Marine Biological Laboratory

THE UNIVERSITY OF CHICAGO

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

July 2019

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APPROVAL AND CERTIFICATION

This plan has been updated and approved by Eric Jensen, SPCC Technical Coordinator, July 2019. Currently, MBL has capacity to hold 4,500 gallons of diesel fluid which is well below the 42,000 gallon threshold for requirement of a SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN. To preserve a thorough spill response document, MBL will continue to maintain and distribute this plan.

Management Approval

This SPCC has been reviewed and approved by an MBL representative with the authority to commit necessary resources for implementing the Plan. The programs and procedures outlined in this Plan will be implemented and periodically reviewed and updated in accordance with 40 CFR 112, as amended, and applicable state and local requirements.

(*Signature*)

Paul Speer (*Name*)

Chief Operating Officer (*Title*)

7/31/2019

(Date)

EMERGENCY CONTACT LIST	
INTERNAL CONTACTS	
SPCC Technical Coordinator Eric Jensen Environmental Health & Safety Manager	Office: (508) 289-7424 Home: (508) 564-9564 Cellular: (401) 497-9593
SPCC Management Coordinator Marie Russell Facilities & Services Director	Office: (508) 289-7641 Home: Cellular: (617) 201-2366
SPCC Management Coordinator William Brosseau Assistant Facilities & Services Director	Office: (508) 289-7773 Home: (508) 295-0905 Cellular: (508) 294-8456
SPCC Management Coordinator Dave Remsen Marine Research Services Director	Office: (508) 289-7477 Home: (508) 524-3601 Cellular: (508) 289-7477
SPCC Management Coordinator Bob Kaski, Transportation & Grounds Supervisor	Office: (508) 289-7326 Home: (508) 958-6310 Cellular: (508) 958-6310
Security Staff	Emergency : (508) 289-7911 Office : (508) 289-7217
City/State Agencies (To be contacted by EH&S only)	
Falmouth Fire/ Police Department	911 / (508) 548-2323
Massachusetts DEP Spill Hotline	(888) 304-1133
Massachusetts DEP Northeast Region Office	(978) 932-7600
State Emergency Commission	(508) 556-1133
Falmouth Water and Sewer	(508) 495-7340 || 508 457-2526 off hours
Local Emergency Planning Committee	(508) 495-7456
Federal Agencies (To be contacted by EH&S only)	
National Response Center	(800) 424-8802
EPA Region 1	(617) 573-9664
US Coast Guard Woods Hole, MA	(508) 457-3210
Spill Response Contractors (To be contacted by EH&S only)	
Veolia Environmental, Marlboro, MA. (On-site spills-land) Clean Harbors-Norwell, MA (Spills into ocean, pond, lake etc.)	(800)-354-2382 Dial “1” (800)-OIL-TANK

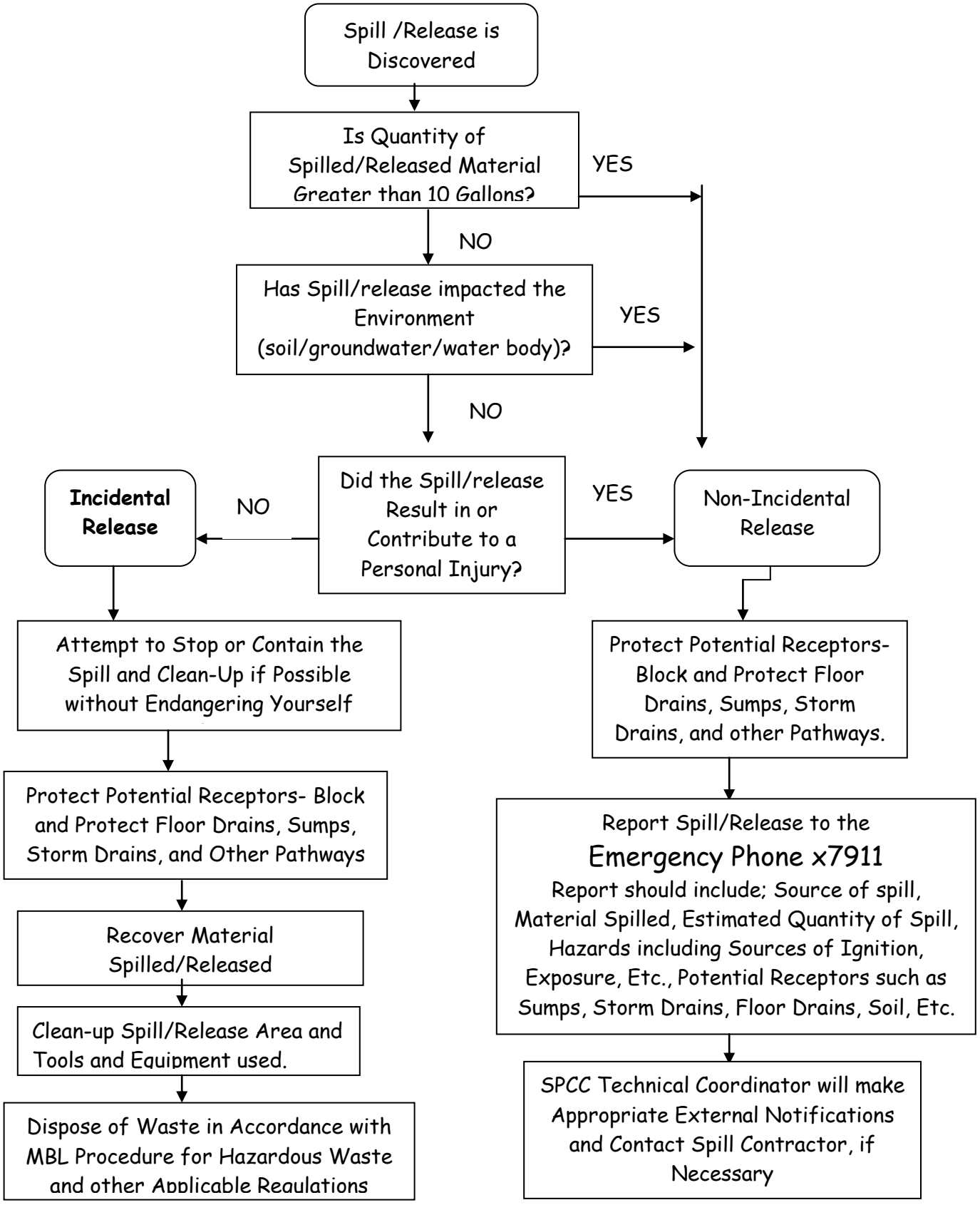
SPILL/RELEASE RESPONSE & REPORTING PLAN
QUICK REFERENCE SUMMARY

1. Extinguish all sources of ignition and isolate incompatibles or reactive chemical substances.
2. Determine if the spill/release is incidental[1] or non-incidental[2].
3. For incidental[1] spills/releases - attempt to stop or contain the spill/release at the source without endangering yourself or others. Report release to SPCC Coordinator Eric Jensen (401) 497-9593.
4. For non-incidental[2] spills/releases - Immediately report the spill/release to the Emergency Switchboard x7911. The switchboard will notify the SPCC Coordinator Eric Jensen (401) 497-9593 and initiate contact with spill vendors upon approval by SPCC Technical Coordinator.
5. Isolate all potential environmental receptors including drains, sumps, soil, etc.
6. Report to outside agencies {SPCC Technical Coordinator or their designee will conduct the necessary reporting to outside agencies}.
7. Recover material spilled and clean-up area utilizing available spill containment kit.
8. Decontaminate tools and equipment. Collect all material and debris.
9. Under the guidance of the SPCC Technical Coordinator, dispose of waste materials in accordance with applicable regulations and MBL procedures.
10. The SPCC Technical Coordinator will conduct follow-up written notifications to applicable agencies.
11. The SPCC Technical Coordinator will conduct an incident analysis and develop plans necessary to prevent reoccurrence. Incident analysis and preventative plans will be included in a written Incident Report
12. An “Incident Report” will be filed and a copy sent to the Facilities Director and the Chief Operating Officer

[1] **“Incidental”** spill/release is defined as a spill/release which meets ALL of the following criteria:
   1. responding personnel are familiar with the hazards associated with the spilled material;
   2. containment/response does not pose potential health and safety hazards (e.g., fire, explosion or chemical exposure);
   3. a small quantity (less than 10 gallons) of material is spilled/released which DOES NOT reach the environment or pose potential health and hazards; and
   4. Spilled/released materials can be readily absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate area or by maintenance personnel.

[2] **“Non-incidental”** spills include:
   1. major spills/release (e.g., greater than 10 gallons of oil) that do not reach the environment or
   2. Any amount of spilled material that reaches the environment.

SPILL/RELEASE RESPONSE/REPORTING FLOWCHART



MBL SPCC PLAN

SECTION 1 – GENERAL INFORMATION

INTRODUCTION

This Spill Prevention Control and Countermeasures (SPCC) plan has been prepared for MBL's Campus pursuant to the Environmental Protection Agency's Oil Pollution Prevention Regulations (40 CFR Part 112). This SPCC plan establishes preparedness, prevention, planning, spill response, and spill notification procedures as set forth in applicable state and federal regulations.

The Environmental, Health and Safety Office at MBL has the responsibility to establish policies and identify resources to ensure compliance with all environmental and safety laws. Environmental, Health and Safety programs require a comprehensive, consistent, and unified response throughout the MBL. For this reason, the EH&S Department maintains technical responsibility for response to incidents involving deployment of this Plan.

This Plan has been compiled by the Environmental, Health and Safety Office (EH&S). Statements have been inserted to clarify and specify requirements for the MBL Facility.

Federal and state regulations require all owners/operators of underground storage tanks (USTs) to designate at least one certified Class A, B and C Operator for each tank system. Operators are qualified through exams and/or training via the MA DEP. William Brosseau (Plant Operations Manager) is the designated Class A and B Operator. William Brosseau and is listed on the MA DEP website as being a qualified Class A and B operator for underground storage tanks.

PURPOSE AND SCOPE

The intention of this SPCC Plan (Plan) is to establish the necessary procedures and equipment required to prevent a discharge of oil or hazardous material that violates applicable water quality standards, causes a sheen upon or discoloration of the surface of navigable waters or adjoining shorelines, or causes sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. This Plan establishes activities and guidelines to be implemented to mitigate oil discharges should they occur and to prevent recurrence.

This Plan has been prepared pursuant to regulations set forth in 40 CFR 112 which state that any facility that has oil storage capacity of 42,000 gallons below ground, 1,320 gallons above ground, or a single aboveground tank of 660 gallons or greater and could reasonably be expected to discharge oil in harmful quantities into navigable waters of the United States must prepare and implement an SPCC Plan. In total, the oil storage at MBL's Campus does not exceed the threshold quantities, however MBL does border navigable water and oil could discharge into those waters. Oil is defined in 40 CFR 112.2(a) as "oil of any kind or form, including, but not limited to petroleum, fuel oil, sludge oil, oil refuse and oil mixed with wastes other than dredged spoil." Underground and aboveground oil storage tanks are also regulated by the Massachusetts Board of Fire Prevention Regulations (527 CMR 9.00). A copy of these regulations are available on file with the EH&S Office.

As required by 40 CFR 112, MBL has appointed a SPCC Coordinator for the Campus. The SPCC Technical Coordinator is the Manager of EH&S for the Campus (Mr. Eric Jensen). Because of the decentralized nature of MBL, local (department) implementation of SPCC requirements will be the responsibility of the MBL's designated SPCC Management Coordinators. The SPCC Management Coordinators are accountable for oil spill prevention at their respective facilities on the Campus. SPCC Coordinator information is included below:

SPCC COORDINATORS FOR MBL	
SPCC Technical Coordinator Eric Jensen Environmental Health & Safety Manager	Office: (508) 289-7424 Home: (508) 564-9564 Cellular: (401) 497-9593
SPCC Management Coordinator Marie Russell Facilities & Services Director	Office: (508) 289-7641 Home: Cellular: (617) 201-2366
SPCC Management Coordinator William Brosseau Assistant Facilities & Services Director	Office: (508) 289-7773 Home: (508) 291-4835 Cellular: (508) 294-8456
SPCC Management Coordinator Bob Kaski Transportation & Grounds Supervisor	Office: (508) 289 -7326 Home: (508) 958-6310 Cellular: (508) 958-6310
SPCC Management Coordinator Dave Remsen Marine Research Services Director	Office: (508) 289-7477 Home: (508) 524-3601 Cellular: (508) 289-7477

The SPCC Technical Coordinator and the SPCC Management Coordinators will be responsible for the overall implementation of this Plan. Specific responsibilities for each role are described within this Plan. A complete, updated copy of the Plan will be maintained on-site in the EH&S Manager's office. The Plan will be made available upon request for on-site review during normal business hours.

The SPCC Plan shall be amended whenever there is a change in any facility design, construction, operation or maintenance which affects the facility's potential for the discharge of oil to navigable waters. The SPCC Management, Technical Coordinators and Chief Operating Officer (COO) will be informed of any substantive changes to the SPCC originally generated by MBL.

DISTRIBUTION AND REVIEW

Copies of the Plan have been distributed to the following individuals and departments:

PLAN DISTRIBUTION LIST		
Plan Copy	**Individual**	**Title/Department**
1	Eric Jensen	SPCC Technical Coordinator/Environmental Health & Safety Manager
2	Marie Russell	SPCC Management Coordinator/Facilities & Services Director
3	William Brosseau	SPCC Management Coordinator/ Plant Operations Manager
4	Bob Kaski	SPCC Management Coordinator/ Transportation & Grounds Supervisor
5	Paul Speer	Chief Operating Officer
6	Mary Harrington	Financial Services, Chief Financial Officer
7	Dave Remsen	Marine Research Services Director
8	Steve Sykes	MBL Campus Security Manager
9	Michael Small	Falmouth Fire Department (LEPC) 750 Main St. Falmouth, MA.
10	Staff Duty Officer	US Coast Guard, 30 Woods Hole Rd. Woods Hole, MA.

Plan Review

As set forth in 40 CFR Part 112.5(a) and (b), this SPCC Plan shall be reviewed and/or amended, if necessary, whenever:

- Required by the Regional Administrator of the US Environmental Protection Agency (USEPA);
- Applicable regulations are revised or added; or
- There is a change in the design of the facility, construction, operations, or maintenance which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

GENERAL MARINE BIOLOGICAL LABORATORY INFORMATION

The oldest private marine laboratory in the Western Hemisphere, the Marine Biological Laboratory (MBL) was founded in 1888 as an independent institution for teaching and research. Primarily a summer laboratory in its early years, the MBL today retains its renowned summer program while simultaneously serving as the year round home for a cadre of world-class biologists and ecologists.

For more than a century, scientists from around the world have been gathering in Woods Hole. The best students from the best universities, the brightest young faculty, the most successful scientists working at the pinnacle of the profession — an unmatched collection of researchers and educators congregates every year in the seaside village whose name has become synonymous with science. But what lies behind this convergence of intellectual energies? What sustains this confluence of diverse scientific talents?

The answer is simple: a history, tradition, and passion for discovery. Couple this with an abundant supply of interesting marine organisms on which to work and a community that has been home to some of the great biological scientists of the modern era, and all the elements are in place for an institution unlike any other: the Marine Biological Laboratory.

The MBL is geographically isolated yet in the mainstream of biomedical research. Research efforts are focused on both marine organand vertebrates; in which the end result serves to improve human health. The MBL is global, with ecosystems research on diverse environments addressing large environmental issues. The MBL is also rich in history with 55 Nobel laureates having worked or studied here and convinced that the most exciting work still lies ahead.

FACILITY INFORMATION

The Marine Biological Laboratory (MBL) was established in 1888. It is a private, not-for-profit institution. It has a rich history of biological research and education that is known around the world. The MBL has over 100 buildings that serve the research, educational and administrative needs of the institution on two campuses in the Woods Hole village of Falmouth. The oldest building was built in 1837 and the newest building (Rowe) was renovated in 2006.

Buildings and Structures on campus are listed below:

- 1. Candle House (Administrative and Lecture Rooms)
- 2. 100 Water Street (Pierce Visitor Center, Satellite Club, MBL Club)
- 3. Marine Resources Center
- 4. Collection Support Facility
- 5. Crane Wing, Lillie Laboratory (Labs, Receiving)
- 6. Lillie Laboratory (Labs, Library, Auditorium)
- 7. Rowe Laboratory (Labs, Auditorium)
- 8. Environmental Science Laboratory (Ecosystems)
- 9. Loeb Teaching Laboratory (Research and Teaching Labs, Lecture Rooms)
- 10. Brick Apartment Building
- 11. Veeder House Dormitory
- 12. David House Dormitory
- 13. Broderick House (IT)
- 14. Crane House
- 15. Swope Center (Registration, Cafeteria, Meigs Room)
- 16. Ebert Hall (Brick Dormitory)
- 17. Drew House Dormitory
- 18. 11 North Street
- 19. 15 North Street
- 20. Smith Cottage and Bar Neck Road Property
- 21. C.V. Starr Environmental Sciences Building

Buildings and Structures of Note off Village Campus

- Building at 25 Bernard St Jean Drive, Falmouth Technology Park
- Cottages at Devils Lane and Memorial Circle
- Warehouse at 311 Oyster Pond Road
- Marshview Farm Newbury, Ma.

OIL STORAGE AT MBL

Oil storage locations include emergency diesel generator fuel tanks. Petroleum products are also found in motor vehicles, engine driven chillers, marine vessels fuel tanks, waste oil, oil in transformers, switches, pumps, compressors, gasoline, hydraulic lifts for elevators and other mechanical or electrical equipment. Other oils include cooking oil.

USE OF THE SPCC PLAN

This Plan is designed to establish the necessary procedures and equipment to prevent a potential spill/release of oil to the environment and to establish procedures and equipment necessary for proper response, cleanup and notification activities to be implemented in the event of a spill/release.

Contents

This Plan contains three main sections: General Information, Spill/Release Procedures, and Spill/Release Prevention.

Section I - General Information describes MBL and the administration of this Plan including procedures for the distribution, periodic review, and amendment of the Plan.

Section II - Spill/Release Response Procedures identifies and establishes the response and notification procedures to be used in the event of a spill/release including: steps to be taken when a spill/release is discovered; how to report a spill/release; guidance on mitigation and cleanup of a spill/release and disposal of related waste; and a description of spill/release response equipment maintained by MBL.

Section III- Spill/Release Prevention identifies and establishes policies and procedures to be implemented with the goal of reducing the potential of a spill/release, including: a detailed description of areas of the campus where oil and petroleum products are used and stored; the associated containment systems; a description of the potential environmental receptors that may be affected; procedures for inspecting storage areas or equipment containing oil; delivery/storage procedures; and a discussion and assessment of the potential spill/release scenarios.

Training

Applicable personnel will participate in classroom SPCC training which specifically pertains to the implementation of spill response and prevention procedures. This training will be conducted in accordance with the Training Section of this manual.

Amendments

Amended copies of this Plan will be distributed to applicable personnel and agencies per the distribution list in the Distribution and Review Section of this Plan. The current revision date of the Plan is indicated in the lower left corner of each page.

RESPONSIBILITIES OF THE SPCC TECHNICAL COORDINATOR AND SPCC MANAGEMENT COORDINATORS

The SPCC Technical Coordinator and SPCC Management Coordinator(s) are directly responsible for the implementation of the Plan and all policies and procedures described in this Plan. However, MBL'S Senior Management must ensure resources needed to implement this plan are available. The distribution of the final plan implies SPCC Technical and Management Coordinators have been authorized by MBL to implement this Plan and utilize any resources described within this Plan to minimize the hazards to human health or the environment from a spill/release of oil or petroleum product.

The specific spill prevention and response responsibilities of the SPCC Technical Coordinator include:

- Coordinating all amendments of the Plan;
- Coordinating the SPCC training program;
- Consulting with SPCC Management Coordinators on site-specific SPCC implementation issues;
- Initiating/coordinating incident response and communicating required follow-up actions;
- Assessing human health and environmental hazards and impacts;
- Assessing spill/release to determine if external reporting is required and/or if spill contractor is needed; and
- Conducting follow-up notifications with outside agencies.

The specific spill prevention and response responsibilities of the SPCC Management Coordinator(s) include:

- Ensuring the allocation of necessary resources (e.g. manpower and equipment) to complete site-specific SPCC implementation issues;
- Implementing identified corrective actions;
- Consulting with SPCC Technical Coordinator on spill mitigation/reporting requirements and compliance implications (serves as backup to SPCC Technical Coordinator);
- Communicating issues of concern regarding SPCC implementation to site personnel;
- Site-specific implementation of the SPCC Plan by:
    - Ensuring personnel requiring training are identified, notified and are properly trained;
    - Maintaining appropriate training records;
      Ensuring implementation of operational issues (e.g. integrity testing/tank management, maintenance of oil device inspections, records for 3 years, ensuring that appropriate spill equipment is maintained/available, etc.);
    - Maintaining up-to-date information on site-specific oil storage/use and providing updated information to SPCC Technical Coordinator or designee.

CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION

As required under the proposed amendments to 40 CFR 112 (July 1, 2005) as mandated by the Oil Pollution Act of 1990, MBL has completed a Substantial Harm Determination. A completed Certification of Substantial Harm Determination Form, which demonstrated that MBL's Campus is not a covered facility, is included as Appendix A.

Section II - Spill/Release Response Procedures

The following section describes the emergency procedures and spill/release response procedures to be implemented in the event of a spill at MBL. A Spill/Release Response/Reporting Flow Chart outlining specific steps to be taken in the event of an oil or hazardous material spill/release is presented at the beginning of this Plan. Appropriate MBL personnel must become familiar with this flowchart and utilize it in the event of a spill/release.

USEPA regulations define a spill event as the discharge of oil into, or upon, the navigable waters of the United States or adjoining shorelines, in harmful quantities. Harmful quantities are defined as a discharge that violates applicable water quality standards or causes a sheen upon, or discoloration of, the surface of the water or the adjoining shorelines. Contaminated groundwater may also have the potential to seep, leach, or flow into navigable water which would be included in this definition. Storm sewers are considered to fall under the definition of a “navigable waterway” since storm sewers discharge into a navigable waterway. Because the MBL and town storm water collection system discharges to Eel Pond, Great Harbor, or navigable waters any spill at the MBL which enters the storm water collection system must be considered subject to these regulations. In addition, the Massachusetts Department of Environmental Protection (DEP) regulations, 310 CMR 40.00 establish release reporting/mitigation requirement for certain hazardous materials. According to 310 CMR 40.00, a quantity of hazardous material released to the environment in a 24-hour period that exceeds its designated reportable quantity (RQ) requires the notification of the DEP.

An important facet of an effective response procedure during an oil or hazardous material spill/release incident is to keep the material separated from water to minimize migration and the resulting potential increase in human and environmental exposure. Every effort should be made to prevent spills and contain spills at the source rather than resort to separation of the material from the environment of downstream waters. In the event of any spill which occurs outside of secondary containment or escapes secondary containment, priority must be given to protecting avenues to the surface water/storm water runoff collection system.

DISCOVERY OF A SPILL/RELEASE AND INITIAL RESPONSE

The person(s) discovering a spill/release of oil or hazardous material from a container, tank, or operating equipment should initiate the following actions immediately.

1. Remove All Sources of Ignition

Until the spilled/released material is identified as nonflammable and non-combustible, remove all potential sources of ignition in the area immediately. Vehicles, boilers, and/or generators should be turned off or shut down if possible and if safety permits. If the ignition source is stationary and immobile, attempt, if safety permits, to move or direct the spilled/released material away from the ignition source. Avoid sparks and/or any movement that may create static electricity. Isolate reactive or incompatible materials.

2. For "Incidental"[1] Spills/Released–Attempt to Stop or contain the Spill/Release at Source

Evacuate the immediate area and assure that no danger to human health or hazard exists. Simple procedures, such as turning valves, plugging leaks, and using absorbent material, should be attempted by the discoverer to stop, contain, and/or clean up the spill/release if there is no health or safety hazard and there is a reasonable certainty of the origin of the leak. If possible and if safety permits, following proper safety procedures, the spill/release should be contained by using absorbent materials, containment booms and dikes using shovels and brooms. Consult applicable SDS's for material compatibility, safety, and environmental precautions. The discoverer should also attempt to protect potential environmental receptors, such as floor drains, sumps (e.g., disconnect basement sump pumps), and storm drains, from the spill/release. Sorbent material and/or pads or booms will be placed around floor/roof drains and basement sumps.

If a spill/release occurs outside of a containment area, it is critical that the material is accurately identified and appropriate control measures are taken in the safest possible manner. SDSs for most oil products (Diesel Fuel and Hydraulic Fluid) can be accessed via the EH&S website using MSDS Online.

[1] **"Incidental"** spill/release is defined as a spill/release which meets ALL of the following criteria: 1) personnel are familiar with the hazards associated with the spilled material, 2) containment/response does not pose potential health and safety hazards (e.g., fire, explosion, or chemical exposure), and 3) a small quantity (less than 10 gallons) of material is spilled/released which DOES NOT reach the environment or pose potential health hazards, and 4) spilled/released material can be readily absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate area or by maintenance personnel.

3. For "Non-Incidental"[2] Spills/Releases–Notification and Reporting Procedures

Immediately report all non-incidental spills/releases to the MBL Emergency phone x7911. Staff will then notify the SPCC Technical and appropriate Management Coordinators or designees. The EH&S Office will notify the appropriate Campus SPCC Management Coordinators or designees. In addition, the EH&S Office may also notify other personnel identified on the building/facility specific emergency call list, depending on specific spill circumstances. The SPCC Technical Coordinator or designee will evaluate the situation to determine immediate actions required and may obtain assistance from a spill response contractor to clean up the spill, if necessary.

If there is an immediate threat to human life (e.g., a fire in progress or fumes overcoming personnel), the initial responder will immediately notify the Falmouth Fire Department (FFD) and Falmouth Police Department (in addition to the notifications described above). If an uncontrollable spill/release has occurred and/or if the spill/release has migrated beyond MBL property, the EH&S office in conjunction with the SPCC Technical and Management Coordinators, will request the assistance of the Falmouth Fire Department and a spill response contractor. If EH&S is unavailable the MBL staff can contact the FFD and spill response contractor based upon their assessment of the incident.

[2] "**Non-incidental"** spills include: 1) major spills/release (e.g., greater than 10 gallons of oil) that do **not** reach the environment, or 2) **any** amount of spilled material that reaches the environment.

NOTIFICATION AND REPORTING

1. Internal Notification

In the event of a non-incidental spill/release at the MBL, the discoverer of the spill/release will immediately notify the MBL Emergency Operator x7911. Provide the following spill related information:

1. Location of spill;
2. Material spilled;
3. Amount spilled and source of spill;
4. Description of any personal injury.

The Emergency operator will notify the SPCC Technical and Management Coordinators of all non-incidental spills/releases. Emergency switchboard is staffed on a 24-hour basis, 365 days per year.

SPCC COORDINATORS			
Name	**Office Telephone Number (ext.)**	**Cellular Phone Number**	**Home Telephone Number**
SPCC Technical Coordinator Eric Jensen EH&S Office	7424	(401) 497-9593	(508) 564-9564
SPCC Management Coordinator Marie Russell Facilities Director	7641	(617) 201-2366	
SPCC Management Coordinator William Brosseau Plant Operations	7773	(508) 294-8456	(508) 291-4835
SPCC Management Coordinator Bob Kaski Transportation and Grounds	7326	(508) 958-6310	(508) 958-6310
SPCC Management Coordinator Dave Remsen Marine Research Service Director	7455	(508) 289-7477	(508) 524-3601

2. Reporting to Outside Agencies

If the spill/release exceeds 10 gallons and/or is released to the environment, the **SPCC Technical Coordinator** or designee will assess the need for external reporting and conduct necessary reporting to outside agencies in accordance with the following sections.

SPILL REPORTING REQUIREMENTS			
Quantity of Oil Spilled	**Internal Notifications**	**Local and State Notifications**	**Federal Notifications**
Incidental Spill Several Gallons with no environmental impact and no personal injuries.	No	No	No
Non-Incidental Spill Less than 10 Gallons with no environmental impact with personal injuries.	Yes	No	No
Non-Incidental Spill/Release Oil spill of any size released to the environment (discharge to a sewer, basement sump, storm water drain, soil, or any other environmental receptor).	Yes	Yes Falmouth Fire Department DEP Falmouth Water & Sewer (DPW)	Yes Coast Guard Woods Hole
Non-Incidental Spill/Release Sheen or Discoloration on Navigable Waters or Adjoining Shorelines (including storm water drains).	Yes	Yes[4] Falmouth Fire Department DEP Falmouth Water & Sewer (DPW)	Yes National Response Center Coast Guard Woods Hole EPA Region 1 (notified by NRC)

[4] May be exempt from DEP notification requirements if condition in 310 CMR 40.0317 (21) are met
NOTE: Release to sanitary or combines sewer require notification of Falmouth Water & Sewer (DPW)

3. State and Local Reporting Requirements

If a spill/release exceed the Massachusetts Contingency Plan (MCP) Oil and Hazardous Material List (310 CMR 40.1600) reportable quantity (RQ) for oil (RQ=10 gallons) and enters the environment, the spill must be reported to the Massachusetts DEP within designated time limits. For oil spills exceeding 10 gallons in a 24-hour period, this notification must be made within 2 hours of the spill/release discovery.

In addition, a spill/release that migrates off of the MBL Campus and/or results in personal injury must be reported to the Falmouth Fire Department and the Falmouth Police Department.

A spill/release that enters a storm water drain system or sewer system must be reported to the Massachusetts Water Resource Authority and the Falmouth Water and Sewer Department and Coast Guard, Woods Hole.

STATE AND LOCAL CONTACTS	
Contact	**Phone Number**
Massachusetts DEP Spill Hotline	(888) 304-1133 or (617) 556-1133
Massachusetts DEP Northeast Region Office	(617) 932-7600
Falmouth Fire Department	911 or (508) 548-2325
Falmouth Police Department	911 or (508) 548-1212
Coast Guard, Woods Hole, MA.	(508) 457-3210
Falmouth Water and Sewer	(508) 495-7340 off-hours: (508) 457-2526

4. Federal Reporting Requirements

If a spill/release causes a sheen or discoloration of navigable waters or adjoining shorelines, the spill must be reported to the National Response Center (NRC). The NRC will notify the EPA.

In addition, the spill/release should also be reported, as required by the SARA Title III/Emergency Planning and Community Right-To-Know Act, to the State Emergency Response Commission and Local Emergency Planning Committee.

FEDERAL CONTACTS	
Contact	**Phone Number**
National Response Center	(800) 424-8802
State Emergency Response Commission	(617) 556-1133
Local Emergency Planning Committee (FFD)	(508) 548-7611
Coast Guard Woods Hole, MA.	(508) 457-3210
EPA Region 1	(617) 573-9664

5. Other Emergency Contacts

MBL utilizes Clean Harbors, INC. as the local spill response contractor for spills into a body of water and Veolia Environmental for onsite spills to land. MBL will contact the appropriate contractor for assistance in the response, mitigation, and clean up of a spill or release on campus.

Spill Response Contractors (in order of contact)	
Veolia Environmental, Marlboro, MA. (On-site spills-land)	(800)-354-2382 Dial “1”
Clean Harbors, Inc. Norwell, MA (spills into body of water)	(800) OIL-TANK

SUSTAINED RESPONSE ACTIONS

1. Recover Material Spilled

All waste material shall be recovered into appropriate containers (i.e., 1-gallon containers, open-top 55-gallon drums; or if the size of the spill warrants, into a roll-off container(s)). Appropriate personal protective equipment and clean-up procedures are typically delineated in the Safety Data Sheets (SDSs). In addition, the EH&S Office is available for consultation. Care must be taken when cleaning up spills in order to minimize the generation of additional waste. Combining non-compatible materials can cause potentially dangerous chemical and/or physical reactions or may severely limit disposal options. Compatibility information can be found on SDSs.

When containers are filled after a clean-up, the containers top shall be secured and the container shall be appropriately labeled (or relabeled) identifying the substance(s), the date of the spill/clean-up, and the building/facility name and street location. If the material meets the definition of a hazardous waste, the container must be labeled in accordance with Massachusetts hazardous Waste regulations (310 CMR 30.000). Contact the EH&S Office to help ensure compliance with hazardous waste regulations.

2. Clean-up of Spill Area

Surfaces that are contaminated by the spill/release shall be cleaned by the use of an appropriate cleaning substance. All materials used in the clean-up, including aqueous cleaning substances, must be minimized, contained and properly disposed. Occasionally, porous materials (such as wood, soil, or sorbent) may be contaminated; such materials will require special handling for disposal.

3. Decontaminate Tools and Equipment

All tools and equipment that have been used during a spill response or clean-up effort must be thoroughly decontaminated, even if dedicated to spill response clean-up efforts.

4. Disposal of Waste Materials

Waste material generated during clean-up activities must be characterized in accordance with Massachusetts Hazardous Waste Regulations (310 CMR 30.000). Waste oil and materials contaminated with waste oil are regulated as a hazardous waste (Waste Code: MA01) in Massachusetts. Material that meets the definition of a hazardous waste under 310 CMR 30.000 must be managed and disposed of as a hazardous waste. Representative sampling and analysis may be necessary to make this determination. Material subject to 310 CMR 30.000 must be transported by a licensed hazardous waste transporter in accordance with Department of Transportation (DOT) regulations. Disposal of hazardous wastes will be coordinated by the EH&S Office.

TERMINATION AND FOLLOW UP ACTIONS

1. Notification to Outside Agencies

The SPCC Technical Coordinator or designee shall determine if a reportable spill has occurred (see Notification and Reporting sub-section). Verbal notifications to the appropriate government agencies shall be executed, if necessary. In all cases, where verbal notification is given, a confirming written report shall be sent to the same entity.

2. Incident Documentation

All spills/release must be documented using the EH&S Spill Incident Report contained in Appendix B. The report shall be prepared by the SPCC Technical Coordinator or designee. At a minimum, the report will document the following items:

a. Date, time, and duration of release;
b. Source/cause and total volume of the release;
c. Spill clean-up procedures;
d. Personnel who discovered and/or participated in the spill remediation;
e. Equipment used during the clean- up;
f. Waste quantity and disposal methods per vendor recommendations.
g. Unusual events, injuries, or agency inspections; and
h. Notifications made.

The completed EH&S Spill Incident Report Forms will be maintained at the EH&S Office. A copy of the Spill Incident Report will be forwarded to the Director of Facilities and Chief Operating Officer for review and distribution. This report will remain consistent with MBL's "Incident Report" program.

3. Remediation

For incidents which require continued remediation, clean-up will be the responsibility of the appropriate SPCC Management Coordinator. Typically, an outside environmental consulting firm will be utilized to ensure an effective, compliant remediation. The SPCC Technical Coordinator or designee will assist the SPCC Management Coordinator with the implementation of ongoing remediation efforts.

RESPONSE MANAGEMENT SYSTEM

In the event of a non-incidental spill or release of oil, the person discovering the spill will immediately report it to Emergency Switchboard x7911. Staff will immediately notify the EH&S Manager. The EH&S Manager will be responsible for reporting the spill/release to the appropriate SPCC Management Coordinator. The EH&S Manager (i.e., the SPCC Technical Coordinator) will initiate the response actions and assumes responsibility for the response to the spill/release.

Responsibilities of the EH&S Office Representative (other than the Manager):

- Notifying SPCC Technical Coordinator, appropriate SPCC Management Coordinator and EH&S Manager
- Directing initial response efforts by adhering to protocols/consulting with SPCC Technical Coordinator or designee
- If requested by SPCC Technical Coordinator or designee, contact spill response contractor
- Maintaining a local incident report database

Responsibilities of the SPCC Technical Coordinator or designee:

- Coordinating the implementation and distribution of the Plan
- Conducting the SPCC training program
- Consulting with SPCC Management Coordinators regarding site-specific SPCC implementation issues
- Directing response efforts with assistance of the EH&S Office representatives and the MBL Staff and Plant Operations/ Maintenance Managers assessing human health and environmental hazards and impacts.
- Assessing spill/release to determine if external reporting is required and/or if spill contractor is needed
- Initiating/coordinating incident response and communicating required follow-up actions
- Conducting follow-up notifications with outside agencies

Responsibilities of the SPCC Management Coordinator:

- Ensuring the allocation of necessary resources (e.g., manpower and equipment) to address site-specific SPCC implementation issues
- Implementing identified corrective actions
- Consulting with SPCC Technical Coordinator on spill mitigation/reporting requirements and compliance implications (serves as backup to the SPCC Technical Coordinator)
- Communicating to site-specific contacts SPCC implementation issues of concern
- Site specific implementation of SPCC Plan by:
  - Ensuring personnel requiring training are identified, notified, and properly trained
  - Maintaining appropriate training records
  - Ensuring implementation of operational issues (e.g., integrity testing/tank management, maintenance of oil device inspections/records for three years, ensuring that appropriate spill equipment is maintained/available, etc.)
  - Maintaining up-to-date information on site-specific oil storage/use and providing updated information to SPCC Technical Coordinator or designee

RESPONSE CRITIQUE AND PLAN REVIEW AND MODIFICATION PROCESS

In the event of a spill or release, the SPCC Technical Coordinator and SPCC Management Coordinators shall establish the root cause of the spill, review response efforts, notification procedures, adequacy of response equipment, procedures and vendors, and adequacy of corrective actions taken. Any deficiencies shall be promptly communicated to the Chief Operating Officer of the MBL. Where deficiencies are found, this Plan shall be revised and amended by the SPCC Technical Coordinator. SPCC Management Coordinators will ensure that local corrective actions plans are communicated and implemented.

SPILL/RELEASE RESPONSE EQUIPMENT

Spill/Release Response Equipment, Tools, and Absorbent Material

Various types of equipment, tools and absorbent materials, including pads, booms, and granular spreads are available throughout the campus to be used to respond to spills and leaks. These materials are available in spill kits and cabinets. Specific locations of spill Response Equipment are listed on the following page and supplies can be obtained from the EH&S Office. Locations include but are not limited to: Rooms where generators are located, Mechanical Spaces, Warehouse, Loeb garage, designated service vehicles, MRC Dock, areas containing oil storage tanks (see inventories).

EMERGENCY OIL SPILL CONTAINMENT MATERIALS
Loose absorbent material - to spread on surface
Booms / pads - absorbing oil/liquids and containment
Protective Gloves, neoprene or latex
Goggles
Latex Overboots
Tyvek Coveralls (available through POM office)
Dustpan/brush
Waste bags

Specific Instructions and Response Flowchart are posted at Spill Kit location.

Fire Extinguishers

Portable Fire extinguishers are located throughout the MBL, are well marked, and are easily accessible. Fire extinguishers available on campus include Type ABC, BC, Halon, water, and CO_2. Records are kept on all fire equipment in service and regular testing is performed in accordance with established consensus standards (NFPA 10).

SPILL / RELEASE RESPONSE EQUIPMENT LOCATIONS

20 GALLON OIL SPILL CONTAINMENT KIT LOCATIONS	
CSF	1ST FLOOR ENTRANCE
LILLIE	SHIPPING / RECEIVING
LOEB	GARAGE
SWOPE	LOADING DOCK
5 GALLON OIL SPILL CONTAINMENT KIT LOCATIONS	
ROWE	1st FLOOR MECHANICLA ROOM
LOEB	MECHANICAL ROOM (Roof)
LILLIE	1st FLOOR MECHANICAL ROOM
MRC	4TH FLOOR MECHANICAL ROOM
STARR	4TH FLOOR MECHANICAL ROOM
COTTAGES	WAREHOUSE
FALMOUTH TECHNOLOGY PARK	WAREHOUSE

Contents of 20 Gallon Kit:

2 Absorbent Pillows, 3 x 12 feet Pigs, 8 adsorbent pads, 3 plastic bags, gloves, goggles, booties

Contents of 5 Gallon Kit:

4 adsorbent pads, 5lb loose absorbent, Dustpan/brush, 2 plastic bags, gloves, safety glasses, booties, dust mask

MBL SPCC PLAN

SECTION III - SPILL/RELEASE PREVENTION

This section of the Plan describes where and how oil and petroleum products are used and stored the MBL. Tables listing the individual oil storage tanks and other oil-containing equipment, their respective capacity, construction type, and other specific information are included in the Tables Section of the Plan.

OIL STORAGE TANKS AND OIL-CONTAINING EQUIPMENT

MBL utilizes the following types of oil and petroleum products covered under this Plan:

- Diesel Fuel;
- Hydraulic Fluid;
- Transformer Oil;
- Lubricating Oil;
- Cooking Oil;
- Compressor Fluid; and
- Gasoline.

The oils and petroleum products listed above are used in the following types of applications:

- Emergency Power Generation
- Electrical Transformer;
- Chillers;
- Hydraulic Elevators and Lifts;
- Cooking Equipment;
- Powering Vehicles;
- Power Boats;
- Compressors; and
- Equipment Maintenance Activities.

These oil and petroleum products are stored in:

- Underground storage tanks; Lillie Parking lot opposite POM (2000 & 2,500 Gallon tanks)
- Miscellaneous storage containers (e.g., 55-gallon drums, 5-gallon safety cans); and
- Equipment sumps, reservoirs, associated piping and pumps.
- Above ground storage tank (Rowe-2000 gal.) opposite Speck auditorium.

Oil Storage Tanks

Diesel fuel oil at MBL is used for emergency power generation. The oil is stored in two underground tanks, which are in line with the generator. There is also one above ground oil tank used to store diesel fuel for one of the generators. Emergency generators provide power for emergency lighting, refrigeration, and elevator service. An inventory of the tanks is provided in Table 1.

Oil-Containing Storage Areas

Small Quantities of virgin oil (i.e., hydraulic oil for elevators, cooking oil, oil for vehicles) are stored in drums and other types of containers throughout the campus. Outside near the Main Hazardous Waste Accumulation Area at Lillie building, four 55 gallon drums within covered poly secondary containers store waste oil various mechanical and vehicle maintenance areas. A summary of the information concerning location and storage capacity is included in Table 2.

Oil-Containing Transformers

Of the 7 transformers on the MBL Campus all contain oil. None of the 7 transformers listed contain PCBs. These transformers are typically stored in basement/tunnel electrical vaults, locked storage areas, or outdoors. Capacities range from 50 gallons to 600 gallons. Table 3 details the location and quantity of dielectric fluid contained in each transformer.

Miscellaneous Oil-Containing Equipment

Several miscellaneous types of equipment (i.e., elevators, hydraulic lifts, compressors, vacuum pumps, cooking equipment and trash compactors) have oil storage associated with their operation. There are 11 elevators located on the campus, 9 of which contain hydraulic oil. A typical elevator may contain 60 gallons of hydraulic oil (this varies depending upon the number of stories in the building). These elevators are maintained and serviced by the MBL's maintenance contractor. Table 4a contains a list of the oil-containing elevators on the MBL's Campus.

Table 4b contains a summary list of the miscellaneous oil-containing Plant equipment at the MBL campus.

Table 4c contains a summary list of the oil containing vessels stored in or at Eel Pond Dock Facility behind the MRC Building

Table 4d contains a summary list of the oil containing vehicles operated at the MBL.

CONTAINMENT SYSTEMS

Marine Biological Lab owns and manages numerous properties, as indicated in Table 1. There are two fuel tanks below ground and one above ground. The capacities of these tanks are (2000 gallons and 2500 gallons-below ground) and (2000 gallons-above ground) respectively; these tanks are readily accessible for inspection and are protected from the corrosive effects of the environment associated with direct soil contact.

Oil Storage Tanks

Aboveground tanks, used for oil/fuel storage on campus are provided with secondary containment through the use the building floors and walls and in some cases a dedicated containment system.

Oil-Containing Storage Areas

Oil storage occurs primarily inside of buildings. These are in mechanical areas that are equipped with secondary containment or through the presence of floors and walls that would contain the spill or release of oil and reduce the potential for migration to an environmental receptor. The Main Hazardous Waste Accumulation Area has secondary containment for waste containers.

Oil-Containing Transformers

Oil-containing transformers are generally located outside. Location of the transformers aid in minimizing the migration of oil to environment receptors. That is, there are no storm drains or other direct connections to a water source in close proximity to the transformers.

Miscellaneous Oil-Containing Equipment

Miscellaneous oil-containing equipment, such as hydraulic elevators, compressors, food processing equipment, compactors and vacuum pumps are not equipped with secondary containment systems. However, most of this equipment is located in areas where: the building/structure would provide some secondary containment capacity; or where there is little or no potential for reaching an environmental receptor; or are in small quantities; or in areas where a release from equipment failure would be readily apparent.

POTENTIAL ENVIRONMENTAL RECEPTORS

Although oil storage on campus is contained and managed as described above, MBL has considered the potential environmental receptors for spills or releases. There are two environmental receptors that potentially could be affected, including the sewerage system and areas of surface soils/water. The sewerage collection system in this area consists of the Falmouth Sewer System, which discharges to the Falmouth treatment plant. It also includes a separate storm water system, which discharges directly to the Eel Pond or Great Harbor, which would in turn discharge to Vineyard Sound and Buzzards Bay. The campus grounds are covered by some asphalt or concrete (i.e., roads, walkways and parking lots) or structures (i.e., buildings), however, the majority of the campus consists of open areas in which the small surface water (ponds) or the soil surface, subsurface and groundwater may be impacted by a surface spill or release.

A significant number of the tanks and oil containing equipment on campus are located in basement mechanical rooms. A spill or release in a basement room would typically be contained by the surrounding walls and floor. However, where: floor drains may be present; or a penetration in the concrete floor; or some catastrophic event; a release may reach an environmental receptor. In the event of a release outside of existing containment barriers, priority will be given to protecting the migration pathways that could potentially transport the released material to the storm water collection system.

A spill or release from oil-containing equipment located outside of buildings (i.e., some vehicles, Marine Vessels, transformers, etc.) or a release during refueling operations has the potential to migrate into surface or subsurface or groundwater and Eel Pond, where it could cause environmental contamination. Should this occur, every effort should be made to contain the spill at the source and minimize the potential for the oil to migrate into the environment.

INSPECTION PROCEDURES

In accordance with 40 CFR Part 112, MBL personnel typically conduct weekly and/or monthly visual inspections of oil storage tanks, oil-containing storage areas, transformers and miscellaneous equipment as part of routine operation and preventative maintenance procedures. These inspections are conducted to identify malfunctions, deterioration, operator error, and discharge that may cause or lead to spills of oil. SPCC Management Coordinators will ensure that inspections occur for oil-containing devices and storage areas within their areas of responsibility.

There are 2 underground storage tanks and 1 above ground storage tank used for storing fuel for diesel generators. These tanks are typically inspected on a monthly basis as part of a routine operation and preventative maintenance procedure. Oil storage in elevator systems are typically checked by elevator maintenance contractors during routine preventative maintenance activities. Waste oil being stored in Main Hazardous Waste Accumulation Area (Lillie) is inspected weekly as per RCRA requirements. Transformers and other miscellaneous oil-containing equipment are inspected during routine maintenance procedures.

Inspections

The following are general inspection guidelines employed as part of the inspection program. More specific inspection criteria are presented on the SPCC Inspection Form:

1. All storage tanks and oil-containing equipment will be examined for leaks from seams, rivets, bolts, and gaskets and for signs of deterioration (e.g., discoloration, corrosion, cracks) of the tank vessel, aboveground foundation, and tank structure supports;

2. All associated piping will be checked for dripping, loose joints, damage to supports, and pipe deflection;

3. All connections will be checked for leakage, drainage, tightness, and appropriate capping;

4. All pumps will be checked for evidence of leakage, proper operation, and damage;

5. All storage areas and containment systems will be inspected for integrity and the accumulation of stored product. If oil or petroleum product is observed in the containment system, the source of the oil or petroleum product will be determined;

6. The security of the tanks will be checked (i.e., applicable tank valves and equipment locked and secured, applicable doors to tank or container storage areas locked).

If a problem is detected during an inspection, notification will be made to the appropriate SPCC Management Coordinator. The SPCC Management Coordinator will be responsible for initiating and implementing corrective action to mitigate the problem. The SPCC Technical Coordinator or designee may be consulted and provide assistance, as required.

Inspection Records

All inspections must be documented. These inspection forms will be signed by the Inspector, maintained locally by the SPCC Management Coordinators, and kept on file for a minimum of three calendar years. These inspections will also become part of the POM Preventative Maintenance Program.

Should the inspection reveal an actual or potential for spill or leakage, management representatives and the SPCC Technical Coordinator will be notified immediately.

The majority of fuel tanks on the campus are ASTs used for the storage of oil for machinery or Waste oil. These tanks are typically inspected on a monthly basis as part of a routine operation and preventative procedure. The two USTs are inspected monthly by POM.

Integrity Testing of Storage Tanks

Integrity testing of applicable oil storage tanks will be conducted in accordance with the Massachusetts Board of Fire Prevention Regulations (527 CMR 9.00). A copy of 527 CMR 9.00 is available on file with the EH&S Office.

TRAINING

The following sections describe the SPCC training program to be implemented at the MBL.

MBL Personnel

MBL personnel whose job duties involve the handling or management of oil are required to attend a classroom SPCC training program. Personnel includes: Plant Operation & Maintenance, Security, Shipping & Receiving, Grounds and MRC boat users. This training program is offered by the EH&S Department and includes spill prevention procedures, spill response procedures, spill response equipment, familiarization with applicable environmental, health, and safety hazards associated with oil, compliance with applicable federal, state and local spill laws, and emergency response regulations applicable to the facility. New personnel with job duties that involve the handling or management of oil are to receive SPCC training prior to working unsupervised. This training may be conducted in conjunction with other training programs, such as OSHA Hazard Communication and other EH&S training programs.

Personnel must attend annual “refresher” SPCC training sessions.

Fuel Delivery Truck Drivers

Vendors delivering bulk oil products have provided documentation those drivers have been trained in the applicable portions of 40 CFR 112. SPCC Management Coordinators will update this documentation from their vendors as needed. Additional copies of vendor training documentation will be maintained by the SPCC Management Coordinators or their designees.

EXERCISES/DRILLS

In order to practically evaluate the effectiveness of the SPCC Plan, periodic exercises and drills will be conducted (minimum of one every two years). These drills will attempt to simulate real spill/release scenarios and should test the readiness and preparedness of the responding personnel and agencies. The exercise will involve appropriate personnel who would respond to an actual spill. By conducting mock drills, actual response personnel can determine and correct potential inefficiencies and problems with the SPCC procedures. Departments that may be included in the exercises/drill scenarios are:

- EH&S Office
- Plant Operations and Maintenance Services
- Security Staff
- Transportation Services & Grounds
- Food Service
- The Falmouth Police and Fire Departments
- Spill Response Contractor
- The SPCC Technical Coordinator/ SPCC Management Coordinator

The results of the exercises/drills must be used to refine and improve the SPCC Plan, Spill Response Procedures, Notification Procedures and internal reporting requirements, as well as to evaluate the effectiveness of the spill equipment available. These exercises/drills should be conducted regularly to familiarize maintenance personnel, responding agencies, Police and Fire Departments and the SPCC coordinators with the SPCC Plan.

LOADING/UNLOADING PROCEDURES

Tank truck drivers loading or unloading materials at the MBL shall adhere to the following guidelines:

1. Remain with the vehicle at all times while loading/unloading;

2. Drain the loading/unloading lines to the storage tank and close the drain valves before disconnecting loading/unloading lines;

3. Ensure a drain pan or other appropriate containment device is located under all connections;

4. Inspect the vehicle before departure to ensure all loading/unloading lines have been disconnected and all drain and vent valves are closed; and

5. Immediately report any leakage or spillage, including quantity, to Emergency Phone x7911.

The foregoing instructions are to be accomplished via the sample notice to fuel delivery truck drivers found in Appendix D.

ASSESSMENT OF SPILL/RELEASE SCENARIOS

This section of the SPCC Plan describes how and where oil and other petroleum products are used and stored at the MBL. The potential types of spill/release scenarios, estimated magnitude of spill/release, the probable flow direction of a spill should one occur, and existing secondary containment systems in each area of concern.

Oil Storage Tanks

Two underground oil storage tanks are used at the MBL campus. These tanks are located outside of the Lillie buildings Shipping and Receiving Department under the tar parking lot. Table 1 of this SPCC Plan contains a complete inventory of these tanks.

Potential Spill/Release Scenarios – Scenarios that may involve this tank include: Catastrophic failure of the tank and its dedicated secondary containment resulting in a major spill/release; spill/release occurring during refueling of the tank resulting in a moderate to major spill/release; and a leak in the tank and dedicated secondary containment that results in a minor to moderate spill/release. Typically, the failure of operating equipment associated with a major spill/release would trigger an immediate response and investigation by EH&S and other personnel trained in SPCC requirements.

Potential Environmental Receptors - Release pathways for in ground tanks located outside of buildings include drainage systems; storm drain catch basin; and combined sewer systems. For this type of tank, environmental receptors may include surface or subsurface soils, groundwater, and navigable waterways including navigable waters (Eel Pond Great Harbor, Vineyard sound).

Existing Containment and Safeguards – Both of these tanks are equipped with some form of secondary containment. Types of containment include: double wall tanks; containment structures; and sealed concrete floors for tanks inside of buildings.

Oil-Containing Storage Areas

Numerous oil-containing storage areas, generally comprised of small quantities used for elevators, cooking, vehicles, compressors, pump operation and maintenance are stored in drums and other types of containers throughout the campus. The Main Hazardous Waste Accumulation Area at Lillie stores several types of containers including an AST of separated waste oil from the vehicle maintenance area. A summary of the information concerning location and storage capacity is included in Table 2.

Potential Spill/Release Scenarios - Potential spill scenarios may involve small incidental leaks or releases from storage containers located in the oil storage area that could potentially result in a minor to major spill/release.

Potential Environmental Receptors - Migration pathways for release from oil storage areas include building drainage systems, floor drains, voids in concrete floors or other structural materials and basement sumps. Receptors for oil storage areas include surface and subsurface soils, combined sewer systems, storm drains and catch basins, groundwater and navigable waterways (e.g., Eel Pond, Great Harbor and Vineyard Sound).

Existing Containment and Safeguards - Should a spill or release occur, from an oil storage area, the spill would likely be contained by the physical structure of the room in which the oil is stored. The surrounding structure would minimize the possibility of the migration of oil into the environment. The Main Hazardous Waste Accumulation Area at the Lillie facility is housed in a structure with a secondary containment surrounding the main ASTs.

Oil-Containing Electrical Transformers

Oil-Containing Transformers are typically located outside. Table 3 details the location and quantity of dielectric fluid contained in each transformer.

Potential Spill/Release Scenarios - Oil-Containing Transformers are generally located outside and not in close proximity to an environmental receptor. Typically the failure of operating equipment associated with a major spill/release would trigger an immediate response and investigation by the utility electricians and other personnel trained in SPCC requirements.

Potential Environmental Receptors - Pathways for release of oil from indoor transformers include and cracks or voids in concrete or other structural materials. Released oils from these pathways as well as oil from transformers located outside of buildings can eventually lead to: drainage systems; storm drain catch basin; combined sewer systems; surface or subsurface soils; groundwater; and navigable waterways (e.g., Eel Pond, Great Harbor and Vineyard Sound)

Existing Containment and Safeguards - Should a spill or release occur, the spill would typically be contained by the physical structure of the room/vault surrounding the transformer and would minimize the possibility for the migration of oil to the environment.

Miscellaneous Oil-Containing Equipment

Miscellaneous oil-containing equipment including hydraulic elevators/ lifts, vehicles, marine vessels, compressors, waste compactors, and vacuum pumps are located throughout the campus. This equipment is typically found in multi-story buildings, mechanical rooms, vehicle maintenance areas, MRC dock facility, maintenance shops and laboratories.

Potential Spill/Release Scenarios - Potential spill scenarios may involve small incidental leaks or releases that could result in a minor to moderate spill/release. Typically the failure of operating equipment associated with a spill/release would trigger an immediate response and investigation by EH&S and MBL personnel trained in SPCC requirements.

Potential Environmental Receptors - Due to the diversity of the miscellaneous equipment at the MBL there are several environmental receptors that may be affected in the event of a spill/release. These receptors include storm drains, groundwater and surface or subsurface soil Eel Pond, Great Harbor and Vineyard Sound.

Potential Environmental Receptors -

Most of the miscellaneous equipment is housed inside of buildings. A potential spill/release would likely be contained by the physical structure of the room/area in which the oil is stored. The surrounding structure would act as secondary containment and limit the possibility of the migration of oil into the environment

DETERMINATION OF A WORST CASE DISCHARGE PLANNING VOLUME

For further information please refer to Appendix E.

MARINE BIOLOGICAL LABORATORY

SPCC PLAN

Tables

TABLE 1

STORAGE TANK INVENTORY

FOR EMERGENCY GENERATORS

Building/ Location	Tank Capacity (gals)	Contents	Use	Secondary Containment Description	Approximate Volume of Secondary Containment (gallons)	Possible Spill Scenario	Approximate Distance to Receptors (feet)
Lillie Shipping/ Receiving Driveway (underground#1	2,500	Diesel Fuel	Emergency Generator	Fiberglass Tank Outside Primary Container	2,500	A spill from the tank would be contained within the secondary containment system. If the secondary containment system failed, fuel would enter the soil could seep into Eel Pond	25
Lillie Shipping / Receiving driveway (underground#2	2,000	Diesel Fuel	Emergency Generator	Concrete 32"H x 6'1" x41"	2,000	A spill from the tank would be contained within the secondary containment system. If the secondary containment system failed, fuel would enter the soil could seep into Eel Pond	25
Rowe Building (Above)	2000	Diesel Fuel	Emergency Generator Power	Concrete Vault set on concrete pad	N/A	A leak from tank would be contained by the secondary containment. Concrete enclosure should prevent oil from spilling into soil.	25

TABLE 2

OIL-CONTAINING STORAGE AREA INVENTORY

Building/ Location	Tank Capacity (gallons)	Contents	Use	Secondary Containment Description	Approximate Volume of Secondary Containment (gallons)	Possible Spill Scenario	Approximate Distance to Receptors (feet)
Lillie Main Hazard Waste Storage area Lillie parking lot	4- 55 gallon drums OR Max 220 gallons	Waste Oil	NA	Poly Secondary Containers	100%	A spill from any drum would be contained within the secondary containment. Spills that occur while filling or emptying tanks would travel over asphalt surface to storm drain. And Enter Eel Pond	±75 feet to Eel Pond. ±60 feet to a storm drain that leads to Eel Pond
Field House	10 10	Gasoline Diesel	Vehicle Maintenance Vehicle Maintenance	None	N/A	Materials are stored in containers of 10-gallon size or less; as a result, a large spill is not likely. There is no floor drain in the room.	N/A
Loeb Garage Maintenance area	20	Gasoline	Equipment Maintenance	None	N/A	A leak from the tank would enter floor drain that is connected to the sewer system.	± 10 feet to storm drain
Swope Loading Dock	2- 55 gallon drums	Kitchen Grease and Oil	Waste oil	None	N/A	A leak from the drum would enter the storm drain that would enter into Eel Pond.	±10 feet to closest floor drain

Table 3

OIL CONTAINING TRANSFORMER INVENTORY

Building Name	Indoor/ Outdoor	Capacity (gal)	Use	Secondary Containment/ Volume (g)	Possible Spill Scenario	Approximate Distance to Receptors (feet)	PCB?
C.V. Starr	Outdoor	50	Incoming voltage to facility	N / A	Oil spill would leak into soil		No
MRC	Outdoor	50	Incoming voltage to facility	N / A	Oil Spill would leak into soil		No
Swope	Indoor	50	Incoming voltage to facility	Concrete room	Oil spill would go to Floor Drain	± 20	No
Homestead Quadrangle Side	Outdoor	600	Incoming voltage to facility	N / A	Oil spill would leak into soil		No
Lillie 2 Units Shipping / receiving	Outdoor	550 ea.	Incoming voltage to facility	N / A	Oil spill would leak into soil		No
Loeb / Quadrangle side	Outdoor	600	Incoming voltage to facility	N / A	Oil spill would leak into soil		No

TABLE 4 a

MISCELLANEOUS OIL-CONTAINING EQUIPMENT INVENTORY

Elevators

Building/ Location	Tank Capacity (gallons)	Contents	Secondary Containment Description	Approximate Volume of Secondary Containment (gallons)	Possible Spill Scenario (Note: Some of the hydraulic fluid has been replaced w/ vegetable oil)	Approximate Distance to Receptors (feet)
Rowe Passenger Elevator Machine Room	Est. 60	Hydraulic Fluid	None	N/A	A spill from the hydraulic fluid reservoir would travel to the sump pump which would discharge to Great Harbor	Direct to elevator shaft
C V Starr Passenger Elevator Machine room	Est. 60	Hydraulic Fluid	Room	N/A	A spill from the hydraulic fluid reservoir would travel over hard floor surface to elevator shaft. Where it would be contained. Fluid may also reach Loading dock Receptor	± 10 feet to shaft ± 20 feet to loading dock
Swope Freight Elevator Machine Room	Est. 60	Hydraulic Fluid	None	N/A	A spill from the hydraulic fluid reservoir would travel over a concrete surface to the elevator shaft or to a floor drain at the loading dock	±10 feet to elevator shaft ±20 feet to floor drain
Lillie Passenger Elevator Machine Room	Est. 60	Hydraulic Fluid	None	N/A	A spill from the hydraulic fluid reservoir would travel to sump pump where it would be discharged to Lillie Parking lot and Eel Pond possibly	± 60 feet to Eel Pond
Lillie Freight Elevator Machine Room	Est. 60	Hydraulic Fluid	None	N/A	A spill from the hydraulic fluid reservoir would be contained in pit.	N/A

Building/ Location	Tank Capacity (gallons)	Contents	Secondary Containment Description	Approximate Volume of Secondary Containment (gallons)	Possible Spill Scenario (Note: Some of the hydraulic fluid has been replaced w/ vegetable oil)	Approximate Distance to Receptors (feet)
Lillie shipping/rec. Lift	Est. 60	Hydraulic Fluid	None	N/A	A spill from the hydraulic fluid reservoir would be contained in pit.	N/A
MRC Passenger Elevator Machine Room	60	Hydraulic Fluid	None	N/A	A failure of the hydraulic system could release the fluid onto the elevator pit. It is unlikely there is enough fluid to enable a spill to reach Soil below the pit	N/A
Candle house Passenger Elevator Machine Room	60	Hydraulic Fluid	None	N/A	A spill from the hydraulic fluid reservoir would spill onto adjacent Classroom and be absorbed by carpet There are no drains in the floor.	±40 feet to bathroom drain
ESL Passenger Elevator	60	Hydraulic Fluid	None	N/A	A spill from the hydraulic fluid reservoir would spill onto the first floor	
Loeb Small passenger elevator		N/A Electric				
Loeb Large Passenger elevator		N/A Electric				

TABLE 4 b

MISCELLANEOUS OIL-CONTAINING EQUIPMENT INVENTORY

Building/ Location	Tank Capacity (gallons)	Contents	Use	Secondary Containment Description	Approximate Volume of Secondary Containment (gallons)	Possible Spill Scenario	Approximate Distance to Receptors (feet)
LILLIE Boiler Room	55	Motor Oil	Chiller	Poly Tank	55	A spill of oil would follow concrete to a floor drain.	±8 feet to nearest floor drain
CV STARR 4th Floor Mechanical Room	55	Motor Oil	Chiller	Poly tank	55	A spill of oil would follow concrete to a floor drain.	±8 feet to nearest floor drain
LOEB (2) Roof	55 ea.	Motor Oil	Chiller	Poly Tank	55	A spill of oil would follow concrete to a floor drain.	±8 feet to nearest floor drain
Rowe Mech. Room	55	Motor Oil	Chiller	Poly Tank	55	A spill of oil would go into sump.	±8 feet to nearest floor drain

TABLE 4 c

Marine Vessels Containing Oil at MBL Dock Facility

Marine Vessel Or Vehicle Name / Year	Tank Capacity (gallons)	Contents	Use	Secondary Containment Description	Approximate Volume of Secondary Containment (gallons)	Possible Spill Scenario	Approximate Distance to Receptors (feet)
R/V Gemma 50' Fiberglass	1000 Gal 35 Gal	Diesel Fuel Hydraulic Fluid	Diesel Engine Winch and powerhead	Hull of Vessel	5X Primary Containment	A spill of hydraulic fluid or Diesel Fuel would discharge into Eel Pond	N/A
Boston Whaler 21' Two Vessels	36 Gal	Gasoline	Gasoline Powered engine	Hull	10 X Primary Containment	A spill would leak into Eel pond	N/A
Boston Whaler 16'	24 Gal	Gasoline	Gasoline Powered engine	Hull	10X Primary Containment	A spill would leak into Eel pond	N/A

TABLE 4 d
MOTOR VEHICLES CONTAINING OIL AT MBL

VEHICLE ID / LOCATION	TANK CAPACITY (GAL)	CONTENTS	USER	SECONDARY CONTAINMENT DESCRIPTION	APPROX. VOLUME OF SECONDARY CONTMNT. (GAL)	POSSIBLE SPILL SCENARIOS	APPROXIMATE DISTANCE TO RECEPTORS (FEET)
#04 FORD VAN LOEB GARAGE	35 1.5	GASOLINE MOTOR OIL	BS&G	NONE	N/A	A leak could release fluid into the driveway, which could go to storm drain/eel pond. Leak could go to garage fl. drain	± 40 FEET TO STORM DRAIN
#299 FORD SUPER VAN LOEB PAR LOT	35 1.5	GASOLINE MOTOR OIL	ECO	NONE	N/A	A leak could release fluid into driveway, which could go to storm drain/Eel Pond. Leak could go to garage floor drain	± 40 FEET TO STORM DRAIN
#100 GMC SONOMA P/U ESC PAR LOT	25 1.5	GASOLINE MOTOR OIL	ECO	NONE	N/A	A spill would be on the Asphalt; may contain.	± 20 FEET FROM STORM DRAIN
#95 FORD VAN SWOPE PARKING LOT	35 1.5	GASOLINE MOTOR OIL	FOOD SERVICES	NONE	N/A	A leak/spill would go onto asphalt and possibly go to storm drain	± 40 FEET TO STORM DRAIN
#106 FORD VAN ESC LOT	30 1.5	GASOLINE MOTOR OIL	ESC	NONE	N/A	A leak/spill would go onto asphalt and possibly go to storm drain	
#12 FORD P/U BSTG	30 1.5	GASOLINE MOTOR OIL	BS&G	NONE	N/A	A leak/spill would go onto asphalt and possibly go to storm drain	

VEHICLE ID / LOCATION	TANK CAPACITY (GAL)	CONTENTS	USER	SECONDARY CONTAINMENT DESCRIPTION	APPROX. VOLUME OF SECONDARY CONTMNT. (GAL)	POSSIBLE SPILL SCENARIOS	APPROXIMATE DISTANCE TO RECEPTORS (FEET)
#103 FORD P/U CSF	30 1.5	GASOLINE MOTOR OIL	ARD	NONE	N/A	A spill could reach a storm drain or Eel pond. Asphalt may contain	± 20 FEET FROM STORM DRAIN
#01 FORD P/U CSF	30 1.5	GASOLINE MOTOR OIL	ARD	NONE	N/A	A spill could reach a storm drain or Eel pond. Asphalt may contain	± 20 FEET FROM STORM DRAIN
#297 FORD ECO ROWLEY/PI	30 1.5	GASOLINE MOTOR OIL	ECO	NONE	N/A	A spill would be on the Asphalt; may contain.	± 20 FEET FROM STORM DRAIN
#80 FORD CHERRY PICKER FIELD HOUSE	16 1.5	GASOLINE HYDRAULIC OIL	POM	NONE	N/A	A leak would release fluid into the ground.	
#99 FORD P/U FIELD HOUSE	30 1.5	GASOLINE MOTOR OIL	COTTAGE	NONE	N/A	A leak would release fluid into the ground	
BOBCAT WAREHOUSE	20	DIESEL	COTTAGE	NONE	N/A	A leak would result in fuel on asphault or soil	
#2K FORD P/U CARP. SHOP	30 1.5	GASOLINE MOTOR OIL	POM	NONE	N/A	A leak/spill would go onto asphalt and possibly go to storm drain	± 40 FEET TO STORM DRAIN
FL3 FORK LIFT S&R	1.5	HYDRAULIC OIL	SHIPPING AND RECEIVING	NONE	N/A	A leak would release fluid into the ground.	

VEHICLE ID / LOCATION	TANK CAPACITY (GAL)	CONTENTS	USER	SECONDARY CONTAINMENT DESCRIPTION	APPROX. VOLUME OF SECONDARY CONTAINMENT (GAL)	POSSIBLE SPILL SCENARIOS	APPROXIMATE DISTANCE TO RECEPTORS (FEET)
#111FORD F150 LILLIE	30 1.5	GASOLINE MOTOR OIL	ECO	NONE	N/A	A SPILL OF OIL/GAS WOULD REACH ASPHALT/SOIL UNLIKELY TO REACH STORM DRAIN	± 30 FEET TO STORM DRAIN
#311 FORD VAN BSTG	30 1.5	GASOLINE MOTOR OIL	ECO	NONE	N/A	A SPILL OF OIL/GAS WOULD REACH ASPHALT/SOIL UNLIKELY TO REACH STORM DRAIN	± 30 FEET TO STORM DRAIN
#98 FORD SUPER VAN ESL	30 1.5	GASOLINE MOTOR OIL	ECO	NONE	N/A	A SPILL OF OIL/GAS WOULD REACH ASPHALT/SOIL UNLIKELY TO REACH STORM DRAIN	± 30 FEET TO STORM DRAIN
#11 FORD VAN E350	30 1.5	GASOLINE MOTOR OIL	ECO	NONE	N/A	A SPILL OF OIL / GAS WOULD BE ON ASPHALT OR DIRT	± 30 FEET TO STORM DRAIN
#05 FORD F350 TSG	25 1.5	GASOLINE MOTOR OIL	TSG	NONE	N/A	A SPILL OF OIL / GAS WOULD BE ON ASPHALT OR DIRT	± 30 FEET TO STORM DRAIN
#06 DODGE VAN TSG	30 1.5	GASOLINE MOTOR OIL	TSG	NONE	N/A	A SPILL OF OIL / GAS WOULD BE ON ASPHALT OR DIRT	± 20 FEET TO STORM DRAIN

MARINE BIOLOGICAL LABORATORY
SPCC PLAN

Appendix A
Certification of Substantial Harm Determination Form

CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

Facility Name: **Marine Biological Laboratory**

Facility Address: **7 MBL Street Woods Hole, Massachusetts 02543**

1. Does the facility have a maximum storage capacity greater than or equal to 42,000 gallons and do operations include over water transfers of oil to or from vessels?

   Yes_____ No__X__

2. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility without secondary containment for each above ground storage area sufficiently large to contain the capacity of the largest above ground storage tank within the storage area?

   Yes_____ No__X__

3. Does the facility have a maximum storage capacity greater than or equal to 1,000,000 gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-111) or an alternate formula[1] considered acceptable by the RA) such that a discharge from the facility could cause injury to an environmentally sensitive area as defined in Appendix A?

   Yes_____ No__X__

4. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-111) or an alternate formula[1] considered acceptable by the RA) such that a discharge from the facility would shut down a public drinking water intake?

   Yes_____ No__X__

5. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and within the past 5 years, has the facility experienced a reportable spill in any amount greater than or equal to 10,000 gallons?

   Yes_____ No__X__

[1] If an alternate formula is used, documentation of the reliability and analytical soundness of the alternate formula must be attached to this form.

MARINE BIOLOGICAL LABORATORY
SPCC PLAN

Appendix B
MBL Spill Incident Report Form

MARINE BIOLOGICAL LABORATORY

Spill Incident Report Form

This form is to be completed and retained by the EH&S Office. Copy to be forwarded to Facilities office.

1. Building:_____ Room #/Location: _____
2. Name of person reporting spill/release: _____ ext. _____
3. Time and date of call: _____
4. Brief Description of incident: _____

   _____
5. Date and time spill/release began?_____ Ended?_____
6. Name of oil or material released: _____
7. Quantity released: _____
8. Source of release (e.g., bottle, tank, drum, etc.):_____
9. DESCRIBE:

   Response actions (include if absorbent was used and how waste was handled):

   _____

   _____
10. Were there potential environmental impacts?_____ If yes, list precautions taken:

    _____

    _____
11. Were there any environmental impacts (spill reached drains…)?_____ If Yes, describe:

    _____

    _____
12. List Regulatory Agencies Contacted, name of person, and outcome:

    _____

    _____

EH&S Representative Responding to Incident: _____

MARINE BIOLOGICAL LABORATORY
SPCC PLAN

Appendix C
Inspection Forms

MARINE BIOLOGICAL LABORATORY

SPCC Inspection Form

POM Preventative Maintenance Program

Marine Biological Laboratory

THE UNIVERSITY OF CHICAGO

MBL Underground Storage Tank (UST)

7 MBL St. Lillie and MRC Tanks

Monthly A/B Operator Inspection Checklist

Date of Inspection:

A/B Operator: William Brosseau 125584

Tank # / Size	1 Lillie 2,500 Gal	2 MRC 2,000 Gal	Notes
Release Detection System: Inspect for proper operation.			
Spill Buckets: Ensure spill buckets are clean and empty			
Overfill Alarm: Inspect for proper operation. Can a delivery person hear or see the alarm when activated?			
Fill and Monitor Ports: Inspect all fill / monitoring ports and other access points. Ensure the covers and caps are tightly sealed, locked, labeled, and painted			
Spill and Overfill Response Supplies: Inventory and inspect emergency supplies. Check for deterioration and functionality.			
Piping Sumps: Inspect all visible piping, fittings, and couplings for any sign of leakage. If any product or water is present, remove and properly dispose. Remove any debris. Verify sensor height.			
Level reading Stick			
Level reading Display			
Review Financial Responsibilities:			
Vent Caps: Inspect for proper operation.			
Emergency Shut Off Switch:			
Review Emergency Procedures:			

Signatures

A/B Operator:	**C Operator:**
Date:	

MARINE BIOLOGICAL LABORATORY
SPCC PLAN

Appendix D
Notice to Fuel Delivery Vendors

MARINE BIOLOGICAL LABORATORY

NOTICE TO FUEL DELIVERY VENDORS

Acknowledgment of Responsibility

To prevent the release of hazardous materials to the environment and in accordance with MBL'S Spill Prevention Control and Countermeasures Plan, all tank truck drivers loading or unloading materials at the MBL shall adhere to the following:

1. Remain with the vehicle at all times, and observe the fuel transfer process;
2. Drain the loading/unloading lines to the storage tank and close the drain valves before disconnecting loading/unloading lines;
3. Ensure a proper containment device (e.g., drain pan) is located under all connections;
4. Before departing the vehicle must be inspected to ensure that all lines have been disconnected and all drain and vent valves are closed;
5. Immediately report any leakage/spillage to Emergency phone. X7911
6. All fuel truck drivers must be trained and qualified to clean up and report oil spills to the appropriate agencies. However, all communications must begin by notifying Emergency staff.
7. Fuel Delivery vendors should maintain equipment necessary for the clean-up of incidental spills, drips or leaks on the fuel delivery truck at all times. This can include absorbents, industrial wipers and clean-up containers (for disposed material).
8. Fuel Vendor should attach a list of all MBL owned locations that they service.

INSTRUCTIONS:
MBL personnel responsible for the purchase or management of fuel oil must provide a copy of this form to their vendor(s) on an annual basis. The vendor is to provide a signed acknowledgment to their MBL contact. The MBL's purchaser or manager of the fuel oil must maintain a signed copy of this form. This signed copy must be accessible, upon request, to EH&S personnel or regulatory agents.

ProvidedBy:_____Date:_____
Marine Biological Laboratory Representative (Vendor Contact)

Received and AcknowledgedBy:_____
Vendor's Company Name

_____Date:_____
Authorized Representative

MARINE BIOLOGICAL LABORATORY
SPCC PLAN

Appendix E
Determination of a Worst Case Discharge Planning Volume

MARINE BIOLOGICAL LABORATORY
7 MBL STREET
WOODS HOLE, MASSACHUSETTS 02543

Worst Case Discharge Planning Volume Calculation for Onshore Storage Facilities: Secondary Containment-Multiple-Tank Facilities

A.2 Are *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility *without* secondary containment?

Yes _____ No ____X___

A.2.1 If the answer is yes, the final worst case discharge planning volume equals the *total aboveground oil storage capacity of the facility.*

(1) FINAL WORST CASE VOLUME: ___0_____GAL

(2) Do not proceed further.

A.2.2 If the answer is no, calculate the total aboveground oil storage capacity of tanks without adequate secondary containment. If *all* aboveground oil storage tanks or groups of aboveground oil storage tanks at the facility have adequate secondary containment, ENTER "0" (zero).

0_ GAL

A.2.3 Calculate the capacity of the single aboveground oil storage tank within an adequate secondary containment area or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater, PLUS THE VOLUME FROM QUESTION A.2.2

FINAL WORST CASE VOLUME: 0 **GAL**

* 40 CFR PART 112, APPENDIX D