

PCB SHIPMENT WORKSHEET

Generator Name: Raytheon Co. EPA ID# MAD 990 685 554
 Address: 430 Boston Post Rd. P.O.# _____
Wayland, MA 01778 Manifest# MA5284454
 Contact: Grace Huang
 Phone: 508-440-2729

2-13 Sump
 DW-05
 HOT SPOT

| PCB INFORMATION | | | | |
|-----------------|-------------|---------------------|------------------------------|-----------------|
| Drum # | Weight (kg) | Out of Service Date | Contents | Disposal Method |
| NERAL 108 | | 12/18/95 | PCB Soil | Landf: 11 |
| NERAL 107 | | 12/18/95 | PCB Soil/Sludge w/ metals | Landf: 11 |
| | | | | |
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ADDITIONAL INFORMATION FOR CAPACITORS/TRANSFORMERS

| Drum # | Unit Dimension | Leaking? Yes/No | Manufacturers Serial# | Pallet or Drum? |
|--------|----------------|-----------------|-----------------------|-----------------|
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Determination of Underlying Constituents

Generator Name: Raytheon Co. Location: 430 Boston Post Rd
Wayland, MA
 Waste Name: PCB Soil / Debris [213 S] Waste Codes: PCBC MA02
 EPA ID #: MA990685554 Profile #: _____

In accordance with final Land Disposal Restriction regulations published on May 18, 1993 and September 19, 1994, hazardous wastes which exhibit the characteristics of: D001 (ignitability, except for D001, High TOC Ignitable Subcategory, TOC > 10%); D002 (corrosivity); and D012 through D043 (toxicity characteristic for pesticides and organics) must be treated to remove the characteristic and for all "underlying constituents" which are reasonably expected to be present in the waste at levels above those listed in 40 CFR Part 268.48, Table UTS - Universal Treatment Standards, at the point of generation of the waste. Generators of these wastes are now responsible for monitoring and identifying, through analysis or documentable knowledge, all underlying constituents reasonably expected to be present in the waste above the UTS level. Wastes exhibiting the characteristics of D004 through D011 (toxicity characteristic for metals) are not affected by this rule.

In order to comply with the requirements of these rules, Laidlaw Environmental Services is requesting all generators whose wastes exhibit one or more of the affected characteristics to review the Universal Treatment Standards table on the back of this form and check the statement which is appropriate for the waste material.

I certify that this waste does not contain any of the "underlying constituents" indicated in 40 CFR Part 268.48, Table UTS. This certification is supported by:

- Analytical Data (Please provide);
- Generator Knowledge.

I certify that this waste meets the Universal Treatment Standards for all "underlying constituents" reasonably expected to be present in this waste. (Please provide analytical data supporting this certification).

I notify that this waste does not meet the Universal Treatment Standards for the following "underlying constituents" and must be treated before this waste can be land disposed. (Please list all applicable legend numbers from the table provided on the back of this form).

Print Name: Grace Huang
 Title: Technical Specialist

Signature: Grace Huang
 Date: 1/16/96

Customer Notification And Certification

Generator Name/Location: Raytheon Co. 430 Boston Post Rd. Wayland, MA 01778

EPA I.D. Number: MD990685554

Waste Profile or ARF Designation: NERAL 108 NERAL 107

Manifest Number: MAT 284454

EPA Waste Number(s): D007 D008 PCB2 M402

Waste Analysis Available? Yes (attached) No On file at receiving facility

Unrestricted Waste Notification (Category 1)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).

Restricted Waste/Debris Notification (Category 2)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards).

NOTE-1: A waste may pass one or more standards and require treatment or be variances for others. In this case, all applicable categories must be checked. **NOTE-2:** D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268.48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on **FORM B**, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

(2a) Restricted Waste Notification

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45. The waste contains the following contaminants subject to treatment [check all that apply]:

- §268.45(b)(1) - Toxicity characteristic debris;
- §268.45(b)(2) - Debris contaminated with listed waste;
- §268.45(b)(3) - Cyanide reactive debris.

Restricted Waste Variance Notification (Category 3)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

I notify pursuant to 40 CFR §268.7(a)(3) that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that this waste is subject to a national capacity variance under 40 CFR §268 Subpart C, or a case-by-case extension under 40 CFR §268.5, or an exemption under 40 CFR §268.6.

Restricted Waste Certification (Treatment Standards Met) (Category 4)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

SIGNATURE: Quinn O'Rourke DATE: 1-23-96
PRINT NAME: Quinn O'Rourke TITLE: Lead Waste Specialist

Generator Name: Ryantheon Co. Location: 430 Boston Post Rd Weymouth, MA Waste Name: PCB Soil Debris
 Profile #: _____ EPA ID#: MA02AG 0685534 Laidlaw Category: _____

CHARACTERISTICS OF HAZARDOUS WASTE: Indicate if this waste contains any of the following characteristics based on criteria mandated by 40 CFR 261.21, 261.22, 261.23 and 261.24.

| Characteristic | Regulatory Threshold Level | (Check One) | | (Check One) | | | Characteristic | Regulatory Threshold Level | (Check One) | | (Check One) | | |
|---------------------------|----------------------------|-------------|----|-----------------|---------------------|--------------|-----------------------------------|----------------------------|-------------|----|-----------------|---------------------|--------------|
| | | Yes | No | Scientific Data | Generator Knowledge | Actual Value | | | Yes | No | Scientific Data | Generator Knowledge | Actual Value |
| D001 (Ignitability) | <140°F | — | X | — | — | — | D023 o-Cresol | 200.0 ppm | — | X | — | — | — |
| D002 (Corrosivity) | ≤2 or ≥12.5 | — | X | — | — | — | D024 m-Cresol | 200.0 ppm | — | X | — | — | — |
| D003 (Reactivity) | — | — | X | — | — | — | D025 p-Cresol | 200.0 ppm | — | X | — | — | — |
| D004 (Acidic) | 5.0 ppm | — | X | — | — | — | D026 Cresol | 200.0 ppm | — | X | — | — | — |
| D005 (Basic) | 100.0 ppm | — | X | — | — | — | D027 1,4-Dichlorobenzene | 7.5 ppm | — | X | — | — | — |
| D006 (Cadmium) | 1.0 ppm | — | X | — | — | — | D028 1,2-Dichloroethane | 0.5 ppm | — | X | — | — | — |
| D007 (Chromium) | 5.0 ppm | — | X | — | — | — | D029 1,1-Dichloroethane | 0.7 ppm | — | X | — | — | — |
| D008 (Lead) | 5.0 ppm | — | X | — | — | — | D030 2,4-Dinitrotoluene | 0.13 ppm | — | X | — | — | — |
| D009 (Mercury) | 0.20 ppm | — | X | — | — | — | D031 Heptachlor (and its species) | 0.008 ppm | — | X | — | — | — |
| D010 (Selenium) | 1.0 ppm | — | X | — | — | — | D032 Hexachlorobenzene | 0.13 ppm | — | X | — | — | — |
| D011 (Silver) | 5.0 ppm | — | X | — | — | — | D033 Hexachlorobutadiene | 0.5 ppm | — | X | — | — | — |
| D012 (Exotic) | 0.01 ppm | — | X | — | — | — | D034 Hexachlorocyclopentadiene | 3.0 ppm | — | X | — | — | — |
| D013 (Lindane) | 0.4 ppm | — | X | — | — | — | D035 Methyl ethyl ketone | 200.0 ppm | — | X | — | — | — |
| D014 (Methoxychlor) | 10.0 ppm | — | X | — | — | — | D036 Nitrobenzene | 2.0 ppm | — | X | — | — | — |
| D015 (Toxaphene) | 0.5 ppm | — | X | — | — | — | D037 p-tert-Butylphenol | 100.0 ppm | — | X | — | — | — |
| D016 2,4-D | 10.0 ppm | — | X | — | — | — | D038 Pyridine | 5.0 ppm | — | X | — | — | — |
| D017 2,4,5-TP (Silver) | 1.0 ppm | — | X | — | — | — | D039 Tetrachloroethylene | 0.7 ppm | — | X | — | — | — |
| D018 Benzene | 0.5 ppm | — | X | — | — | — | D040 Trichloroethylene | 0.5 ppm | — | X | — | — | — |
| D019 Carbon Tetrachloride | 0.5 ppm | — | X | — | — | — | D041 2,4,5-Trichlorophenol | 400.0 ppm | — | X | — | — | — |
| D020 Chloroform | 0.01 ppm | — | X | — | — | — | D042 2,4,6-Trichlorophenol | 2.0 ppm | — | X | — | — | — |
| D021 Chlorobenzene | 100.0 ppm | — | X | — | — | — | D043 Vinyl Chloride | 0.2 ppm | — | X | — | — | — |
| D022 Chloroform | 6.0 ppm | — | X | — | — | — | | | | | | | |

* As defined by the TCLP (Method 1311)

If waste exhibits characteristics of Ignitability or Corrosivity the ICR Rule Certification on the back must be completed.

I certify that this waste is considered non-hazardous under 40 CFR 261. (Please initial if applicable)

Indicate the expected concentrations of the following parameters for this waste stream:

Thallium (ppm) _____ Ammonia (ppm) _____ TOC (ppm) _____ VOC (ppm) _____ COD (ppm) _____
 TPH (ppm) _____ TCLP-TPH (ppm) _____ BOD (ppm) _____ Oil (%) _____ Ash (%) _____ Chloride (ppm) _____

Does this waste contain any of the following: Pesticides, Herbicides, or Dioxins? Please initial one: Yes _____ No _____
 If YES, indicate compounds and concentrations: _____

"LISTED" Hazardous Wastes: Indicate if this waste also contains any listed hazardous wastes coded in 40 CFR 261.31, 261.32, and 261.33 by including the appropriate EPA hazardous waste code(s).
PEST MA02

Please initial each statement if your waste does not carry any listed hazardous wastes coded in 40 CFR 261.31, 261.32 and/or 261.33.

I certify that this waste does not contain any listed hazardous waste(s) coded in 40 CFR 261.31, 261.32 and/or 261.33.

I certify that the treatment of this waste will not produce any listed hazardous waste(s) coded in 40 CFR 261.31 and/or 261.32 (i.e. F006 sludges from the treatment of electroplating wastewaters. F019 sludges from aluminum chemical conversion coating wastewaters).

SORBENT NOTIFICATION: Please initial the appropriate line.

I have not added sorbents (i.e. material that is used to soak up free liquids by either adsorption or absorption, or both. Sorb means to either adsorb, absorb, or both) to the waste streams indicated above.

I have added sorbents (i.e. material that is used to soak up free liquids by either adsorption or absorption, or both. Sorb means to either adsorb, absorb, or both) to the waste streams indicated above. I certify that any sorbent agents added to this waste are considered nonbiodegradable as indicated in 40 CFR Section 264.314/265.314.

REPRESENTATIVE SAMPLE CERTIFICATION: Please initial below.

I certify that the sample presented is representative of the waste and has been collected in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" SW246, USEPA, Office of Solid Waste, Washington, D.C. 20460.

GENERATOR CERTIFICATION:

I hereby certify that all information submitted on this form and all attached documents are true and accurate. In the event that this form is not fully completed, I authorize Laidlaw Environmental Services (TS) Inc. to conduct necessary testing at my expense to properly complete the form, and to modify my profile based upon the analytical data on the representative sample sent upon my notification.

Print Name: Grace Huang Signature: Grace Huang Title: Technical Specialist Date: 1/16/96

THIS CERTIFICATION/RECERTIFICATION IS REQUIRED FOR EACH PROFILE TO LAIDLAW ENVIRONMENTAL SERVICES (TS), INC.
 ORIGINAL SIGNATURE REQUIRED



HAZARDOUS MATERIALS WASTE DISPOSAL

LAIDLAW ENVIRONMENTAL SERVICES (TS), INC.
208 WATLINGTON INDUSTRIAL DR
REIDSVILLE NC 27320

Mail To: RAYTHEON COMPANY
430 BOSTON POST ROAD
WAYLAND MA 01778-
Attention: GRACE HWANG

Pickup Address: RAYTHEON COMPANY
430 BOSTON POST ROAD
WAYLAND MA 01778-

EPA ID: MAD990685554

Manifest No: NERAC-12795

This is to certify that hazardous material removed from RAYTHEON COMPANY

has been disposed of in accordance with all applicable local, state and federal regulations in the following manner:

| Container | Date | Location | Method |
|------------------------------|----------|------------------|---------------|
| 951207-NERAC-001 NERAC104 | 03/21/96 | PPM TUCKER GA | RECOVERY |
| 951207-NERAC-002 NERAC106 | 03/21/96 | PPM TUCKER GA | STABILIZATION |

Thomas W. Collins

Operations

Date: 03/25/96

Limited Removal Action

DW- 06



INFORMATION FORM FOR RELEASE SITES

GENERATOR INFORMATION:

Generator Name: Raytheon Electronic System
 Generator Address: 430 Boston Post Road
Wayland MA 01778
 Release Location: No known or source specific
release
 Contact Person: Grace Hwang
 Telephone: 508 440 2729 Fax: 508 440 2051

RELEASE INFORMATION:

Site History/Use: This site was a research and
development center Pilot, small scaled
production of electronic related devices
was tested and created machines.
 Description of Release: No known release is related to this
soil. This soil surrounds a drywell which
was a conveyance for wastewater's conta
with oils from an old machine shop.
 Petroleum Released: N/A
 Amount of Soil: Approximately 60 cubic yards
 Description of Soil: silty soil, <1% stone/rock mixed
in this soil based on visual inspection.

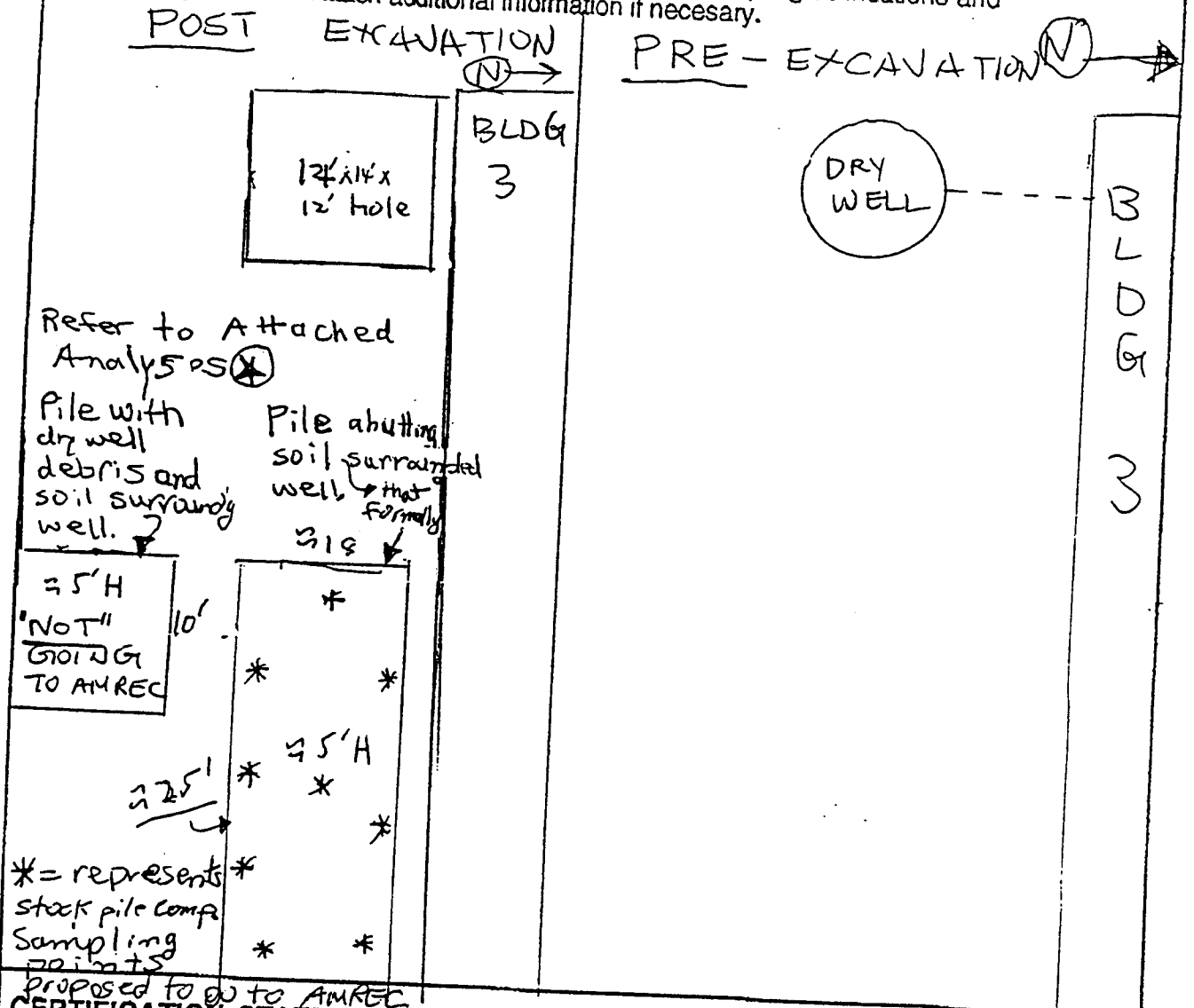
BILLING INFORMATION: (for submission of documentation and invoice(s))

Company: Laidlaw Environmental
 Address: 221 Sutton Street
N. Andover
 Contact Person: Dave Danis/Scott Schultz
 Telephone: 508 683 1002 Fax: 508 682 3871

⊗ Results for TPH, PCRA 8 metals total, PCRA 3 metals ICLF and 1 came from stock pile composite sampling. Results for SVOCs and VOCs came from drywell bottom prior to excavation.

SITE DIAGRAM AND SAMPLING INFORMATION:

Note: Not to scale
 In the space below, please provide an approximate representation of the site and/or the stockpile(s) of soil designated for recycling. Indicate the sampling delineations and methodologies used. Attach additional information if necessary.



CERTIFICATION STATEMENT:

I certify that the information provided on this sheet and applicable attachments has been carefully reviewed and is representative of the site, and I have applied due diligence in the characterization of the site.

Signed: Grace Hwang Date: 12/6/95
 Name: Grace M Hwang Title: Environmental Engineer
 Company: Raytheon
 Telephone: 508 440 2129 Fax: 508 440 2051

ATTORNEY CLIENT 004/015
 COMMUNICATION AND 03/10
 WORK PRODUCT, ALL
 PRIVILEGES CLAIMED
 2.23

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 82006 RI A65

Laboratory Sample Number: L9508905-01

Date Collected: 17-NOV-95

Sample Matrix: C-1
 SOIL

Date Received: 17-NOV-95

Condition of Sample: Satisfactory

Date Reported: 21-NOV-95
 Field Prep: None

Number & Type of Containers: 3 Glass

| PARAMETER | RESULT | UNITS | RDL | REP | METHOD | DATE | DATE | ID |
|--------------------------------------|--------|-------|-------|-----|-----------|------|----------|-----------|
| | | | | | | PREP | ANALYSIS | |
| Solids, Total | 92. | % | 0.10 | 3 | 2540B | | 20-NOV | ST |
| Total Metals | | | | | | | | |
| Arsenic, Total | 2.9 | mg/kg | 0.20 | 1 | 6010 | | 20-Nov | 20-Nov GF |
| Barium, Total | 20. | mg/kg | 2.0 | 1 | 6010 | | 20-Nov | 20-Nov GF |
| Cadmium, Total | ND | mg/kg | 0.40 | 1 | 6010 | | 20-Nov | 20-Nov GF |
| Chromium, Total | 37. | mg/kg | 0.80 | 1 | 6010 | | 20-Nov | 20-Nov GF |
| Lead, Total | 4.8 | mg/kg | 2.0 | 1 | 6010 | | 20-Nov | 20-Nov GF |
| Mercury, Total | ND | mg/kg | 0.25 | 1 | 7470/7471 | | 18-Nov | 20-Nov DM |
| Selenium, Total | ND | mg/kg | 0.40 | 1 | 6010 | | 20-Nov | 20-Nov GF |
| Silver, Total | ND | mg/kg | 0.40 | 1 | 6010 | | 20-Nov | 20-Nov GF |
| PCB Extraction | | | | | | | | |
| Arsenic, TCLP | ND | mg/l | 1.0 | 1 | 6010 | | 21-Nov | 21-Nov GF |
| Barium, TCLP | ND | mg/l | 0.50 | 1 | 6010 | | 21-Nov | 21-Nov GF |
| Cadmium, TCLP | ND | mg/l | 0.10 | 1 | 6010 | | 21-Nov | 21-Nov GF |
| Chromium, TCLP | ND | mg/l | 0.20 | 1 | 6010 | | 21-Nov | 21-Nov GF |
| Lead, TCLP | ND | mg/l | 0.50 | 1 | 6010 | | 21-Nov | 21-Nov GF |
| Mercury, TCLP | ND | mg/l | 0.005 | 1 | 7470/7471 | | 21-Nov | 21-Nov DM |
| Selenium, TCLP | ND | mg/l | 0.50 | 1 | 6010 | | 21-Nov | 21-Nov GF |
| Silver, TCLP | ND | mg/l | 0.10 | 1 | 6010 | | 21-Nov | 21-Nov GF |
| Polychlorinated Biphenyls | | | | | | | | |
| Arochlor 1221 | ND | ug/kg | 250 | | | | 20-Nov | 21-Nov DB |
| Arochlor 1232 | ND | ug/kg | 250 | | | | | |
| Arochlor 1242/PCB 1016 | ND | ug/kg | 250 | | | | | |
| Arochlor 1248 | ND | ug/kg | 250 | | | | | |
| Arochlor 1254 | ND | ug/kg | 250 | | | | | |
| Arochlor 1260 | ND | ug/kg | 250 | | | | | |
| Arochlor 1262 | ND | ug/kg | 250 | | | | | |
| Arochlor 1268 | ND | ug/kg | 250 | | | | | |

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSIS

ATTORNEY CLIENT
COMMUNICATION ON
WORK PRODUCT, ALL
PRIVILEGES CLAIMED

Laboratory Job Number: L9508905

2.23

| Parameter | % Recovery |
|-------------------------|------------|
| Total Metals | |
| Mercury, Total | 85 |
| Total Metals | |
| Arsenic, Total | 69 |
| Barium, Total | 94 |
| Cadmium, Total | 100 |
| Chromium, Total | 61 |
| Lead, Total | 94 |
| Total Metals | |
| Arsenic, TCLP | 94 |
| Barium, TCLP | 94 |
| Cadmium, TCLP | 96 |
| Chromium, TCLP | 101 |
| Lead, TCLP | 92 |
| Selenium, TCLP | 101 |
| Silver, TCLP | 90 |
| Total Metals | |
| Mercury, TCLP | 90 |

ALPHA ANALYTICAL LABS
ADDENDUM I

ATTORNEY CLIENT
COMMUNICATION AND
WORK PRODUCT, ALL
PRIVILEGES CLAIMED

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. 1986.
3. Standard Methods for Examination of Water and Waste Water. APHA-AWWA-WPCF. 17th Edition. 1989.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.

METHOD Method number by which analysis was performed.

ID Initials of the analyst.

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

CERTIFICATE OF ANALYSIS

Client: Raytheon Company

Laboratory Job Number: L9509252

Address: 528 Boston Post Road
M/S 4-2-263
Sudbury, MA 01776

Invoice Number: 79441

Attn: William Smey

Date Received: 04-DEC-95

Project Number: WAY ESA

Date Reported: 05-DEC-95

Site: ESA/Wayland

Delivery Method: Alpha

ALPHA SAMPLE NUMBER

CLIENT IDENTIFICATION

SAMPLE LOCATION

L9509252-01

DW-06C

DW-06

Authorized by: James R. Roth

James R. Roth, PhD - Laboratory Manager

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9509252-01
 DW-06C

Date Collected: 04-DEC-95
 Date Received : 04-DEC-95
 Date Reported : 05-DEC-95

Sample Matrix: SOIL

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1 Glass

| PARAMETER | RESULT | UNITS | RDL | REF | METHOD | DATES | | ID |
|---------------------|--------|-------|------|-----|--------|--------|----------|----|
| | | | | | | PREP | ANALYSIS | |
| Solids, Total | 94. | % | 0.10 | 3 | 2540B | | 05-Dec | ST |
| Hydrocarbons, Total | ND | mg/kg | 40. | 1 | 418.1 | 05-Dec | 05-Dec | ST |

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L9509252

| Parameter | Value 1 | Value 2 | RPD | Units |
|---------------------|----------------------------|---------|-----|-------|
| Solids, Total | DUPLICATE for sample(s) 01 | | | |
| | 99. | 99. | 0 | % |
| Hydrocarbons, Total | DUPLICATE for sample(s) 01 | | | |
| | ND | ND | NC | mg/kg |

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L9509252

| Parameter | % Recovery |
|---------------------|------------------------|
| Hydrocarbons, Total | SPIKE FOR SAMPLE(S) 01 |

ALPHA ANALYTICAL LABS
ADDENDUM I

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA 846. 1986.
3. Standard Methods for Examination of Water and Waste Water. APHA-AWWA-WPCF. 17th Edition. 1989.

GLOSSARY OF TERMS AND SYMBOLS

- REF Reference number in which test method may be found.
- METHOD Method number by which analysis was performed.
- ID Initials of the analyst.
-

Analysis Report: EPA Method 8240A
(PAGE 1 OF 2 PAGES)

| | | | |
|--------------|-----------------------|------------------|-------------|
| Client: | Laidlaw Environmental | IEA ID: | L114-002-01 |
| Project: | 41508 | Sample: | 41508 |
| Report Date: | 07/18/95 | Type: | Soil |
| Collected: | 07/10/95 | Container: | Glass |
| Received: | 07/10/95 | | |
| Analyzed: | 07/15/95 | | |
| By: | GMT | Dilution Factor: | 2.8 |

Priority Pollutant Compounds

| Number | Compound | PQL ug/kg (dry) | Result ug/kg (dry) |
|--------|----------------------------|--------------------|-----------------------|
| 1 | Benzene | 14 | BQL |
| 2 | Bromodichloromethane | 14 | BQL |
| 3 | Bromoform | 14 | BQL |
| 4 | Bromomethane | 28 | BQL |
| 5 | Carbon tetrachloride | 14 | BQL |
| 6 | Chlorobenzene | 14 | BQL |
| 7 | Chloroethane | 28 | BQL |
| 8 | 2-Chloroethylvinyl ether | 14 | BQL |
| 9 | Chloroform | 14 | BQL |
| 10 | Chloromethane | 28 | BQL |
| 11 | Dibromochloromethane | 14 | BQL |
| 12 | 1,2-Dichlorobenzene | 14 | BQL |
| 13 | 1,3-Dichlorobenzene | 14 | BQL |
| 14 | 1,4-Dichlorobenzene | 14 | BQL |
| 15 | 1,1-Dichloroethane | 14 | BQL |
| 16 | 1,2-Dichloroethane | 14 | BQL |
| 17 | 1,1-Dichloroethene | 14 | BQL |
| 18 | 1,2-Dichloroethene (Total) | 14 | BQL |
| 19 | 1,2-Dichloropropane | 14 | BQL |
| 20 | cis-1,3-Dichloropropene | 14 | BQL |
| 21 | trans-1,3-Dichloropropene | 14 | BQL |
| 22 | Ethylbenzene | 14 | BQL |
| 23 | Methylene chloride | 14 | 18B |
| 24 | 1,1,2,2-Tetrachloroethane | 14 | BQL |
| 25 | Tetrachloroethene | 14 | BQL |
| 26 | Toluene | 14 | BQL |
| 27 | 1,1,1-Trichloroethane | 14 | BQL |
| 28 | 1,1,2-Trichloroethane | 14 | BQL |
| 29 | Trichloroethene | 14 | BQL |
| 30 | Trichlorofluoromethane | 14 | BQL |
| 31 | Vinyl chloride | 28 | BQL |

Analysis Report: EPA Method 8240A
(PAGE 2 OF 2 PAGES)

Client: Laidlaw Environmental IEA ID: L114-002-01
Project: 41508 Sample: 41508

| Number | Compound | PQL ug/kg (dry) | Result ug/kg (dry) |
|----------------------|----------------------|--------------------|-----------------------|
| Other TCL Compounds: | | | |
| 32 | Acetone | 280 | BQL |
| 33 | 2-Butanone | 280 | BQL |
| 34 | Carbon disulfide | 14 | BQL |
| 35 | 1,2-Dibromoethane | 14 | BQL |
| 36 | 2-Hexanone | 140 | BQL |
| 37 | Methyl-t-butylether | 14 | BQL |
| 38 | 4-Methyl-2-pentanone | 140 | BQL |
| 39 | Styrene | 14 | BQL |
| 40 | Vinyl Acetate | 140 | BQL |
| 41 | Xylenes (Total) | 14 | BQL |

Surrogate Standard Recovery:

| | |
|-----------------------|-------|
| 1,2-Dichloroethane-d4 | 97 % |
| Toluene-d8 | 110 % |
| Bromofluorobenzene | 85 % |

Comments:

BQL = Below Quantitation Limit.
PQL = Practical Quantitation Limit.
Dilution factor adjusted for % moisture.
B = Compound in blank



IEA

An Aquarion Company

Analysis Report: EPA Method 8240A
(PAGE 1 OF 2 PAGES)

| | | | |
|--------------|----------|------------------|----------------------|
| Client: | | IEA ID: | Method Blank (07/15) |
| Project: | | Sample: | |
| Report Date: | 07/18/95 | Type: | Soil |
| Collected: | | Container: | |
| Received: | | | |
| Analyzed: | 07/15/95 | | |
| By: | GMT | Dilution Factor: | 1 |

Priority Pollutant Compounds

| Number | Compound | PQL ug/kg (dry) | Result ug/kg (dry) |
|--------|----------------------------|--------------------|-----------------------|
| 1 | Benzene | 5 | BQL |
| 2 | Bromodichloromethane | 5 | BQL |
| 3 | Bromoform | 5 | BQL |
| 4 | Bromomethane | 10 | BQL |
| 5 | Carbon tetrachloride | 5 | BQL |
| 6 | Chlorobenzene | 5 | BQL |
| 7 | Chloroethane | 10 | BQL |
| 8 | 2-Chloroethylvinyl ether | 5 | BQL |
| 9 | Chloroform | 5 | BQL |
| 10 | Chloromethane | 10 | BQL |
| 11 | Dibromochloromethane | 5 | BQL |
| 12 | 1,2-Dichlorobenzene | 5 | BQL |
| 13 | 1,3-Dichlorobenzene | 5 | BQL |
| 14 | 1,4-Dichlorobenzene | 5 | BQL |
| 15 | 1,1-Dichloroethane | 5 | BQL |
| 16 | 1,2-Dichloroethane | 5 | BQL |
| 17 | 1,1-Dichloroethene | 5 | BQL |
| 18 | 1,2-Dichloroethene (Total) | 5 | BQL |
| 19 | 1,2-Dichloropropane | 5 | BQL |
| 20 | cis-1,3-Dichloropropene | 5 | BQL |
| 21 | trans-1,3-Dichloropropene | 5 | BQL |
| 22 | Ethylbenzene | 5 | BQL |
| 23 | Methylene chloride | 5 | 6B |
| 24 | 1,1,2,2-Tetrachloroethane | 5 | BQL |
| 25 | Tetrachloroethene | 5 | BQL |
| 26 | Toluene | 5 | BQL |
| 27 | 1,1,1-Trichloroethane | 5 | BQL |
| 28 | 1,1,2-Trichloroethane | 5 | BQL |
| 29 | Trichloroethene | 5 | BQL |
| 30 | Trichlorofluoromethane | 5 | BQL |
| 31 | Vinyl chloride | 10 | BQL |

Analysis Report: EPA Method 8240A
(PAGE 2 OF 2 PAGES)

Client:
Project:

IEA ID: Method Blank (07/15)
Sample:

| Number | Compound | PQL ug/kg (dry) | Result ug/kg (dry) |
|----------------------|----------------------|--------------------|-----------------------|
| Other TCL Compounds: | | | |
| 32 | Acetone | | |
| 33 | 2-Butanone | 100 | BQL |
| 34 | Carbon disulfide | 100 | BQL |
| 35 | 1,2-Dibromoethane | 5 | BQL |
| 36 | 2-Hexanone | 5 | BQL |
| 37 | Methyl-t-butylether | 50 | BQL |
| 38 | 4-Methyl-2-pentanone | 5 | BQL |
| 39 | Styrene | 50 | BQL |
| 40 | Vinyl Acetate | 5 | BQL |
| 41 | Xylenes (Total) | 50 | BQL |
| | | 5 | BQL |

Surrogate Standard Recovery:

| | |
|-----------------------|-------|
| 1,2-Dichloroethane-d4 | 99 % |
| Toluene-d8 | 114 % |
| Bromofluorobenzene | 97 % |

Comments:

BQL = Below Quantitation Limit.
PQL = Practical Quantitation Limit.
Dilution factor adjusted for % moisture.
Corresponding Sample: L114-002-01



IEA

An Aquarion Company

Analysis Report: EPA Method 8270A
(PAGE 1 OF 2 PAGES)

Client: Laidlaw Environmental
Project: 41508
Report Date: 07/18/95
Collected: 07/10/95
Received: 07/10/95
Extracted: 07/13/95
Analyzed: 07/14/95
By: MEW

IEA ID: L114-002-01
Sample: 41508
Type: Soil
Container: Glass

Dilution Factor: 2.8

| Number | Compound | PQL ug/kg (dry) | Result ug/kg (dry) |
|--------|------------------------------|--------------------|-----------------------|
| 1 | Acenaphthene | | |
| 2 | Acenaphthylene | 924 | BQL |
| 3 | Aniline | 924 | BQL |
| 4 | Anthracene | 4620 | BQL |
| 5 | Benzoic acid | 924 | BQL |
| 6 | Benzo(a)anthracene | 4620 | BQL |
| 7 | Benzo(b)fluoranthene | 924 | BQL |
| 8 | Benzo(k)fluoranthene | 924 | BQL |
| 9 | Benzo(g,h,i)perylene | 924 | BQL |
| 10 | Benzo(a)pyrene | 924 | BQL |
| 11 | Benzyl alcohol | 924 | BQL |
| 12 | bis(2-Chloroethoxy)methane | 1848 | BQL |
| 13 | bis(2-Chloroethyl) ether | 924 | BQL |
| 14 | bis(2-Chloroisopropyl) ether | 924 | BQL |
| 15 | bis(2-Ethylhexyl)phthalate | 924 | BQL |
| 16 | 4-Bromophenyl phenyl ether | 924 | BQL |
| 17 | Benzyl butyl phthalate | 924 | BQL |
| 18 | 4-Chloroaniline | 924 | BQL |
| 19 | 2-Chloronaphthalene | 1848 | BQL |
| 20 | 4-Chloro-3-methylphenol | 924 | BQL |
| 21 | 2-Chlorophenol | 1848 | BQL |
| 22 | 4-Chlorophenyl phenyl ether | 924 | BQL |
| 23 | Chrysene | 924 | BQL |
| 24 | Dibenzo(a,h)anthracene | 924 | BQL |
| 25 | Dibenzofuran | 924 | BQL |
| 26 | Di-n-butyl phthalate | 924 | BQL |
| 27 | 1,3-Dichlorobenzene | 924 | BQL |
| 28 | 1,4-Dichlorobenzene | 924 | BQL |
| 29 | 1,2-Dichlorobenzene | 924 | BQL |
| 30 | 1,2-Diphenylhydrazine | 924 | BQL |
| 31 | 3,3'-Dichlorobenzidine | 924 | BQL |
| 32 | 2,4-Dichlorophenol | 1848 | BQL |
| 33 | Diethyl phthalate | 924 | BQL |
| 34 | 2,4-Dimethylphenol | 924 | BQL |
| 35 | Dimethyl phthalate | 924 | BQL |
| 36 | 2-Methyl-4,6-dinitrophenol | 924 | BQL |
| 37 | 2,4-Dinitrophenol | 4620 | BQL |
| 38 | 2,4-Dinitrotoluene | 4620 | BQL |
| | | 924 | BQL |

Analysis Report: EPA Method 8270A
(PAGE 2 OF 2 PAGES)

Client: Laidlaw Environmental
Project: 41508

IEA ID: L114-002-01
Sample: 41508

| Number | Compound | PQL ug/kg (dry) | Result ug/kg (dry) |
|--------|----------------------------|--------------------|-----------------------|
| 39 | 2,6-Dinitrotoluene | | |
| 40 | Di-n-octylphthalate | 924 | |
| 41 | Fluoranthene | 924 | BQL |
| 42 | Fluorene | 924 | BQL |
| 43 | Hexachlorobenzene | 924 | BQL |
| 44 | Hexachlorobutadiene | 924 | BQL |
| 45 | Hexachlorocyclopentadiene | 924 | BQL |
| 46 | Hexachloroethane | 924 | BQL |
| 47 | Indeno (1,2,3-cd) pyrene | 924 | BQL |
| 48 | Isophorone | 924 | BQL |
| 49 | 2-Methylnaphthalene | 924 | BQL |
| 50 | 2-Methylphenol (o-cresol) | 924 | BQL |
| 51 | 4-Methylphenol (p-cresol) | 924 | BQL |
| 52 | Naphthalene | 924 | BQL |
| 53 | 2-Nitroaniline | 924 | BQL |
| 54 | 3-Nitroaniline | 4620 | BQL |
| 55 | 4-Nitroaniline | 4620 | BQL |
| 56 | Nitrobenzene | 4620 | BQL |
| 57 | 2-Nitrophenol | 924 | BQL |
| 58 | 4-Nitrophenol | 924 | BQL |
| 59 | N-Nitroso-di-n-propylamine | 4620 | BQL |
| 60 | N-Nitrosodiphenylamine | 924 | BQL |
| 61 | Pentachlorophenol | 924 | BQL |
| 62 | Phenanthrene | 4620 | BQL |
| 63 | Phenol | 924 | BQL |
| 64 | Pyrene | 924 | BQL |
| 65 | 1,2,4-Trichlorobenzene | 924 | BQL |
| 66 | 2,4,5-Trichlorophenol | 924 | BQL |
| 67 | 2,4,6-Trichlorophenol | 924 | BQL |

Surrogate Standard Recovery:

| | |
|----------------------|------|
| 2-Fluorophenol | |
| Phenol-d6 | 48 % |
| Nitrobenzene-d5 | 52 % |
| 2-Fluorobiphenyl | 40 % |
| 2,4,6-Tribromophenol | 48 % |
| Terphenyl-d14 | 78 % |
| | 68 % |

Comments:

PQL = Practical quantitation limit.
BQL = Below quantitation limit.

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

CERTIFICATE OF ANALYSIS

Client: ERM-New England Laboratory Job Number: L9508905
Address: 205 Portland Street Invoice Number: 79086
Boston, MA 02114 Date Received: 17-NOV-95
Attn: John McTigue Date Reported: 21-NOV-95
Project Number: 143-40 Delivery Method: Alpha
Site:

| ALPHA SAMPLE NUMBER | CLIENT IDENTIFICATION | SAMPLE LOCATION |
|---------------------|-----------------------|-----------------|
| L9508905-01 | C-1 | Wayland, MA |
| L9508905-02 | D-1 | Wayland, MA |

Authorized by: James R. Roth

James R. Roth, PhD - Laboratory Manager

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9508905-01

Date Collected: 17-NOV-95

C-1

Date Received : 17-NOV-95

Sample Matrix: SOIL

Date Reported : 21-NOV-95

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 3 Glass

| PARAMETER | RESULT | UNITS | RDL | REF | METHOD | DATES | | ID |
|---------------------------|--------|-------|-------|-----|-----------|--------|----------|--------|
| | | | | | | PREP | ANALYSIS | |
| Solids, Total | 92. | % | 0.10 | 3 | 2540B | | 20-Nov | ST |
| Total Metals | | | | 1 | 3005/3050 | | | |
| Arsenic, Total | 2.9 | mg/kg | 0.20 | 1 | 6010 | 20-Nov | 20-Nov | GF |
| Barium, Total | 20. | mg/kg | 2.0 | 1 | 6010 | 20-Nov | 20-Nov | GF |
| Cadmium, Total | ND | mg/kg | 0.40 | 1 | 6010 | 20-Nov | 20-Nov | GF |
| Chromium, Total | 37. | mg/kg | 0.80 | 1 | 6010 | 20-Nov | 20-Nov | GF |
| Lead, Total | 4.8 | mg/kg | 2.0 | 1 | 6010 | 20-Nov | 20-Nov | GF |
| Mercury, Total | ND | mg/kg | 0.25 | 1 | 7470/7471 | 18-Nov | 20-Nov | DM |
| Selenium, Total | ND | mg/kg | 0.40 | 1 | 6010 | 20-Nov | 20-Nov | GF |
| Silver, Total | ND | mg/kg | 0.40 | 1 | 6010 | 20-Nov | 20-Nov | GF |
| TCLP Extraction | | | | 1 | 1311 | | 20-Nov | |
| Arsenic, TCLP | ND | mg/l | 1.0 | 1 | 6010 | 21-Nov | 21-Nov | GF |
| Barium, TCLP | ND | mg/l | 0.50 | 1 | 6010 | 21-Nov | 21-Nov | GF |
| Cadmium, TCLP | ND | mg/l | 0.10 | 1 | 6010 | 21-Nov | 21-Nov | GF |
| Chromium, TCLP | ND | mg/l | 0.20 | 1 | 6010 | 21-Nov | 21-Nov | GF |
| Lead, TCLP | ND | mg/l | 0.50 | 1 | 6010 | 21-Nov | 21-Nov | GF |
| Mercury, TCLP | ND | mg/l | 0.005 | 1 | 7470/7471 | 21-Nov | 21-Nov | DM |
| Selenium, TCLP | ND | mg/l | 0.50 | 1 | 6010 | 21-Nov | 21-Nov | GF |
| Silver, TCLP | ND | mg/l | 0.10 | 1 | 6010 | 21-Nov | 21-Nov | GF |
| Polychlorinated Biphenyls | | | | 1 | 8080 | | 20-Nov | 21-Nov |
| Arochlor 1221 | ND | ug/kg | 250 | | | | | |
| Arochlor 1232 | ND | ug/kg | 250 | | | | | |
| Arochlor 1242/PCB 1016 | ND | ug/kg | 250 | | | | | |
| Arochlor 1248 | ND | ug/kg | 250 | | | | | |
| Arochlor 1254 | ND | ug/kg | 250 | | | | | |
| Arochlor 1260 | ND | ug/kg | 250 | | | | | |
| Arochlor 1262 | ND | ug/kg | 250 | | | | | |
| Arochlor 1268 | ND | ug/kg | 250 | | | | | |

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9508905-01
C-1

| PARAMETER | RESULT | UNITS | RDL | REF | METHOD | DATES | ID |
|-------------------------------------|--------|-------|-----|-----|--------|---------------|----|
| Polychlorinated Biphenyls continued | | | | 1 | 8080 | 20-Nov 21-Nov | DB |
| SURROGATE RECOVERY | | | | | | | |
| 2,4,5,6-Tetrachloro-m-xylene | 96.0 | % | | | | | |
| Decachlorobiphenyl | 98.0 | % | | | | | |

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9508905-02

Date Collected: 17-NOV-95

D-1

Date Received : 17-NOV-95

Sample Matrix: SOIL

Date Reported : 21-NOV-95

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 3 Glass

| PARAMETER | RESULT | UNITS | RDL | REF | METHOD | DATES PREP ANALYSIS | ID |
|---------------------------|--------|-------|-------|-----|-----------|------------------------|----|
| Solids, Total | 93. | % | 0.10 | 3 | 2540B | 20-Nov | ST |
| Total Metals | | | | 1 | 3005/3050 | | |
| Arsenic, Total | 3.3 | mg/kg | 0.20 | 1 | 6010 | 20-Nov | GF |
| Barium, Total | 19. | mg/kg | 2.0 | 1 | 6010 | 20-Nov | GF |
| Cadmium, Total | ND | mg/kg | 0.40 | 1 | 6010 | 20-Nov | GF |
| Chromium, Total | 37. | mg/kg | 0.80 | 1 | 6010 | 20-Nov | GF |
| Lead, Total | 5.2 | mg/kg | 2.0 | 1 | 6010 | 20-Nov | GF |
| Mercury, Total | ND | mg/kg | 0.25 | 1 | 7470/7471 | 18-Nov | DM |
| Selenium, Total | ND | mg/kg | 0.40 | 1 | 6010 | 20-Nov | GF |
| silver, Total | ND | mg/kg | 0.40 | 1 | 6010 | 20-Nov | Nc |
| TCLP Extraction | | | | 1 | 1311 | 20-Nov | |
| Arsenic, TCLP | ND | mg/l | 1.0 | 1 | 6010 | 21-Nov | GF |
| Barium, TCLP | ND | mg/l | 0.50 | 1 | 6010 | 21-Nov | GF |
| Cadmium, TCLP | ND | mg/l | 0.10 | 1 | 6010 | 21-Nov | GF |
| Chromium, TCLP | ND | mg/l | 0.20 | 1 | 6010 | 21-Nov | GF |
| Lead, TCLP | ND | mg/l | 0.50 | 1 | 6010 | 21-Nov | GF |
| Mercury, TCLP | ND | mg/l | 0.005 | 1 | 7470/7471 | 21-Nov | DM |
| Selenium, TCLP | ND | mg/l | 0.50 | 1 | 6010 | 21-Nov | GF |
| Silver, TCLP | ND | mg/l | 0.10 | 1 | 6010 | 21-Nov | GF |
| Polychlorinated Biphenyls | | | | 1 | 8080 | 20-Nov | DB |
| Arochlor 1221 | ND | ug/kg | 250 | | | | |
| Arochlor 1232 | ND | ug/kg | 250 | | | | |
| Arochlor 1242/PCB 1016 | ND | ug/kg | 250 | | | | |
| Arochlor 1248 | ND | ug/kg | 250 | | | | |
| Arochlor 1254 | ND | ug/kg | 250 | | | | |
| Arochlor 1260 | ND | ug/kg | 250 | | | | |
| Arochlor 1262 | ND | ug/kg | 250 | | | | |
| Arochlor 1268 | ND | ug/kg | 250 | | | | |

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9508905-02
D-1

| PARAMETER | RESULT | UNITS | RDL | REF | METHOD | DATES PREP ANALYSIS | ID |
|-------------------------------------|--------|-------|-----|-----|--------|------------------------|----|
| Polychlorinated Biphenyls continued | | | | 1 | 8080 | 20-Nov 21-Nov | DB |
| SURROGATE RECOVERY | | | | | | | |
| 2,4,5,6-Tetrachloro-m-xylene | 90.0 | % | | | | | |
| Decachlorobiphenyl | 89.0 | % | | | | | |

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L9508905

| Parameter | Value 1 | Value 2 | RPD | Units |
|-----------------|-------------------------------|---------|-----|-------|
| Total Metals | DUPLICATE for sample(s) 01-02 | | | |
| Mercury, Total | ND | ND | NC | mg/kg |
| Total Metals | DUPLICATE for sample(s) 01-02 | | | |
| Arsenic, Total | 2.9 | 2.9 | 0 | mg/kg |
| Barium, Total | 20. | 19. | 3 | mg/kg |
| Cadmium, Total | ND | ND | NC | mg/kg |
| Chromium, Total | 37. | 42. | 12 | mg/kg |
| Lead, Total | 4.8 | 5.1 | 7 | mg/kg |
| Selenium, Total | ND | ND | NC | mg/kg |
| Silver, Total | ND | ND | NC | mg/kg |
| TCLP Extraction | DUPLICATE for sample(s) 01-02 | | | |
| Arsenic, TCLP | ND | ND | NC | mg/l |
| Barium, TCLP | ND | ND | NC | mg/l |
| Cadmium, TCLP | ND | ND | NC | mg/l |
| Chromium, TCLP | ND | ND | NC | mg/l |
| Lead, TCLP | ND | ND | NC | mg/l |
| Selenium, TCLP | ND | ND | NC | mg/l |
| Silver, TCLP | ND | ND | NC | mg/l |
| TCLP Extraction | DUPLICATE for sample(s) 01-02 | | | |
| Mercury, TCLP | ND | ND | NC | mg/l |

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L9508905

| Parameter | % Recovery |
|-----------------|---------------------------|
| Total Metals | SPIKE for sample(s) 01-02 |
| Mercury, Total | 95 |
| Total Metals | SPIKE for sample(s) 01-02 |
| Arsenic, Total | 69 |
| Barium, Total | 94 |
| Cadmium, Total | 100 |
| Chromium, Total | 61 |
| Lead, Total | 94 |
| TCLP Extraction | SPIKE for sample(s) 01-02 |
| Arsenic, TCLP | 94 |
| Barium, TCLP | 94 |
| Cadmium, TCLP | 96 |
| Chromium, TCLP | 101 |
| Lead, TCLP | 92 |
| Selenium, TCLP | 101 |
| Silver, TCLP | 90 |
| LP Extraction | SPIKE for sample(s) 01-02 |
| Mercury, TCLP | 90 |

ALPHA ANALYTICAL LABS
ADDENDUM I

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. 1986.
3. Standard Methods for Examination of Water and Waste Water. APHA-AWWA-WPCF. 17th Edition. 1989.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.

METHOD Method number by which analysis was performed.

D Initials of the analyst.

ALPHA

Analytical Laboratories, Inc.

Eight Walkup Drive
Westborough, MA 01581-1019
508-898-9220 FAX 508-898-9193

CHAIN OF CUSTODY RECORD and ANALYSIS REQUEST RECORD

MWU
No. 36563
Sheet ___ of ___

| | | | | |
|---|--------------------------------------|--|--|---------------------------|
| Company Name: ERM | Project Number: | Project Name/Location: Wayland | Date Received in Lab: 11/17 | Date Due: 11/21 |
| Company Address: Portland St Boston | P.O. Number: | Project Manager: JMCT | Alpha Job Number: (Lab use only) 9508905 | |
| | Phone Number: 617 721 9228 | | | |
| | FAX No.: | | | |

| ALPHA Lab # (Lab Use Only) | Sample I.D. | Containers (number/type) | Matrix / Source | Method Preserve. (number of containers) | | | | | | Solubles - F.F. | Sampling Date Time | Analysis Requested |
|-------------------------------|-------------|-----------------------------|-----------------|--|-----|--------|----------|-----|-------|-----------------|------------------------------------|--------------------|
| | | | | Unpres. | Ice | Nitric | Sulfuric | HCl | Other | | | |
| 8905.1 | C-1 | 3 G | S | 3 | | | | | | 11/17 9:10 | PCB 9030 + RCRA 8 | |
| 2 | D-1 | 3 G | S | 3 | | | | | | ↓ ↓ | TCR RCRA 8 Total m. det. TD | |
| | | | | | | | | | | | Composite all three | |
| | | | | | | | | | | | Jars prior to | |
| | | | | | | | | | | | analysis. | |
| | | | | | | | | | | | due Tues | |

| | | | | | | | | |
|--------------------------|----------------------------|-----------------------|----------------------|--------|---------------------------|-----------------------|----------|-------|
| Sampler's Signature: | Affiliation: ERM | Date: 11/17 | Time: 9:10 | NUMBER | TRANSFERS RELINQUISHED BY | TRANSFERS ACCEPTED BY | DATE | TIME |
| ADDITIONAL COMMENTS: | | | | 1 | | | 11/17/95 | 12:45 |
| | | | | 2 | | | 11/17 | 17:40 |
| | | | | 3 | | | | |
| | | | | 4 | | | | |



STATE OF NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2050-0035. Expires 9-30-95

Please print or type. Do not Staple.

Main manifest form with sections: 1. Generator's US EPA No., 2. Page 1 of Information in the shaded areas is not required by Federal Law, 3. Generator's Name and Mailing Address, 4. Generator's Phone, 5. Transporter 1 (Company Name), 6. US EPA ID Number, 7. Transporter 2 (Company Name), 8. US EPA ID Number, 9. Designated Facility Name and Site Address, 10. US EPA ID Number, 11. US DOT Description, 12. Containers, 13. Total Quantity, 14. Unit, 15. Special Handling Instructions and Additional Information, 16. GENERATOR'S CERTIFICATION, 17. Transporter 1 (Acknowledgement of Receipt of Materials), 18. Transporter 2 (Acknowledgement or Receipt of Materials), 19. Discrepancy Indication Space, 20. Facility Owner or Operator Certification of receipt of hazardous materials.

1-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

In case of emergency or spill immediately call the National Response Center (800) 424-9311.

Manifest No. 430 Boston Post Rd. Weyland, MS.

Manifest Doc. No.: 0000
 State Manifest No.: NYB730
 93743

Site Number: A20445

1. Is this waste a non-wastewater or a wastewater? (See 40 CFR 268.2) Check ONE: Non-Wastewater Wastewater
2. Is this waste subject to any California List restrictions enter the letter from below (either A, B1, or B2) next to each restriction that is applicable:
 ___ HOCs. ___ PCBs. ___ Acid. ___ Metals. ___ Cyanides.
3. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subdivision, or check NONE if the waste code has no subdivision. Also check which treatment standards apply. Spent solvent and California List treatment standards are listed on the back of this form. If F039, multi-source leachate applies, those standards must be attached by the generator.

| REF | 4. US EPA HAZARDOUS WASTE CODE(S) | 5. SUBDIVISION ENTER THE SUBDIVISION DESCRIPTION IF NOT APPLICABLE SIMPLY CHECK NONE | | 6. APPLICABLE TREATMENT STANDARDS | | | 7. HOW MUST THE WASTE BE MANAGED? ENTER THE LETTER FROM BELOW |
|-----|-----------------------------------|---|------|---|-----------|---|--|
| | | | | 6.a - PERFORMANCE-BASED: CHECK AS APPLICABLE | | 6.b - SPECIFIED TECHNOLOGY: IF APPLICABLE ENTER THE 40 CFR 268.42- TABLE 1 TREATMENT CODE(S) | |
| | | DESCRIPTION | NONE | 268.41(a) | 268.43(a) | 268.42-1) | |
| 1 | PCB1 | | | | | | |
| 2 | MAD2 | | ✓ | | | | E |
| 3 | | | ✓ | | | | E |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |

List additional USEPA waste code(s) and subcategory(s), use the supplemental sheet provided (CWM-2001-B) and check here:

HOW MUST THE WASTE BE MANAGED? In column 7 above, enter the letter (A, B1, B2, B3, C, or D) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B2, B3, or D, you are making the appropriate certification as provided below.

- 1. RESTRICTED WASTE REQUIRES TREATMENT**
 This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d).
- 2.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS**
 "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment."
- 2.2 RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS EXPRESSED AS A SPECIFIED TECHNOLOGY (AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY)**
 "I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
- 3. GOOD FAITH ANALYTICAL CERTIFICATION - FOR INCINERATED ORGANICS**
 "I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR Part 264 Subpart O or Part 265 Subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
- 4. RESTRICTED WASTE SUBJECT TO A VARIANCE**
 This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 7 above
- 5. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT**
 "I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32 or RCRA Section 3004(d), and therefore, can be land disposed without further treatment. A copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above. "I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth on 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment."
- 6. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS**
 This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

PCB SHIPMENT WORKSHEET

Area 2.23 [DW-06]

Generator Name: Raytheon Co

EPA ID# MA099068555

Address: 430 Boston Post Rd.

P.O.# _____

Wayland, MA 01778

Manifest# NYB 7393743

Contact: Grace Huang

Phone: 508-440-2729

| PCB INFORMATION | | | | |
|-----------------|--------------|---------------------|---------------------|-----------------|
| Drum # | Weight (kg)* | Out of Service Date | Contents | Disposal Method |
| A20445 MX | | 12/18/95 | PCB Soil / Concrete | Landfill |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

ADDITIONAL INFORMATION FOR CAPACITORS/TRANSFORMERS

| Drum # | Unit Dimension | Leaking? Yes/No | Manufacturers Serial# | Pallet or Drum? |
|--------|----------------|-----------------|-----------------------|-----------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

* 30 yard dump trailer

August 23, 1995

Ms. Grace Hwang
Raytheon Co.
450 New Boston Road
Wayland, MA 01778

RE: Derived Source Ruling for PCB's at Wayland, MA Facility

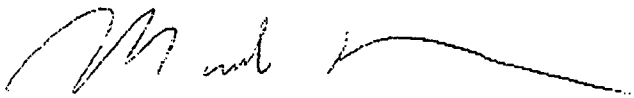
Dear Ms. Hwang:

In order for Laidlaw Environmental Services (North East), Inc. (LES) to characterize the waste profiles for material manually removed from an outdoor sump at Raytheon, Wayland, MA., we need a letter that states if PCB's were used or are in use at your facility in excess of 50 ppm. If there are no sources of PCB's in excess of 50 ppm we need that clarified too.

The three (3) drums of sludge removed from the sump have PCB concentrations of 9.7 ppm.

Please review your records and notify us in writing of your findings. We will then attach your letter to the profile for waste characterization. Oil and grease are the only other contaminants and if the waste does not fit the TSCA classification, it will be shipped through our facility as State Regulated Oil Waste. Please call me if you have any questions at (508) 683-1002 ext. 5365.

Sincerely,



Mark Thompson
Senior Project Manager

cc: Jim McCarthy, TSCA Coordinator

MT/eg PC- r.thompson@rayt_way.lad

TEL: (508) 440-2729
FAX: (508) 440-2051

GENERATOR NAME Raytheon Co. Weyland MA Job # 415713

WASTE DESCRIPTION Dry well Sledge

PLEASE ANSWER "YES" OR "NO"

- 1. IF THIS IS A SPILL, WAS THE SPILL INTENTIONAL? NO
- 2. IS THE SOURCE OF THE PCB CONTAMINATION GREATER THAN OR EQUAL TO 50 PPM? NO
- 3. HAS THE WASTE BEEN DILUTED IN ANY WAY? YES
(THIS INCLUDES SOLID OR LIQUID DILUTION.)

Dilution most likely occurred due to rainwater contribution from processes that also fed into this dry well.

IF YOU HAVE ANSWERED "NO" TO ALL OF THE ABOVE QUESTIONS, ATTACH A CERTIFIED LAB ANALYSIS, ALONG WITH THIS FORM, TO THE WASTE IDENTIFICATION FORM FOR YOUR WASTE WITH LESS THAN 50 PPM PCB'S AND SUBMIT TO TECHNICAL SERVICE FOR APPROVAL.

AUTHORIZED SIGNATURE Grace Hwang

PRINT NAME Grace Hwang

DATE 8/23/95

AUG 23 '95 9:07 P.02

LFHILRH ENVI/PON (NE) Fax:5086823821

P.E. BURKE MOVING & STORAGE CORP.

00032

AGENT FOR UNITED VAN LINES

124 PROSPECT ST. • WALTHAM, MA 02154 • Ph: (617) 894-1900

DATE _____

CUSTOMER'S NAME _____ B/L NO. _____

ORIGIN _____

DESTINATION _____

CARRIER _____

DATE 1-17-96 TIME 4:09PM 65440

lb GROSS

lb TARE - DRIVER

lb NET

ON _____ OFF

Dump Truck

DW-05
223

DRIVER *John Schmitt*

WEIGHER *Michael Canino*

TRUCK NO. 207 900

TRAILER NO. 94T

FEE _____ (5)

WEIGHED ON A FAIRBANKS SCALE



Waste Management, Inc.

CWM Chemical Services, Inc. Phone 716/754-8231
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107

Federal EPA ID: NYD049836679

RAYTHEON CO
ATTN: MANIFEST SECTION
MAD990685554
528 BOSTON POST RD
SUDBURY MA 01776

CERTIFICATE OF DISPOSAL

CWM Chemical Services, Inc. has received waste material from RAYTHEON CO on 01/19/96 as described on Hazardous Waste Manifest number NYB7393743 Sequence number 01. CWM Chemical Services, Inc., hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: AR0445
CWM Tracking ID: 8144260201
CWM Unit #: 1*0
Disposal Date: 01/19/96

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

Kathleen D. Morrison

KATHLEEN D. MORRISON
RECORDS DEPT. SUPERVISOR
Certificate # 54323
01/22/96