup.

F. IF A CASE DEVELOPMENT PLAN HAS BEEN PREPARED, SPECIFY THE DATE PREPARED (mo., day, & yr.)	G. IF AN ENFORCEMENT CASE HAS BEEN FILED, SPECIFY THE DATE FILED (mo., day, & yr.)
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H. PREPARER INFORMATION

1. NAME B. Rickerby	2. TELEPHONE NUMBER 223-5632	3. DATE (mo., day, & yr.) 7/3/80
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III. REMEDIAL ACTIONS TO BE TAKEN WHEN RESOURCES BECOME AVAILABLE

List all remedial actions, such as excavation, removal, etc. to be taken as soon as resources become available. See instructions for a list of Key Words for each of the actions to be used in the spaces below. Provide an estimate of the approximate cost of the remedy.

A. REMEDIAL ACTION	B. ESTIMATED COST	C. REMARKS
Cleanup	\$ 600,000	To complete job already started
	\$	Removal of wastes.
	\$	Removal contaminated soil.
	\$	
	\$	
	\$	
	\$	
	\$	
	\$	
D. TOTAL ESTIMATED COST	\$	

IV. REMEDIAL ACTIONS

A. SHORT TERM/EMERGENCY ACTIONS (On Site and Off-Site): List all emergency actions taken or planned to bring the site under immediate control, e.g., restrict access, provide alternate water supply, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. ACTION START DATE (mo, day, & yr)	3. ACTION END DATE (mo, day, & yr)	4. ACTION AGENCY (EPA, State, Private Party)	5. COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED.
				\$	
				\$	
				\$	
				\$	
				\$	
				\$	

B. LONG TERM STRATEGY (On Site and Off-Site): List all long term solutions, e.g., excavation, removal, ground water monitoring wells, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. ACTION START DATE (mo, day, & yr)	3. ACTION END DATE (mo, day, & yr)	4. ACTION AGENCY (EPA, State, Private Party)	5. COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED.
In future/ Contaminated Soil Disposal with funding.			State	\$ Unknown at present.	
				\$	
				\$	
				\$	
				\$	
				\$	

C. MANHOURS AND COST BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL MAN-HOURS FOR REMEDIAL ACTIVITIES	3. TOTAL COST FOR REMEDIAL ACTIVITIES
a. EPA		\$
b. STATE		\$
c. PRIVATE PARTIES		\$
d. OTHER (specify):		\$

SILRESIM WASTE
(equivalent gallons)

WASTE CATEGORY	WASTE ESTIMATE 9/78	WASTE REMOVED NEWCO 12/78 - 6/79	WASTE ESTIMATE 12/79	WASTE REMOVED CECOS 6/80 - 9/80	TOTAL WASTE
1. Aqueous Organics	125,500	27,500	120,000	-	27,500
2. Dilute Aqueous Organics	173,200	92,600	-	88,000	180,600
3. Hydrocarbon Liquids Non-Chlorinated	261,300	226,000	-	-	226,000
4. Chlorinated Hydrocarbons	79,400	116,100	59,600	1,500	117,600
5. Aqueous Inorganics without Heavy Metals	83,900	133,500	125,200	104,100	237,600
6. Aqueous Inorganics with Heavy Metals	272,400	-	-	7,200	7,200
7. Packaged Lab Chemicals	5,500	30,600	-	4,555	35,155
8. Sludges	171,700	56,200	79,800	193,000	249,200
9. Solids	72,700	979,300	222,200	77,568	1,056,868
TOTALS	1,245,600	1,661,800 1,662,300	606,800	475,923 ^{130,877}	2,137,723

Waste removal

