GP.

Lockheed Martin
Burbank Program Office
2550 N. Hollywood Way, #305 Burbank, CA 91505-1055
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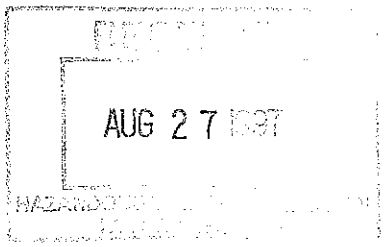
LOCKHEED MARTIN

VIA Hand Delivery
RNH0897/330 WBS# DP

August 25, 1997

Mr. Girish Desai
NYSDEC
SUNY at Stony Brook
Building 40
Stony Brook, New York 11790-2356



Dear Mr. Desai:

Subject: Submittal of Site Soil Investigation Scope of Work at Lockheed Martin Tactical Defense Systems ID# 130045 at 365 Lakeville Road, Great Neck, New York

Lockheed Martin Corporation (Lockheed Martin) herein provides you this notification and submittal of our Site Soil Investigation Scope of Work at the subject facility.

Lockheed Martin is preparing for competitive procurement for the Site Soil Investigation in September 1997, and the work to begin and be completed October 1997. The intent of the soil sampling program is to confirm the presence or absence of chemicals of concern in the subsurface soil at the facility based on historical operations; and the soil sampling program will target features that may have potentially impacted subsurface soil with chemicals of concern.

The contractor will prepare a Site Soil Investigation Work Plan and Health and Safety Plan for conducting this work. These documents, which detail the scope of the investigation, will be provided for your review prior to initiation of the site investigation activities. At the conclusion of the field work, the contractor will prepare a report summarizing the results of the investigation. We will forward you this site investigation report and meet with you to discuss the results of our findings.

If you have any questions regarding our preliminary site investigation activities, please do not hesitate to contact Mr. Bob Gilbert of my staff at (818) 847-0210.

Sincerely,

R. N. Helgerson
Director

RNH:EW:gc

cc: R. Becherer (NYSDEC)

SCOPE OF WORK

FOR

PHASE I SITE SOIL INVESTIGATION

LOCKHEED MARTIN TACTICAL DEFENSE SYSTEMS
GREAT NECK, NEW YORK

Prepared By:
Eric Wang
Lockheed Martin Corporation - Burbank Program Office
2550 North Hollywood Way, 3rd Floor
Burbank, California

AUGUST 1997

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1.0 INTRODUCTION

Lockheed Martin Corporation - Burbank Program Office (Lockheed Martin) is requesting services to conduct a preliminary site soil investigation to consist of drilling, sampling, and laboratory analysis at Lockheed Martin Tactical Defense Systems (LMTDS) located at 365 Lakeville Road in Great Neck, Nassau County, New York. Site investigation and remedial investigation have been conducted previously to assess the potential for historical impact of chemicals to the subsurface soil. Previous subsurface soil gas investigations at the property have been conducted by several consultants. This soil sampling program shall meet the requirements of the New York Department of Environmental Conservation (NYSDEC) and Federal Environmental Protection Agency (EPA) rules and regulations pertaining to subsurface site investigations. However, this subsurface soil investigation is to provide additional support for environmental site due diligence in support of real estate.

To provide a framework for this scope of work, a brief discussion of site background information, site history, findings of site investigations, current site conditions, and the regulatory status of the site. A description of proposed Phase I Soil Sampling activities and discussion of the estimated schedule for the implementation of these activities is provided.

The purpose of this scope of work is to 1) perform a site-wide assessment of the presence or absence of chemicals of concern in subsurface soil at locations where potential chemicals may have been discharged to the subsurface, 2) assess the lateral and vertical extent of chemicals of concern in subsurface soil at areas of potential environmental concern, and 3) confirm the presence and concentrations of previously identified chemicals of concern in subsurface soil.

2.0 SITE DESCRIPTION

The LMTDS property totals approximately 94 acres with a portion of the site situated within the Village of Lake Success and remaining part in the Town of North Hempstead in Nassau County, New York. The property is identified on the Nassau County Land and Tax Map as Section 8, Block B-18, Lots 300H and 300J. Lot 300H is approximately 44 acres located within the Village of Lake Success and Lot 300J is approximately 50 acres in the Town of North Hempstead. The site is located at 365 Lakeville Road at the southeast intersection of Marcus Avenue and Lakeville Road. The site is bordered to the north by Marcus Avenue, to the south by Union Turnpike, to the west by Lakeville Road, and immediately to the east is the Triad Business Park - see Figure 2.

The property has a main building and six smaller buildings located immediately

south of the main building - see Figure 3. The buildings total approximately 1.5 million square feet. The majority of the site is covered by buildings and paved asphalt for parking lots and driveways. Three storm water recharge basins are located in the southwest corner of the property adjacent to Lakeville Road and was constructed to receive snow melt and rain runoff from parking lots, driveways, and roofs.

The site was first developed in 1941. The facility was used to design and manufacture a wide range of defense-related products including navigational systems for Navy nuclear submarines (Trident Program), navigational sonar equipment, radar tracking systems (north Warning System), and weather radar systems (NEXRAD). Past manufacturing processes at the facility have included metal casting, chemical etching, degreasing, plating, metal finishing, machining, printed circuit board manufacturing and assembly. Chemicals used in these manufacturing process included halogenated and non-halogenated hydrocarbon solvents, cutting oils, paints, fuel oils, acids, caustics, and metal plating compounds. Manufacturing operations are no longer conducted at this facility. At the present, the facility primarily houses administration offices and engineering departments for the continued design, development, and program administration of on-going government contracted projects. Some limited testing, prototype assembly, and electronics integration operations for support of development activities of these programs are still being conducted at the facility.

3.0 PURPOSE

The purpose of this Phase I Site Soil Investigation Program is to identify and characterize potential chemical impact to subsurface soil at the LMTDS property. This Soil Sampling Program is intended to assess and document:

1) Investigate the extent of petroleum hydrocarbons, metals, Volatile Organic Compounds (VOCs), polychlorinated biphenyls (PCBs), and semi-volatile organic compounds (SVOCs) that may have impacted the subsurface soil at areas of previous manufacturing processes or storage of chemicals of concern;

2) Verify both the presence and concentrations of chemicals of concern previously detected. The analytical data collected adjacent to previous sampling locations will provide a timed-phase correlation of current and previous data, and additional quality control confirmation; and

3) The Soil Sampling Program should target potential sources that may have (or had) chemical impact to the subsurface soil and provide data to evaluate potential target sources.

4.0 PREVIOUS SITE INVESTIGATIONS

The LMTDS site is classified as a Class 2 Site by NYSDEC and currently under an Administrative Order of Consent for remedial activities to be performed on the property. The OU-1 Administrative Order of Consent from NYSDEC include, on-site groundwater remediation pump and treat, SVE system evaluation, and excavation of the three dry wells located at the southeast corner of the Manufacturing building. In addition, a draft Off-Site Investigation work plan was developed and submitted to NYSDEC for conducting additional groundwater investigation and characterization.

Several contractors have performed site investigation activities throughout the years to include a Remedial Investigation/Feasibility Study, Interim Removal Measures, tank removals, asbestos surveys and abatement, limited facility decontamination and decommissioning of several areas. A summary of various investigations conducted at the facility is referenced in the Phase I Environmental Assessment prepared by H2M - July 1997.

5.0 SCOPE OF WORK

The field investigation activities need to fully characterize the site shall include the drilling of geoprobe borings, collection of soil samples for laboratory analyses, and preparation of reports and maps depicting the results of the investigation. In order to complete the subsurface assessment of LMTDS property, the consultant shall provide an overview of the proposed soil sampling methodology, locations, depths, sampling intervals, and analytical scheme. The scope of work shall be prepared in accordance with all applicable standard subsurface soil investigation protocols.

This investigation approach is based on identifying potential sources as a result of the environmental assessment and general areal investigation, and is grouped into two categories; Category I and Category II as described below.

Category I

The targets that are classified as Category I are discrete targets designated for assessment. Category I includes underground storage tanks (USTs), pits, sumps, clarifiers, dry wells, and tank processing lines. A single soil boring will be drilled immediately adjacent to the center of each suspect target. There are some exceptions that will require more than a single soil boring such as clarifiers or large tank lines. Every Category I soil boring will be completed to a depth of 30 feet below ground surface with 5 foot sampling intervals to 30 feet. In addition to the depth samples, a near-surface 1-

foot soil sample will be collected to assess surface soil.

Category II

In addition to the investigation of each Category I target, general soil sampling of the LMTDS property will also be performed. These non-point and general areal assessment locations are referred to as Category II. These include but are not limited to storm drain piping, floor/surface staining, paint booths, media blast area, and hazardous waste storage areas. Every Category II soil boring sample will be drilled to a depth of 15 feet with 5-foot sampling intervals. Additionally, a near-surface 1-foot soil sample will be collected from each boring to assess surface soil.

The scope of work for this soil sampling investigation will include the tasks listed below:

5.1 Project Work Plan

Prior to starting the field investigation activities, a work plan shall be prepared to describe the field activities and standard operating procedures for obtaining field data. The work plan shall include a health & safety plan, sampling and analysis plan, waste management plan, and a quality assurance/quality control plan. Drafts of these documents shall be submitted to Lockheed Martin for review and comments. Final versions shall be prepared and submitted to Lockheed Martin prior to initiation of field work. The work plan shall be prepared in accordance with the NYSDEC and other applicable requirements and guidelines:

A. Introduction

B. Site Background

C. Site Assessment Plan

D. Sampling and Analysis Plan

E. Quality Assurance/Quality Control Plan

F. Health & Safety Plan

G. Investigation Derived Waste Management Plan

H. Maps, Schematics, Plot Plans, etc.

5.2 Geophysical Clearance

The objective of the geophysical survey is to 1) locate underground utility lines and other subsurface obstructions at proposed drilling and sampling locations, and 2) identify subsurface features, such as underground storage tanks, buried debris, or other materials to ensure that the drilling operation will not affect or cause damage to subsurface features. Provide a technical approach and methodology for the geophysical survey with specific equipment, method, and survey approach. The approach must address areas where sample locations will be drilled and sampled. All work must comply with local underground alert requirements.

5.3 Geotechnical

A Drilling and Sampling Plan shall be provided to Lockheed Martin as part of the work plan and submitted to the New York State Department of Environmental Conservation (NYSDEC) prior to implementation of the field work. In addition to drilling and sampling requirements, lithological logging of soil samples will be required.

5.4 Geoprobe Borings

Geoprobe borings shall be drilled at selected locations to confirm the presence or absence of chemicals of concern in subsurface soil. The proposed locations of the geoprobe borings on the site is shown on Figure 1.

The proposed geoprobe borings shall be conducted by a licensed contractor using a truck-mounted geoprobe unit. A manually-transported or hand-operated geoprobe unit may be necessary for locations within the building areas or areas of limited access. In both cases, the geoprobe unit will drive small diameter, steel casing with a removable cutting shoe to the desired depth. A clear acetate liner should be attached to the cutting shoe inside the casing for retrieval of soil samples.

Where feasible, soil samples shall be collected during the drilling of the geoprobe borings for geologic identification, field headspace screening, and laboratory analysis. Representative portions of each sample should be placed in clean containers for both laboratory analysis and field headspace screening. The laboratory samples shall be stored in an appropriate cooler until delivery to the laboratory. The field headspace screening shall be performed in accordance with EPA or ASTM protocols. A description of each soil sample collected during the drilling and the corresponding PID readings shall be recorded on sample logs.

To prevent cross-contamination between geoprobe borings, new steel casing and cutting shoes shall be used or the casing and the cutting shoe shall be decontaminated with a detergent solution and rinsed with distilled water before each use. For soil sampling, a new acetate liner shall be used for each sample. The cleaning fluids and residual solids generated by the decontamination process is to be containerized. The containers shall be transferred to the designated storage area on-site pending waste characterization and disposal.

Following the completion of each geoprobe boring, the borehole shall be filled with cement/bentonite grout consistent with standard protocols for borehole abandonment. Geoprobe boreholes located in paved areas should be sealed at the surface with grout or asphalt patch.

The locations of the geoprobe borings shall be marked for surveying. A licensed surveyor shall determine the locations of the borings to the nearest tenth of a foot and plot on a base map of appropriate scale. The ground surface elevation at each location shall be determine to the nearest tenth of a foot in relation to the NGVD.

5.5 Soil Sampling & Analysis

Soil sampling shall be conducted at various locations across the site to determine the extent of constituents of concern and the potential sources of groundwater impacts. Discrete samples of surficial soil and subsurface soil will be collected during the drilling of geoprobe borings as well as by hand at the proposed locations shown on Figure 1.

Soil samples collected at the proposed depths at each geoprobe boring locations are described in preceding sections of this scope of work. Surficial soil samples shall also be collected manually using a stainless steel hand auger, trowel, or spatula. To prevent cross-contamination between the surficial samples, the sampling equipment (split-spoon core barrel, hand auger, or trowel) shall be decontaminated with a detergent solution and rinsed with distilled water before use at each sampling location. The cleaning fluids and residual solids generated by the decontamination process will be containerized, transferred to a designated storage area on-site pending waste characterization and disposal.

The soil samples shall be stored in an appropriate cooler and submitted to the laboratory for analysis. The selection of soil samples from each drilling or sampling location to be submitted for laboratory analysis shall be based on depth , PID readings, and/or visual inspection. The samples will be analyzed for one or more of the following parameters using the corresponding analytical methods:

- Volatile organic compounds (USEPA Method 8240);

- Semi-volatile organic compounds (USEPA Method 8270);
- Priority Pollutant Metals (USEPA 6000 or 7000 Series Methods or SW-846);
- Polychlorinated Biphenyls (USEPA Method 8080);
- Total Petroleum Hydrocarbons (USEPA Method 418.1); and
- pH.

The proposed number and depth of soil samples to be collected from each area, and the proposed analytes for each sample can be referred in Table 2 and 3. Table 1 below, presents the summary of overall proposed site investigation boring locations:

Table 1
Summary of Proposed
Site Investigation Boring Locations

AREA NO.	SAMPLING LOCATION	TOTAL NO. OF BORINGS	CATEGORY I BORINGS	CATEGORY II BORINGS
1	Thin Film Lab	3	1 - Target process Line	2 - Target stains
2	Chemistry Lab	2		2 - General area coverage
3	High Power Lab	2		2 - Target floor stains/vaults
4	Foundry Basement	2		2 - Target stains
5	Maintenance Building	1		1 - Deteriorated floor slab
6	Coal Silo/Ash Pit	1	1 - Through ash pit	
✓ 7	Paint Storage Room	2	1 - Through sump	1 - Target floor drain line
✓ 8	Oil Room/Pump Room	3		3 - (2) pump room (floor drain line, utility pit, (1) oil room
9	Old Plating Area	6	6 - (2) per vault	
11	Process Photo Lab	2	1 - Through sump	1 - Target stain
12	A-12 Plating/Paint Shop	4	2 - (1) through plating room floor, (1) through degreaser vault sump	2 - (1) in over room, (1) in paint room
✓ 13	Hazardous Materials Storage	3		3 - (1) per zone
14	Boiler House	1		1 - Stains in control room
15	L-19 Lime Neutralization Pit	1	1 - Vicinity of former pit	
16	Oil Bladder Containment Area	1	1 - Center of concrete pad	
✓ 17	Reclamation Room with Oil/Water Separator & Sump	4	2 - (1) in sump, (1) oil/water separator	2 - (1) in SVE room, (1) in smaller room
18	Oil/Water Separators in Garage	2	2 - East & west systems	
20	Former 10,000 Gallon Gasoline UST	1	1 - SW corner of garage	
21	Foundry USTs (3)	3	3 - (1) per tank	

22	Foundry Dielectric Oil UST	1	1 - N side of foundry bldg.	
24	Transformer/Substation	3		3 - (3) borings to 5 feet bgs
25	A8 Clean Rooms & Above Grade Sumps	2		2 - Vicinity of above grade sumps
26	Abandoned Cooling Towers (5)	5		5 - (1) at each tower
27	C12 - Sheet Metal Sump	1	1 - Through sump	
28	C9 Temperature Control Room Sump	1	1 - Through sump	
29	O13 Clean Rooms & Above Grade Sumps	2		2 - Vicinity of above grade sumps
30	Short Order Machine Shop Sumps	1	1 - Through one of the sumps	
31	Foundry Basement Sump	1	1 - Adjacent to sump	
32	O2 A/C Condensate Sump	1	1 - Through sump	
33	O10 Sump (unconfirmed)	1	1 - Vicinity of sump	
34	Heat Treat Pit	2	2 - (1) each end of 80' L X 10' W sump	
35	Lakehouse Lime Neutralization Tank	1	1 - Through center of pit	
36	Former 100 Gallon Gasoline USTs (4)	4	4 - (1) at each former UST	
37	Former 275 Gallon Gasoline UST (Boiler Bldg.)	1	1 - Outside of boiler bldg.	
38	Existing 275 Gallon AST (Boiler Bldg.)	1		1 - SW corner of boiler bldg.
39	Former Ethylene Glycol AST	1		1 - Vicinity of former AST
40	Hydraulic Lift in Garage	1	1 - Vicinity of reservoir tank	

TABLE 2
Proposed Sampling Locations of Category I Borings

AREA NO.	SAMPLING LOCATION	NO. OF BORINGS	DEPTH INTERVAL (ft)	ANALYSIS
1	Thin Film Lab	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
6	Coal Silo/Ash Pit	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
7	Paint Storage Room	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
9	Old Plating Area	6	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
11	Process Photo Lab Sump	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
12	A-12 Plating Room & Sump	2	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
15	L-19 Lime Neutralization Pit	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
16	Oil Bladder Containment Area	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
17	Reclamation Room with Oil/Water Separator & Sump	2	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
18	Oil/Water Separators in Garage	2	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
20	Former 10,000 Gallon Gasoline UST	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
21	Foundry USTs (3)	3	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
22	Foundry Dielectric Oil UST	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
27	C-12 Sheet Metal Sump	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
28	C-9 Temperature Control Room Sump	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
30	Short Order Machine Shop Sumps (2)	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
31	Foundry Basement Sump	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
32	O2 A/C Condensate Sump	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
33	O10 Sump (Unconfirmed)	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
34	Heat Treat Pit	2	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
35	Lakehouse Lime Neutralization Pit	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
36	Former 100 Gallon USTs (4)	4	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
37	Former 275 Gallon Gasoline UST (Boiler Bldg)	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN
40	Hydraulic Lift in Garage	1	1, 5, 10, 15, 25, 30	VOCs, SVOCs, TPH, PCBs, Metals, CN

TABLE 3
Proposed Sampling Locations of
Category II Borings

AREA NO.	SAMPLING LOCATION	NO. OF BORINGS	DEPTH INTERVAL (ft)	ANALYSIS
1	Thin Film Lab	2	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
2	Chemistry Lab	2	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
3	High Power Lab	2	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
4	Foundry Basement	2	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
5	Maintenance Building	1	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
7	Paint Storage Room	1	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
8	Oil Room/Pump Room	3	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
11	Process Photo Lab	1	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
12	A-12 Paint Shop & Oven Room	2	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
13	Hazardous Materials Storage	3	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
14	Boiler House	1	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
17	Reclamation Room with Oil/Water Separator and Sump	2	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
24	Transformer/Substation	3	1, 5	VOCs, SVOCs, TPH, PCBs, Metals, CN
25	A8 Clean Rooms & Above Grade Sumps	2	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
26	Abandoned Cooling Towers	5	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
29	O13 Clean Rooms & Above Grade Sumps	2	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
38	Existing 275 Gallon AST (Boiler Bldg)	1	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN
39	Former Ethylene Glycol AST	1	1, 5, 10, 15	VOCs, SVOCs, TPH, PCBs, Metals, CN

5.6 Data Evaluation

Following the completion of the Phase I Site Soil Investigation program and the receipt of the laboratory analytical data, the field and laboratory data shall be evaluated to determine the nature and extent of chemicals of concern, including a characterization of the source(s), nature, and vertical and horizontal extent of chemicals of concern at the site; presence and distribution of non-aqueous phase liquids, if any; tabulation of analytical testing results; and, where appropriate, a characterization of background concentrations of chemicals of concern at the site.

5.7 Phase I Site Soil Investigation Report Preparation

A Phase I Site Soil Investigation Report shall be prepared to summarize the field investigation program. The Phase I Site Soil Investigation Report shall include the following elements:

- Site name, location, and locus map;
- Detailed site maps;
- Site history;
- Nature and extent of chemicals of concern, including a characterization of the source(s), nature, and vertical and horizontal extent of chemicals of concern at the site, presence and distribution of non-aqueous phase liquids, and where appropriate, a characterization of background concentrations of chemicals of concern; and
- Conclusions regarding the outcome of the Phase I Site Soil Investigation.

Appropriate summary data tables and site maps, including sample location plans, water-table contour maps, and geologic cross-sections, and pertinent documentation (e.g. laboratory reports) shall be included to support the conclusions. Upon completion, the Phase I Site Soil Investigation Report shall be submitted to Lockheed Martin for review and comments. A final report with a Phase I Site Soil Investigation Report shall be submitted to Lockheed Martin with appropriate professional engineer signature and certification.

Please provide (10) final copies of the report to Lockheed Martin.

6.0 SCHEDULE

The Phase I Site Soil Investigation shall be implemented after receipt of work plan approval from NYSDEC. The estimated schedule for the work activities is as follows:

- The field investigation program is expected to take approximately 3 weeks to complete;
- The data evaluation should be performed over a 2 week period after completion of the field investigation program; and

- The preparation of the Phase I Report should require approximately 4 weeks to complete.

The overall duration of the project should be approximately 8 weeks.

7.0 DELIVERABLES

- Draft Project Work Plan due 10 working days after notice to proceed from Lockheed Martin Procurement (2 copies)

  Final Project Work Plan due 5 working days after receipt of Lockheed Martin comments (10 copies)

- Draft Site Specific Health & Safety Plan due 10 working days after notice to proceed from LMC Procurement (2 copies)

  Final Site Specific Health & Safety Plan due 5 working days after receipt of Lockheed Martin comments (10 copies to include in work plan)

- Drill Schedule to be provided as part of the work plan

- Laboratory Quality Assurance Project Plan to be included in the work plan

- Draft Phase I Site Soil Investigation Report due 15 working days after completion of all field work (2 copies)

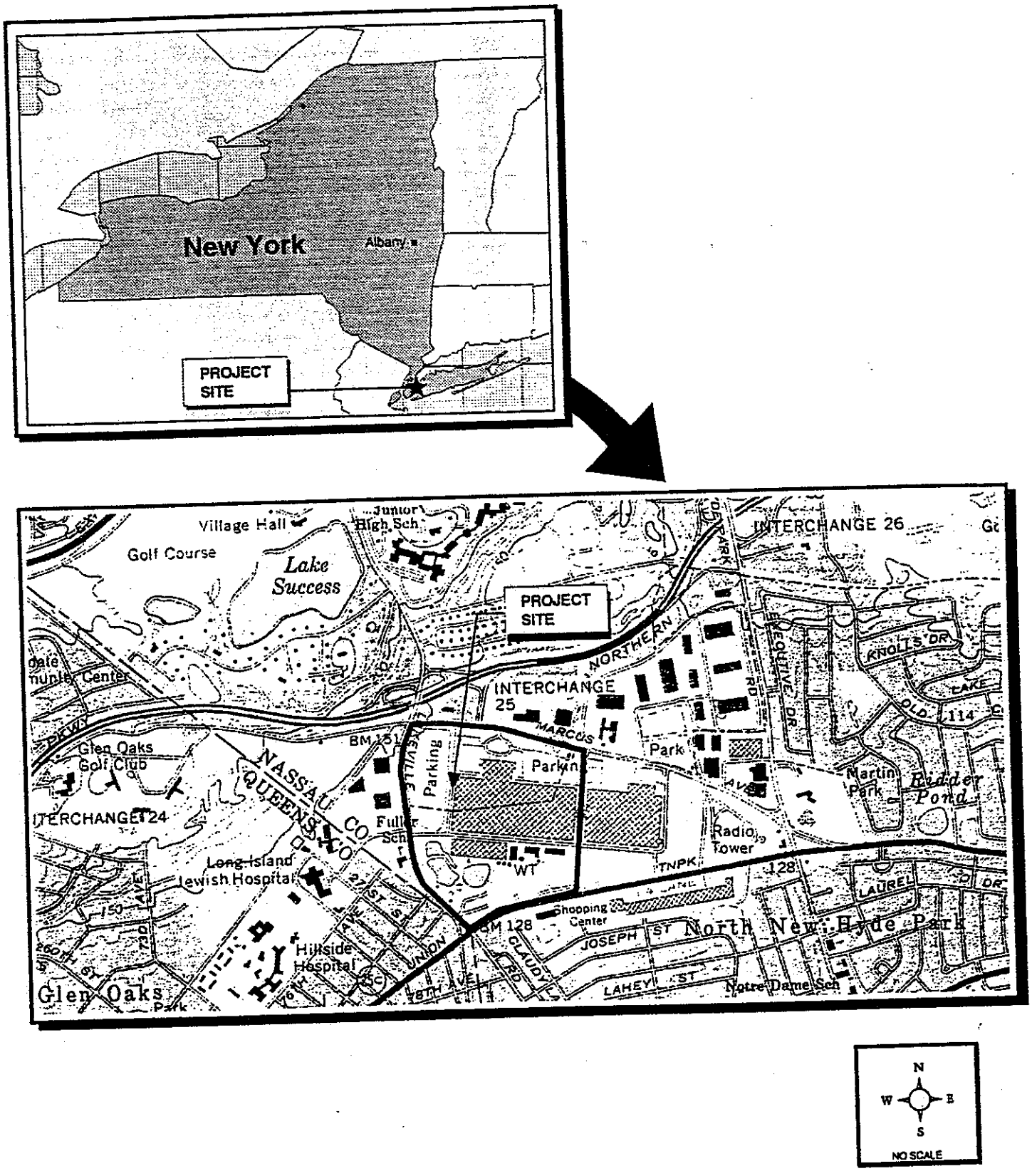
  Final Phase I Site Soil Investigation Report due 5 working days after receipt of Lockheed Martin comments (10 copies)

8.0 PROJECT CLOSE OUT

The contractor shall ensure that all debris generated as part of the field activities, any equipment and materials, and waste be removed from the site. Lockheed Martin may elect to conduct a site closure inspection with the contractor to confirm that all tasks are completed. As part of the final project close out, all documents and reports must be submitted to Lockheed Martin for final approval.

FIGURES

FIGURE 2
SITE LOCATION MAP



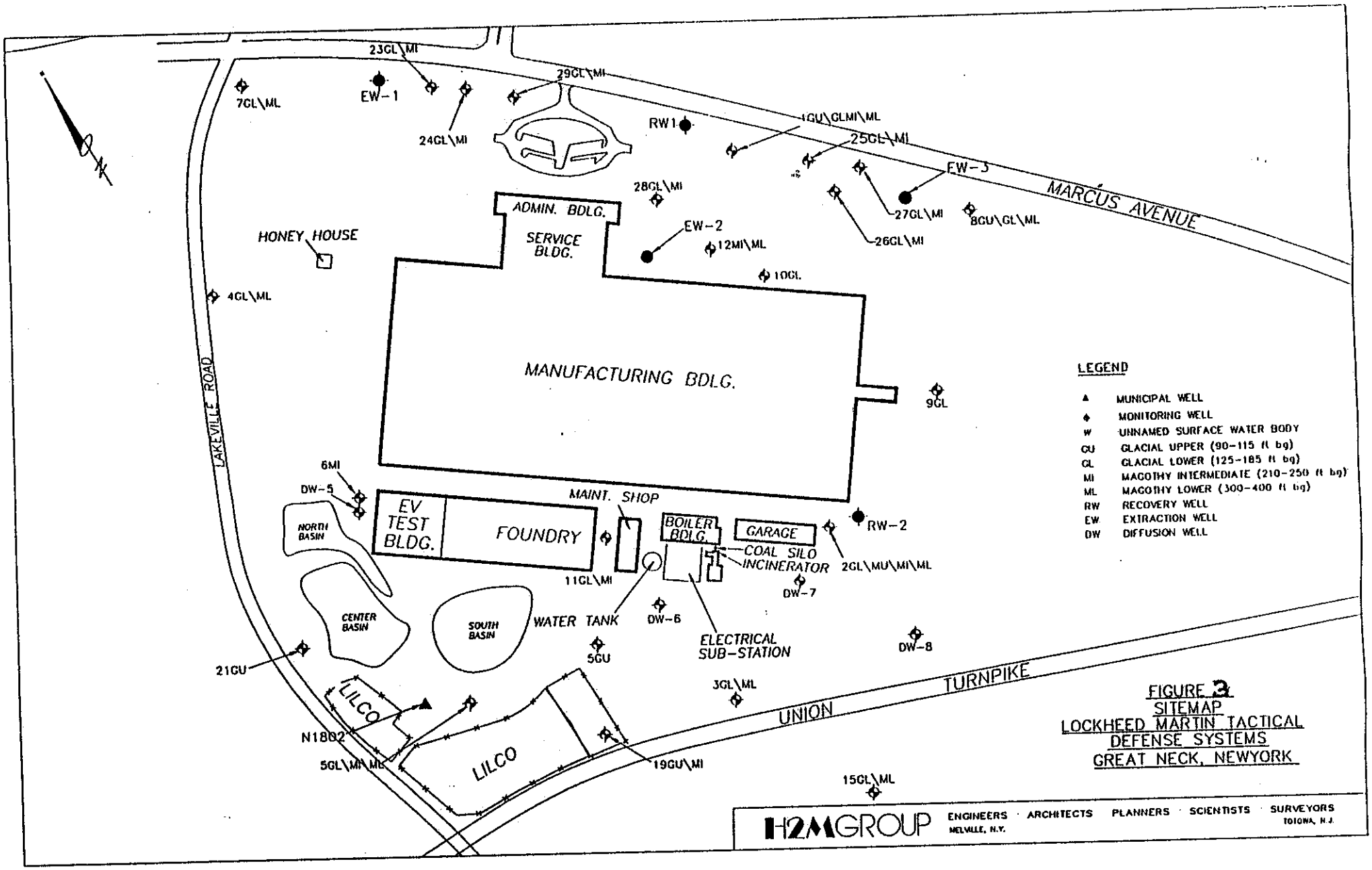


FIGURE 3
SITEMAP
LOCKHEED MARTIN TACTICAL DEFENSE SYSTEMS
GREAT NECK, NEWYORK

H2MGROUP ENGINEERS · ARCHITECTS · PLANNERS · SCIENTISTS · SURVEYORS
MELVILLE, N.Y. TOTOWA, N.J.

APPENDIX A

APPENDIX A LOCKHEED MARTIN WASTE MANAGEMENT PLAN

WASTE MANAGEMENT, REPORTING AND RECORDKEEPING

Ref:
1. Code of Federal Regulations, Title 40, Parts 260, 261, 262, 264, 265, 268, 761, and 763
2. Code Federal Regulations, Title 49, Parts 172 through 178
3. Lockheed Martin Corporation - Corporate Functional Procedure No: ESH-01; Environmental, Safety and Health. Issued: April 15, 1997, Revision No: 1

I. PURPOSE AND SCOPE

To establish waste management, reporting and recordkeeping procedures that ensure compliance with federal and state requirements, and to identify responsibilities for assuring tasks have been completed.

II. APPLICABILITY

This procedure implements federal requirements. State variations must be followed in the event a Lockheed Martin facility is located in a state with an EPA-approved RCRA program. These states may have additional reporting requirements.

This procedure applies to all Lockheed Martin-Burbank Program Office (BPO) staff members authorizing or overseeing operations in which federal and state regulated waste is, or may be, generated or discovered. Specifically excluded are materials identified in 40 CFR 261.4. Activities including, but not limited to, site investigation, remediation, facility decontamination and demolition, system operations and maintenance, caretaking, and salvage will be conducted in accordance with this procedure. This procedure has been prepared in accordance with the referenced *Lockheed Martin Corporation, Corporate Environment, Safety and Health Functional Procedure No: ESH-01.*

III. TRAINING REQUIREMENTS

Responsible parties will be trained in accordance with the Lockheed Martin-BPO *ESH Manual Procedure No.: BPO/ESH-01: ESH Training*. Persons signing manifests must be trained in accordance with Department of Transportation (DOT) Hazardous Materials regulations: HM-181, HM-215A, and HM-126F. All appropriate BPO employees must be trained according to Procedure No: BPO/ESH-01 and the related manifest database software.

IV. PROCEDURES

A. Waste Management Plan

Depending on the scope of the project (and as deemed necessary by the Project Supervisor), a site specific plan will be prepared which identifies all potential hazardous waste streams that may reasonably be expected to be generated or discovered during project activities. The plan will include but not be limited to the identification of designated on-site waste storage areas, the process for characterization of waste streams (i.e., generator/process knowledge or chemical analysis), description of spill response equipment to be located in designated waste storage areas, description of weekly waste container inspections to be performed, and schedule for waste management activities (waste characterization, profiling, manifesting, and shipment.)

B. Pre-Shipment Requirements

1. Waste generation and proper containerization: Upon generation of a potentially hazardous waste, the waste will be properly containerized in approved containers which are compatible with the waste generated, and which are reasonably expected to meet the packing requirements for the waste stream. Containers will be properly closed and stored.

2. Waste container marking: Containers will be marked utilizing a waste identification label which contain the following minimum information: date of first accumulation, generator name, waste description, and LMC point of contact. (See examples in ***Attachment 1*** to this procedure). The label must be appropriately filled out to assure compliance with federal, state, and local regulations. The label will be securely affixed to the outside of the container and weatherproofed, if necessary. The label will be affixed so that it is readily visible for inspection.

   In the event that it is not known whether the waste in the container is hazardous or non-hazardous, the words "PENDING ANALYSIS" will be entered in the "Chemical Name(s)" section of the label. The label will be updated immediately upon confirmation of the proper classification of materials in the container.

   After containers are marked for identification, appropriate information must be logged for inventory and tracking purposes. Example waste container tracking forms for found in ***Attachment 2*** and ***Attachment 3*** to this procedure. Copies of the tracking forms will be filed at the BPO with the site manifest files.

IV. PROCEDURES

B. Pre-Shipment Requirements (cont.)

3. Waste Classification: The waste in the container will be properly classified. If determination of the hazardous nature, or degree of hazard posed by the containerized waste, cannot be made strictly utilizing process knowledge, field screening samples or samples for laboratory analysis will be collected within one week of waste generation. Samples which may be required for waste profiling purposes will also be collected within a timely manner of waste generation.

4. Waste profile preparation: Identify the potential disposal method and the receiving facility (i.e., Transportation, Storage and Disposal Facility), then prepare any needed profile. Hazardous waste profile preparation will be initiated upon receipt of laboratory sample results, or upon verification of the waste constituents.

5. Compliant accumulation prior to shipment of waste to an LMC authorized Transportation, Storage and Disposal Facility (TSDF): Wastes will be accumulated in containers or tanks which are made of, or lined with, materials which will not react with, and are otherwise compatible with, the waste to be stored. Hazardous waste will not be stored on-site for more than ninety (90) days from its first date of accumulation except for:

   a. Conditionally exempt small quantity generator,
   b. Satellite accumulated hazardous wastes, which will not be stored on-site in excess of three-hundred sixty-five (365) days, and
   c. An authorized extension.

6. Hazardous Waste Manifest and Land Disposal Restriction (LDR) Preparation: A Hazardous Waste Manifest and any necessary Land Disposal Restriction (LDR) forms will be completed for the waste to be shipped. Manifest and LDR forms will be properly completed with DOT shipping names, EPA ID Numbers, validity of waste destination, and other relevant information.

7. Timely Preparation of Manifest and LDR Paperwork for Review: The manifest and LDR preparation will be completed in a timely manner prior to waste shipment.

C. Shipping Requirements

1. Manifest certification and retention of necessary paperwork: At the time of shipment, the manifest and corresponding LDR forms will be signed and

IV. PROCEDURES

C. Shipping Requirements (cont.)

dated by the BPO Project Supervisor (or his/her designee). The person signing the forms will be responsible for assuring that:

a. Any state required transporter information is included on the manifest, and that the primary transporter signs the manifest.
b. All copies of manifests which are required for company records, and those copies which need to be forwarded to the generating or receiving states are secured.
c. Copies of the LDR form(s) will also be secured for company records prior to shipment.

D. Post Shipment Requirements

1. Filing of Manifest and LDR: All paperwork retained by the person shipping the waste will be properly filed. At a minimum, the generator's copy of the manifest, associated LDR forms, applicable waste characterization paperwork (i.e., sample analysis or documentation of generator knowledge), and waste profile will be filed in the BPO waste manifest files, which reside with the site specific folders in the Program Office's central files.

2. Manifest Tracking: Applicable information will be entered on an appropriate Manifest Tracking Form (See example in ***Attachment 4*** to this procedure) or related database.

3. Forwarding manifest copies which are required to be sent out of house to assigned individual: All copies of manifests which are required to be sent to either the state in which the waste was generated, or the receiving state, will be forwarded to the Lockheed Martin Corporation employee designated with the responsibility of forwarding the copies of the manifest.

4. Assuring manifest copies are sent to states in a timely fashion (not to exceed thirty (30) days): Copies of manifests which are required to be sent to the generating or receiving state will be sent within thirty (30) days of the waste shipment, or sooner if required by specific state rules and regulations.

5. Verification of receipt of "signed off" copy of manifest within thirty-five (35) days: Verification will be made to ensure that the "signed off" copy of the manifest returned to Lockheed Martin Corporation by the permitted

IV. PROCEDURES

D. Post Shipment Requirements (cont.)

TSDF is received within thirty-five (35) days. The date the "signed off" copy is received will be entered on the Manifest Tracking Form or related database. If the "signed off" copy has not been received within the thirty-five (35) days of the initial shipment, the receiving TSDF will be contacted to locate the "signed off" copy of the manifest. When received, the "signed off" copy of the manifest will be filed in the BPO waste manifest files. All contact efforts will also be documented and filed in the BPO waste manifest files.

6. Preparing and filing exception reports, as necessary: If the "signed off" copy is not received by Lockheed Martin Corporation within forty-five (45) days from the initial shipment, an exception report which meets the requirements of the state from which the shipment took place will be prepared and filed with the appropriate agency.

7. Preparing and filing associated tax forms, reports etc.: Tax forms (such as California required hazardous waste taxes) will be prepared and submitted as required. Facility fees and generator fees will be prepared and submitted as required. Manifest fees, and other state specific fees will be prepared and submitted as required. Annual and biennial reports will be prepared and submitted as required. Copies of all submitted tax forms, reports, etc. will be filed in the BPO agency correspondence files, which are part of the site specific files maintained by the Program Office.

8. Reviewing manifest package for completion prior to filing: Prior to filing the site specific manifest package, a review of the contents will be performed, and verification that all required material are contained in the file will be documented on the manifest tracking form. A copy of this form will be placed at the front of the site specific manifest folder.

9. Assuring records are permanently maintained: In accordance with the Lockheed Martin Corporate Functional Procedure No: ESH-01, the manifest records will be permanently retained.

V. RESPONSIBILITIES

A. Technical Project Department Managers

1. Retain ultimate responsibility for ensuring staff compliance with this procedure.

B. Project Supervisors

1. The Project Supervisor (or his/her designee) assigned to a given project has the responsibility for overall compliance with this procedure. He/She is specifically responsible for oversight of:

   a. Waste generation and proper containerization*
   b. Waste container marking*
   c. Waste classification*
   d. Waste profile preparation*
   e. Compliant accumulation prior to shipment of waste to an LMC authorized Transportation, Storage and Disposal Facility (TSDF)*
   f. Hazardous Waste Manifest and Land Disposal Restriction (LDR) preparation*
   g. Timely preparation of Manifest and LDR paperwork for review*
   h. Manifest certification and retention of necessary paperwork
   i. Reporting, recordkeeping and filing performed by the Executive Secretary

   Asterisk (*) indicates tasking may be delegated to a BPO contractor, with Project Supervisor providing appropriate scope of work.

C. Executive Secretary

1. In support of the Project Supervisors, will be responsible for performing respective document filing in the Post-Shipment Requirements including:

   a. Filing of manifest and LDR
   b. Manifest tracking
   c. Forwarding manifest copies which are required to be sent out of house to assigned individual
   d. Assuring manifest copies are sent to states in a timely fashion (not to exceed thirty (30) days
   e. Verification of receipt of "signed off" copy of manifest within thirty-five (35) days.
   f. Preparing and filing exception reports, as necessary
   g. Preparing and filing associated tax forms, reports, etc.

V. RESPONSIBILITIES

C. Executive Secretary (cont.)

h. Reviewing manifest package for completion prior to filing
i. Assuring records are permanently maintained

D. Safety & Health Supervisor

1. Will ensure respective BPO personnel are trained in accordance with this procedure.

VI. FOR MORE INFORMATION

Research the regulatory references as identified at the beginning of this procedure.

Attachments:

1. Example of Hazardous Waste Container Identification label and example of Waste Container Identification label.
2. Example of Tracking Form: Drum Containerization
3. Example of Tracking Form: Roll-off Storage (suitable for stockpiles)
4. Example of Manifest Tracking Form

HAZARDOUS WASTE CONTAINER IDENTIFICATION

STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL

IF FOUND, CONTACT LOCKHEED MARTIN CORP., BURBANK, CA

DATE OF FIRST ACCUMULATION

SECTION A (Completed by Generator)

Generator LOCKHEED MARTIN CORPORATION (LMC)
2550 N. HOLLYWOOD WAY, SUITE 301, BURBANK,CA 91505

LMC CONTACT / PHONE:
REGULATORY AFFAIRS DEPARTMENT
818-847-0264

Facility Location: .....

Waste Common Name

Chemical Name(s) (Approximate Chemical Composition) Percent Range

Phys. State	Container/Maximum Capacity		Boring No.
☐ Solid	☐ Steel Drum	55 gal	
☐ Liquid	☐ Plastic Drum	55 gal	Intervals:
☐ Sludge	☐ Roll-off Bin	cu yds	
☐ Multi-layer	☐ Tank	gal	
	☐		

% .....
% .....
% .....
% .....
% .....

Quantity in Container: ☐ gal ☐ cu yds ☐ lbs

Task Manager(s) Name: ..... (PRINT)

Task Manager(s) Name: .....

IN PLANT USE ONLY! NOT FOR TRANSPORTATION ON PUBLIC HIGHWAYS

SECTION B

EPA ID NUMBER _____ Unique Contained ID _____

LMC Contractor: _____ Phone # _____

Date of Waste Characterization: _____ ☐ HAZARDOUS/ ☐ NON-HAZARDOUS

Date Container Filled: _____ Date Container Samples: _____ Sample No. _____

HWCID-02 (R 10/96) (IM 10/96)

CONTRACTOR

No:
Issued: Jan 1994
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Attachment 1 to BPO/E-01

WASTE CONTAINER IDENTIFICATION

STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL

IF FOUND, CONTACT LOCKHEED MARTIN CORP., BURBANK, CA

DATE OF FIRST ACCUMULATION

SECTION A (Completed by Generator)

Generator LOCKHEED MARTIN CORPORATION (LMC)
2550 N. HOLLYWOOD WAY, SUITE 301, BURBANK,CA 91505

LMC CONTACT / PHONE:
REGULATORY AFFAIRS DEPARTMENT
818-847-0264

Facility Location: .....

Waste Common Name .....

Chemical Name(s) (Approximate Chemical Composition) Percent Range

.....	%
.....	%
.....	%
.....	%
.....	%

Phys. State	Container/Maximum Capacity		Boring No.
☐ Solid	☐ Steel Drum	55 gal	
☐ Liquid	☐ Plastic Drum	55 gal	Intervals:
☐ Sludge	☐ Roll-off Bin	cu yds	
☐ Multi-layer	☐ Tank	gal	
	☐		

Quantity in Container: ☐ gal ☐ cu yds ☐ lbs

Task Manager(s) Name: ..... (PRINT)

Task Manager(s) Name: .....

IN PLANT USE ONLY! NOT FOR TRANSPORTATION ON PUBLIC HIGHWAYS

SECTION B

EPA ID NUMBER _____ Unique Contained ID _____

LMC Contractor: _____ Phone # _____

Date of Waste Characterization: _____ ☐ HAZARDOUS/ ☐ NON-HAZARDOUS

Date Container Filled: _____ Date Container Samples: _____ Sample No. _____

LEETC-01 (R 10/94) (TM 10/94)

CONTRACTOR

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Attachment 1 to BPO/E-01

No: Attachment 4 to BPO/E-01
Issued: Jan 1994
Rev. 1: Jul 1997
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MANIFEST TRACKING FORM

SITE: ______________________ EPA ID NO.: ______________________

Document #	Manifest #	TSDF	Date Shipped	Date mailed to State	Date TSDF signed copy received	Copy in BPO files

TRACKING FORM -- ROLL-OFF STORAGE

ROLL-OFF # (SIZE)		ROLL-OFF CONTENTS	WASTE ORIGIN*	ACCUM. DATE	VOLUME (LBS)	WEIGHT TICKET #	PROFILE NUMBER	RECEIVING FACILITY	MANIFEST NUMBER	DATE SHIPPED	A

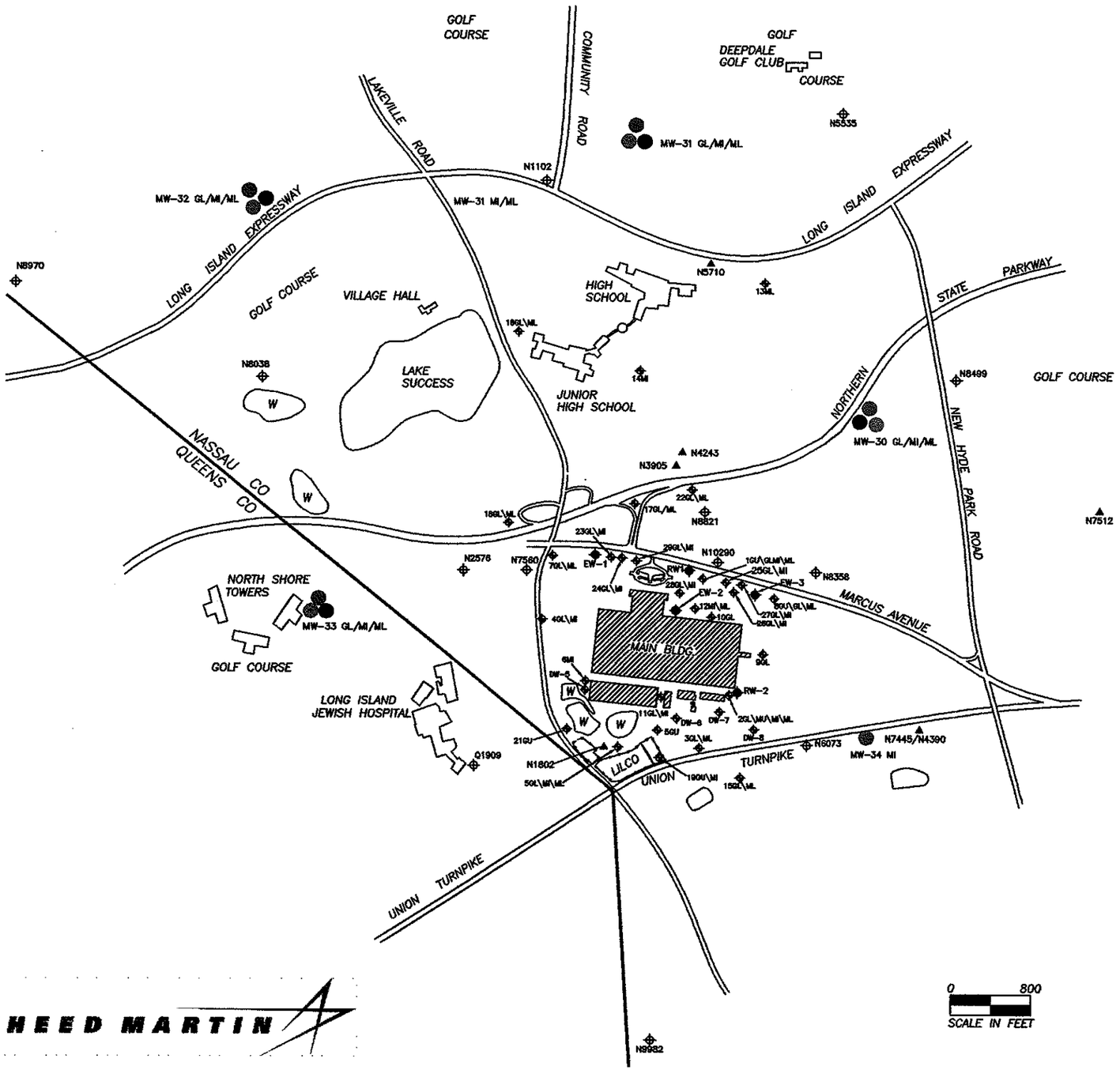
* Monitor well or soil boring identification, if applicable

No:
Issue
Rev.
Page:

TRACKING FORM -- DRUM CONTAINERIZATION

DRUM #	DRUM TYPE	DRUM CONTENTS	WASTE ORIGIN*	QUANTITY	WASTE TYPE	ACCUM. DATE	PROFILE NUMBER	RECEIVING FACILITY	MANIFEST NUMBER	DATE SHIPPED	

* Monitor well or boring identification, if applicable



LEGEND

▲	MUNICIPAL WELL
⌖	MONITORING WELL
W	UNNAMED SURFACE WATER BODY
GU	GLACIAL UPPER (90–115 ft bg)
GL	GLACIAL LOWER (125–185 ft bg)
MI	MAGOTHY INTERMEDIATE (210–250 ft bg)
ML	MAGOTHY LOWER (300–400 ft bg)
RW	RECOVERY WELL
EW	EXTRACTION WELL
DW	DIFFUSION WELL
●	PROPOSED LOCATION – SHALLOW WELL
●	PROPOSED LOCATION – INTERMEDIATE WELL
●	PROPOSED LOCATION – DEEP WELL

FIGURE 5–4
PROPOSED MONITORING WELL LOCATIONS
LOCKHEED MARTIN
GREAT NECK, NEW YORK

LOCKHEED MARTIN

9–2FIG.DWG 9–3–97 4:55:46 pm