DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RDMS DocID 00100111

RCRA RECORDS CENTER
FACILITY Thompson Town of Sanitary Landfill
I.D. NO. CTD000760729
FILE LOC. R-13
OTHER

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA725)

Current Human Exposures Under Control

Facility Name: Thompson Landfill
Facility Address: Pasay Road, North Grosvenordale
Facility EPA ID #: CTD000760729

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

X If yes - check here and continue with #2 below.

_ If no - re-evaluate existing data, or

_ if data are not available skip to #6 and enter IN(more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of Current Human Exposures Under Control EI

A positive Current Human Exposures Under Control EI determination (YE status code) indicates that there are no unacceptable human exposures to contamination (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all contamination subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The Current Human Exposures Under Control EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action programs overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be **contaminated**[1] above appropriately protective risk-based levels (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	Yes	No	?	Rationale / Key Contaminants
Groundwater	**Y**			**DOPH or RSRs/Mn, Na, Fe, &Benzene**
Air (indoors)[2]		**N**		
Surface Soil (e.g., <2 ft)		**N**		
Surface Water	**Y**			**DOPH or RSRs/Mn, Na, Fe & Nitrate N**
Sediment		**N**		**RSRs**
Subsurf. Soil (e.g., >2 ft)	**Y**			**EPToxicity/Ba, Cr, Cu, Pb, Ni & Zn**
Air (outdoors)		**N**		

_ If no (for all media) - skip to #6, and enter YE, status code after providing or citing appropriate levels, and referencing sufficient supporting documentation demonstrating that these levels are not exceeded.

X If yes (for any media) - continue after identifying key contaminants in each contaminated medium, citing appropriate levels (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

_ If unknown (for any media) - skip to #6 and enter IN status code.

Rationale and Reference(s):

The sanitary portion of the Town of Thompson landfill closed with the construction of an impermeable cap in 1991. The RCRA hazardous waste metal hydroxide cell located at the Thompson landfill was closed in 1996 with the construction of a 2-liner impermeable RCRA cap (a flexible membrane liner and a liner of bentonite clay within a polypropylene matrix), and the installation of the 13-well (5 bedrock and 8 overburden) groundwater monitoring network. In addition to the landfill well monitoring network there are 4 domestic wells, from the residences that are the closest and downgradient from the landfill, that are included in the landfill groundwater monitoring program. The groundwater monitoring was initiated in 1986 and upgraded in the mid 1990s. Groundwater sampling and testing is conducted twice a year, in April and October. The last available annual groundwater monitoring report is for the year 2001. Groundwater, surface and groundwater sampling locations are shown in the enclosed Figure 2 "Well location and topography Map"....

Please see Item 2 Addendum for additional information.

Footnotes:

[1] Contamination and contaminated describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based levels (for the media, that identify risks within the acceptable risk range).

[2] Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

3. Are there **complete pathways** between contamination and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table
Potential **Human Receptors** (Under Current Conditions)

Contaminated Media	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food[3]
Groundwater	No	No	No	No			No
Air (indoors)							
Soil (surface, e.g., <2 ft)							
Surface Water	No	No			No	No	
Sediment							
Soil (subsurface e.g., >2 ft)				No	No	No	No
Air (outdoors)							

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors spaces for Media which are not contaminated as identified in #2 above.

2. enter yes or no for potential completenes under each Contaminated Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential Contaminated≅ Media - Human Receptor combinations (Pathways) do not have check spaces (___). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

X If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter YE status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).

_ If yes (pathways are complete for any Contaminated Media - Human Receptor combination) - continue after providing supporting explanation.

_ If unknown (for any Contaminated Media - Human Receptor combination) - skip to #6 and enter IN status code

Rationale and Reference(s):

Please see Item 3 Addendum.

[3] Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

4 Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **significant**[4] (i.e., potentially unacceptable because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable levels≅ (used to identify the contamination); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable levels) could result in greater than acceptable risks)?

_ If no (exposures can not be reasonably expected to be significant (i.e., potentially unacceptable) for any complete exposure pathway) - skip to #6 and enter YE status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to contamination (identified in #3) are not expected to be significant.

_ If yes (exposures could be reasonably expected to be Asignificant≅ (i.e., potentially Aunacceptable≅) for any complete exposure pathway) - continue after providing a description (of each potentially Aunacceptable≅ exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to Acontamination≅ (identified in #3) are not expected to be Asignificant.≅

_ If unknown (for any complete pathway) - skip to #6 and enter AIN≅ status code

Rationale and Reference(s):

[4] If there is any question on whether the identified exposures are Asignificant≅ (i.e., potentially Aunacceptable≅) consult a human health Risk Assessment specialist with appropriate education, training and experience.

5 Can the significant **exposures** (identified in #4) be shown to be within **acceptable** limits?

_ If yes (all significant exposures have been shown to be within acceptable limits) - continue and enter YE after summarizing and referencing documentation justifying why all significant exposures to contamination are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

_ If no (there are current exposures that can be reasonably expected to be unacceptable≅)- continue and enter NO status code after providing a description of each potentially unacceptable exposure.

_ If unknown (for any potentially unacceptable exposure) - continue and enter IN status code

Rationale and Reference(s):

Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

YE Yes, Current Human Exposures Under Control has been verified. Based on a review of the information contained in this EI Determination, Current Human Exposures are expected to be Under Control at the **TOWN OF THOMPSON MUNICIPAL LANDFILL** facility, EPA ID #**CTD000769729**, located at Pasay Road, North Grosvenor dale under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

_ NO - Current Human Exposures are NOT Under Control

_ IN - More information is needed to make a determination.

Completed by (signature) Marina Roser
Date 2/5/03
(print) Marina Roser
(title) Sanitary Engineer 3

Reviewed by David Lim
David Lim 6/2/03

Supervisor (signature) John England
Date 2/7/03
(print) John England
(title) Supervising Env. Analyst

Approved by
Matthew Hoagland
Chief, RCRA Corr. Act. Sect.
8/25/03

Locations where References may be found:

- **Connecticut Department of Environmental Protection, 79 Elm St., Hartford, CT 06106**
- **GEOTOXI ASSOCIATES, INC, P.O. Box 213, Ponfret, CT 06258**

Contact telephone and e-mail numbers

(name) Marina Roser
(phone #) (860 424-3574
(e-mail) Marina.Roser@po.State.Ct.US

Town of Thompson Municipal Landfill
U.S. EPA I.D. No.CTD000769729
CURRENT HUMAN EXPOSURES UNDER CONTROL
CA725

Item 3 Addendum:

GROUNDWATER:
There is no planned, or ongoing excavation or construction work at this site, and therefore there are no workers placed at risk of contamination.
At this time there is not a potential exposure pathway between human receptors at the downgradient residential wells and the landfill plumes of contamination, as evidenced by the last data collected from the residential wells in October, 2001, that shows all hazardous constituents and indicator parameters below the drinking water standards (DOPHS or RSRSs). Residential wells at 131 Pasay Road (house) and at 10 Stawicki Road show exceedances of the standards for sodium for the month of April monitoring only, which indicates that sweepings from the road are seasonally affecting the water quality in those wells.

SURFACE WATER:

There is not a complete pathway between human receptors and Stream South. Stream South is located in a remote area so that at this time is not presenting any immediate threat to the public health, as people do not use it for any recreational purpose. The stream is intermittent and therefore not good for fishing. It is located at the back side of the landfill at one side running through a very steep and rocky slope and at the other running through private undeveloped woodland.

There is not a complete pathway between human receptors and Dug Pond. Access to Dug Pond is restricted by the chain link entrance fence to the landfill and Transfer Station, and by dense thorny shrubs. This is not a good fishing area, as the waters at the pond are shallow, murky and stagnant. To date, fishermen have not been observed trespassing.

SOIL (SUBSURFACE e.g.,>2 ft):
There is not a complete pathway between human receptors and the landfill contents as there is a sanitary landfill cap and a RCRA cap at the metal hydroxide site. There is no planned construction activity at the landfill cap and therefore workers are not at risk. The landfill and the RCRA metal hydroxide cell are fenced and there is no trespassing of the property.

Town of Thompson Municipal Landfill
U.S. EPA I.D. No. CTD000769729
CURRENT HUMAN EXPOSURES UNDER CONTROL
CA725
Item 2 Addendum:

INTRODUCTION

The solid waste portion of the Thompson landfill was closed with the construction of an impermeable cap in 1991.
The RCRA hazardous waste metal hydroxide cell located at the Thompson landfill was closed in 1997. The cell closure consisted of placement of a cap with two impermeable liners(a flexible membrane liner and a liner of bentonite clay within a polypropylene matrix), and the installation of the 13-well (5 bedrock and 8 overburden) groundwater monitoring network. In addition to the landfill well monitoring network there are 4 domestic wells, from the residences that are the closest and downgradient from the landfill, that are included in the landfill groundwater monitoring program. The groundwater monitoring was initiated in 1986 and upgraded in the mid 1990s. Groundwater sampling and testing is conducted twice a year, in April and October. The last available annual groundwater monitoring report is for the year 2001. The standards aimed at are the Department of Public Health Services (DOPHS) or the Connecticut Remediation Standard Regulations (RSRs).
Groundwater, surface and groundwater sampling locations are shown in the enclosed Figure 2 "Well location and topography Map". Groundwater and surface water test results from GEOTOXI for the years 1999 through 2001 are attached. Sediment test results gathered by GEOTOXI in 2001 are also attached.
Following is an evaluation of the each environmental media and potential contamination at the landfill.

GROUNDWATER

There are two contamination plumes emanating from the landfill, a southwesterly plume and a northwesterly plume. Cyanide, arsenic, barium, copper, cobalt, cadmium, mercury, lead and zinc have not been detected at the landfill monitoring network. However there have been exceedances for sodium, manganese, iron, and benzene. The following tables show the exceedances for those parameters at the indicated locations during October, 2001.

Table 1. SOUTHWESTERLY PLUME
Exceedances for last 2001 sampling event (ppm)

Parameter	DOPH or RSRs	Well BW-101	Well BW-103	Well OW-203	Well OW-013A	Well OW-022A	Well OW-025
Sodium	28	89	54		110		
Iron	0.3	5.4	9.3		1.9		1.0
Manganese	0.05	5.1	2.8	0.57	2.8	1.8	0.089
Nitrate N	10				17		
Benzene	1.0				2.1	4.6	

Table 2. NORTHWESTERLY PLUME.
Exceedances for the last 2001 sampling event. (ppm)

Parameter	DOPH or RSRs	Well BW-102	Well OW-202	Well OW-021A
Sodium	28	44	39	33
Iron	0.3	1.3	0.74	16
Manganese	0.05	0.11	0.24	0.84

Concerning data collected from the 4 residential wells that are part of the monitoring network, test results for the month of April of 2001 sampling event, reveals that for wells at 131 Pasay Road (house) and at 10 Stawicki Road there were high sodium concentrations of 36 ppm and 95 ppm respectively. However, during the last monitoring event for which there is data, October of 2001, data reveals that the sodium concentrations are only 10 ppm and 27 ppm for the above indicated wells, which indicates that sweepings from the road immediately after the winter season elevates the sodium content in those wells. There are no exceedances of any standards in the last monitoring event for any of the residential wells at the vicinity of the landfill. Please see FIGURE 1 "SITE LOCATION MAP" for locations of landfill and residential wells.

AIR INDOORS
This media is not applicable to the landfill.

SURFACE SOIL<2 ft.
The cap of the sanitary landfill constructed during closure activities covers all trash and contaminated soils. The metal hydroxide cell at the landfill has also been closed with a cap over all waste and contaminated soils.
There is an operating Solid Waste Transfer Station adjacent to the landfill. The writer visited the landfill and the Transfer Station on September 28, 1998, and there appeared to be no releases or spills to the ground surface and the station was being run in an orderly and clean manner. Subsequent to that visit a member of the CT DEP Solid Waste group conducted a full inspection to the Thompson Transfer Station on June 8, 1999 noting no violations either.

SURFACE WATER
Stream South 1 is an intermittent stream that was dry during the October 2001 sampling event. The water is typically an inch or two deep. Stream South 1 is the most impacted water body at the site. Data from the last sampling event, April of 2001, reveals exceedances for sodium, manganese and iron showed at 60 ppm, 1.7 ppm and 1.6 ppm respectively.

Stream South 2 is located downgradient of Stream South 1 and it is also an intermittent stream that was dry during the October 2001 sampling event. Data form the last sampling event, April of 2001, reveals exceedances for sodium, manganese and nitrate nitrogen showed at 40 ppm, 0.065 ppm and 13 ppm respectively.

Dug Pond is located northwesterly of the landfill between the entrance road and Pasay Road. Data from the October 2001 sampling event reveals exceedances for manganese and iron at 1.8 ppm and 0.34 ppm respectively.

SEDIMENTS

Three sediment samples were collected from Stream South between sampling locations stream south #1 and stream south # 2 on May 8, 2001 by GEOTOXI. The stream bed has a substrate with rocks and cobbles. The samples were collected within the top six inches of the sediment profile. Metals were selected as the constituents of concern since metals from the sludge lagoon are of the greatest potential to be adsorbed in the organic matter contained in the sediment. The samples were analyzed for arsenic, zinc, tin, sodium, nickel, manganese, lead, iron, copper, cobalt, chromium, cadmium, barium and mercury. None of the sample test results exceeded the RSRs for the residential direct exposure criteria.

SUBSURFACE SOIL (>2 ft)

Buried under the two-liner impermeable RCRA cap at the metal hydroxide cell there are hazardous constituents (metals) at or above the hazardous criteria as tested for the EPA E.P. Toxicity test. The metal hydroxide cell was closed in 1996-1997 and it is fenced. As previously mentioned, the solid waste portion of the landfill is as well closed with waste in place. The constituents within the landfill would range wide in nature and concentrations as a typical solid waste landfill.

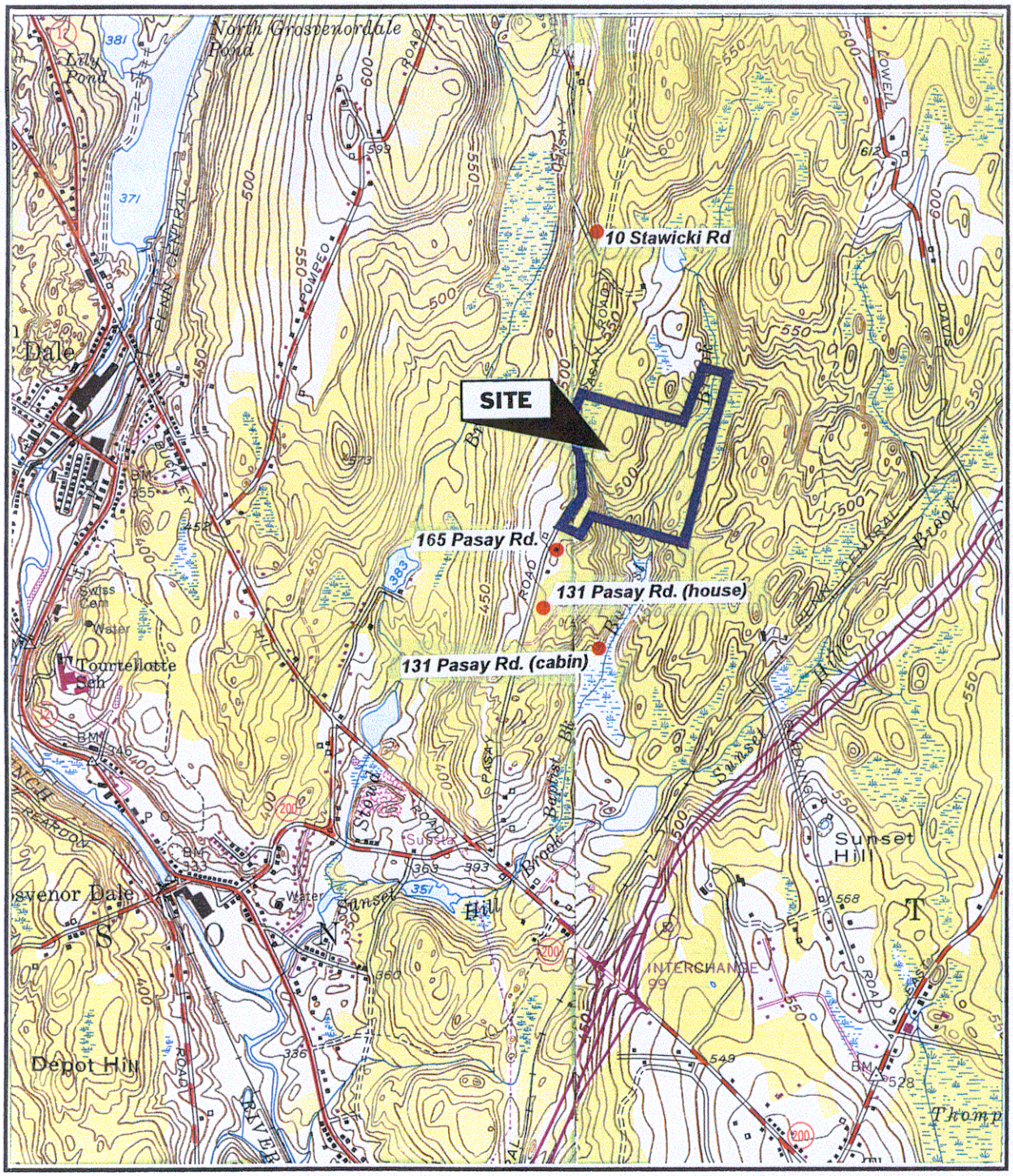
AIR (OUTDOORS)

Air releases have not been observed at the landfill in the recent last years. This is due to the fact that the sanitary landfill has been closed for more about 12 years, and the subsequent conversion of solids to liquids and liquids to gases has mostly already taken place.

REFERENCES:

1- "RCRA Closure and Post-closure Plan, Town of Thompson Metal Hydroxide Cell, Thompson Sanitary Landfill, Pasay Road", Environmental Remediation Inc., 1996.
2- "RCRA Closure Certification Report, Town of Thompson Metal Hydroxide Cell, Thompson Sanitary landfill" Environmental Remediation, 1997.

3- Connecticut Department of Environmental Protection (CTDEP) Solid Waste Landfill Closure Records.
4- CTDEP Solid Waste Thompson Transfer Station Inspection Report, G. McGillis, 1999.
5- "Annual Groundwater Monitoring Report (or Data), Thompson Sanitary Landfill, Thompson, Connecticut", GEOTOXI, 1998, 1999, 2000, 2001.
6- "Documentation of Environmental Indicators Determination, Environmental Indicator (EI) RCRIS Code (CA725)", GEOTOXI, 2002.



SITE LOCATION MAP

From USGS Topographic Quadrangle Maps; 7.5 minute series
Putnam, CT 1955 (photorevised 1970) & Thompson, CT - R.I. 1955 (photoinspected 1974)
Scale: 1 inch = 2000 feet

FIGURE 1

Geotoxl Associates, Inc.
26 Putnam Road
Pomfret, CT 06258

FAX TRANSMITTAL **TEL # 860-928-7343**

GEOTOXI ASSOCIATES, INC.
Environmental Scientists & Consultants
P.O. BOX 213
POMFRET, CONNECTICUT 06258

TO: Marina Rosen
CT DEP

DATE: 1/26/03

Regarding: Thompson Landfill

WE ARE SENDING YOU

- [x] Attached
- [ ] Under Separate Cover
- [x] Per Your Request
- [ ] For Approval
- [ ] For Your Files
- [ ] _____

THE FOLLOWING:

- [x] # of Pages Including Transmittal

Marina -
Here is the lab report for ~~sec~~ sediment samples collected from Stream South at the Thompson Landfill

REMARKS:

I am sending hard copies of this and the topo map identifying the domestic well locations in the mail.

IF ENCLOSURES ARE NOT AS LISTED, PLEASE NOTIFY AT ONCE.

GEOTOXI ASSOCIATES, INC.

FROM: Sarah Hemingway

Premier Laboratory, LLC
Route 205, The Regional Building
PO Box 700
Brooklyn, Connecticut 06234
FAX: 860-774-2689
860-774-6814 800-932-1150

ANALYTICAL DATA REPORT

Report Number: E105401
Project: Residential Thompson Landfill

prepared for:

Geotoxi
P.O. Box 213
Pomfret, CT 06258

Attn: Sarah Heminway

Received Date: 5/8/2001
Report Date: 5/17/2001

received 5/21/01

Copies Sent to:
Town of Thompson
Thompson Town Hall
North Grosvenordale, CT 06255

Kristen Bernard
Premier Laboratory, LLC
Authorized Signature

Connecticut Department of Health Services PH-0465
Maine Department of Environmental Protection CT050
Massachusetts Department of Environmental Quality M-CT008
New Hampshire Department of Environmental Services 2020
New York Department of Health 11549
Rhode Island Department of Health 180

Premier Laboratory, LLC

Route 205, The Regional Building
PO Box 700
Brooklyn, Connecticut 06234
FAX: 860-774-2889
860-774-6814 800-932-1150

Report No: E105401
Client: Town of Thompson
Project: Residential Thompson Landfill

CASE NARRATIVE / METHOD CONFORMANCE SUMMARY

Premier Laboratory received three samples from Town of Thompson on 05/08/2001. The samples were analyzed from the following list of analyses:

Mercury in Solids by Cold Vapor by 7471
Trace Metals by ICP by 6010B
Moisture, Percent

Variances:

SDG:

None reported.

Method:

None reported.

QA/QC:

None reported.

INORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, LLC
PL Report No: E105401
Date Received: 5/8/2001

Customer: Town of Thompson
Location: Thompson, CT
Project: Residential Thompson Landfill

Parameter	Result	DL	Units	Completed	By	Dilution
(1) Thompson Landfill Soil #1						
Date Collected: 5/8/2001 Matrix: Solid						
Trace Metals by ICP by 6010B						
Arsenic	ND	0.99	mg/kg	05/17/01	KR	
Zinc	250	1.0	mg/kg	05/17/01	KR	
Tin	7.4	5.0	mg/kg	05/17/01	KR	
Sodium	190	100	mg/kg	05/17/01	KR	
Nickel	160	1.0	mg/kg	05/17/01	KR	
Manganese	17000	20	mg/kg	05/17/01	KR	20
Lead	50	0.40	mg/kg	05/17/01	KR	
Iron	42000	99	mg/kg	05/17/01	KR	20
Copper	190	1.0	mg/kg	05/17/01	KR	
Cobalt	16	0.20	mg/kg	05/17/01	KR	
Chromium	140	1.0	mg/kg	05/17/01	KR	
Cadmium	ND	0.20	mg/kg	05/17/01	KR	
Barium	630	1.0	mg/kg	05/17/01	KR	
Mercury by Cold Vapor by SW-846 7471	0.083	0.043	mg/kg	05/14/01	SA	
(2) Thompson Landfill Soil #2						
Date Collected: 5/8/2001 Matrix: Solid						
Trace Metals by ICP by 6010B						
Arsenic	2.8	1.2	mg/kg	05/17/01	KR	
Zinc	320	1.2	mg/kg	05/17/01	KR	
Tin	8.2	6.0	mg/kg	05/17/01	KR	
Sodium	180	120	mg/kg	05/17/01	KR	
Nickel	220	1.2	mg/kg	05/17/01	KR	
Manganese	33000	60	mg/kg	05/17/01	KR	50
Lead	45	0.48	mg/kg	05/17/01	KR	
Iron	33000	120	mg/kg	05/17/01	KR	20
Copper	180	1.2	mg/kg	05/17/01	KR	
Cobalt	18	0.24	mg/kg	05/17/01	KR	
Chromium	96	1.2	mg/kg	05/17/01	KR	
Cadmium	0.76	0.24	mg/kg	05/17/01	KR	
Barium	1000	1.2	mg/kg	05/17/01	KR	
Mercury by Cold Vapor by SW-846 7471	0.084	0.053	mg/kg	05/14/01	SA	

INORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, LLC
PL Report No: E105401
Date Received: 5/8/2001

Customer: Town of Thompson
Location: Thompson, CT
Project: Residential Thompson Landfill

Parameter	Result	DL	Units	Completed	By	Dilution
(3) Thompson Landfill Soil #3						
Date Collected: 5/8/2001 Matrix: Solid						
Trace Metals by ICP by 6010B						
Arsenic	1.5	0.77	mg/kg	05/17/01	KR	
Zinc	130	0.77	mg/kg	05/17/01	KR	
Tin	4.1	3.9	mg/kg	05/17/01	KR	
Sodium	150	77	mg/kg	05/17/01	KR	
Nickel	87	0.77	mg/kg	05/17/01	KR	
Manganese	12000	15	mg/kg	05/17/01	KR	20
Lead	24	0.31	mg/kg	05/17/01	KR	
Iron	18000	77	mg/kg	05/17/01	KR	20
Copper	70	0.77	mg/kg	05/17/01	KR	
Cobalt	13	0.15	mg/kg	05/17/01	KR	
Chromium	61	0.77	mg/kg	05/17/01	KR	
Cadmium	ND	0.15	mg/kg	05/17/01	KR	
Barium	560	0.77	mg/kg	05/17/01	KR	
Mercury by Cold Vapor by SW-846 7471	ND	0.034	mg/kg	05/14/01	SA	

Premier Laboratory, LLC
CHAIN OF CUSTODY
www.PremierLaboratory.com

SHADED AREAS FOR LAB USE ONLY

Lab WO# E105401
Project Manager

COPY OF REPORT TO

CUSTOMER: Geotoxi
ADDRESS: P.O. Box 213
Pomfret CT 06258
ATTENTION: Sarah
E-MAIL:
PHONE: 928-7343 FAX:

BILLING INFORMATION

BILL TO: Geotoxi
ADDRESS: P.O. Box 213
Pomfret CT 06258
ATTENTION: Sarah Hemingway
TELEPHONE: 928-7343
PURCHASE ORDER #: —

PROJECT INFORMATION

PROJECT: Thompson Landfill
PROJECT LOCATION: Thompson STATE: CT
PROJECT MANAGER: Sarah Hemingway
IN CASE WE HAVE ANY QUESTIONS WHEN SAMPLES ARRIVE WE SHOULD CALL:
E-MAIL:
TELEPHONE: 928-7343
FAX:

SAMPLE IDENTIFICATION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE: COMPOSITE	SAMPLE TYPE: GRAB	SAMPLE MATRIX	# OF BOTTLES	ANALYSIS	PRESERVATIVES: H2SO4	HCL	HNO3	NAOH	NON-PRES. MeOH
Thompson Landfill #1	5-8-01	10:15		X	soil	1	See attached metals list					
Thompson Landfill #2	5-08-01	10:20		X	soil	1						
Thompson Landfill #3	5-08-01	10:25		X	soil	1						

CUSTODY TRANSFER

		DATE	TIME
SAMPLER:	Sarah Hemingway	5-8-01	10:30
RECEIVED:			
RELINQUISHED:	Sarah Hemingway	5-8-01	12:00
RECEIVED:			
RELINQUISHED:			
RECEIVED:	Peter D. Burnstaple	5/8/01	12:00

TURNAROUND (INDICATE IN CALENDAR DAYS): Std X FAX X HARD COPY ___ E-MAIL
EXPEDITED SERVICE MAY BE SUBJECT TO SURCHARGE

COMMENTS

CONDITIONS UPON RECEIPT: (Check One)
☐ Cooled ☒ Ambient ☐ Upon Receipt at Lab

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

PAGE 1 of 1