

Appendix D

Draft Oil Spill Response Plan



DRAFT Oil Spill Response Plan

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PREPARED FOR

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Project No. E159-601

December 2005



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SECTION 1. OSRP QUICK GUIDE (OPTIONAL)

Upon completion of the final OSRP, Cape Wind will include a quick guide that may consist of an emergency contact list and the immediate steps to be taken in the event of a spill.



SECTION 2. PREFACE

a. Table of Contents

Section 1. OSRP Quick Guide (Optional)

Section 2. Preface

- a. Table of Contents
- b. Record of Revisions
- c. Cross-Reference Table

Section 3. Introduction

- a. Companies Covered
- b. Purpose and Use
- c. Types of Leases and ROW Pipelines
- d. Facility Information Statement
- e. Coverage Area
- f. Contract Certification Statement

Section 4. Organization

- a. Qualified Individual
- b. Spill Management Team
- c. Spill Response Operating Team
- d. Oil Spill Removal Organizations

Section 5. Spill Response Operations Center and Communications

- a. Spill Response Operations Center
- b. Communications

Section 6. Spill Detection and Source Identification and Control

- a. Spill Detection
- b. Pipeline Spill Detection and Location
- c. Source Control

Section 7. QI, SMT, SROT, and OSRO Notifications

- a. Reporting Procedures
- b. Company Contact Information
- c. SROT Contact Information
- d. OSRO Contact Information
- e. Internal Spill Reporting Forms

Section 8. External Notifications

- a. Reporting Procedures
- b. External Contact Information
- c. External Spill Reporting Forms

Section 9. Available Technical Expertise

Section 10. Spill Assessment

- a. Locating a Spill
- b. Determining the Size and Volume of a Spill
- c. Predicting Spill Movement
- d. Monitoring and Tracking the Spill Movement

Section 11. Resource Identification

Section 12. Strategic Response Planning

Section 13. Resource Protection Methods

Section 14. Mobilization and Deployment Methods

Section 15. Oil and Debris Removal Procedures

- a. Offshore Procedures
- b. Shallow Water Procedures

Section 16. Oil and Debris Disposal Procedures

Section 17. Wildlife Rehabilitation Procedures

Section 18. Dispersant Use Plan

- a. Dispersants Inventory
- b. Toxicity Data
- c. Dispersant Effectiveness
- d. Application Equipment
- e. Application Methods
- f. Conditions for Use
- g. Approval Procedures and Forms

Section 19. *In Situ* Burning Plan

- a. *In Situ* Burning Equipment
- b. Procedures
- c. Environmental Effects
- d. Safety Provisions
- e. Conditions for Use
- f. Decision Processes
- g. Approval Procedures and Forms

Section 20. Alternative Chemical and Biological Response Strategies (Optional)

- a. Product Inventory
- b. Toxicity Data
- c. Application Equipment
- d. Application Methods
- e. Conditions for Use
- f. Approval Procedures and Forms

Section 21. Documentation

Figure 1. Site Locus

Appendix A. Facility Information

- a. Table 1
- b. Table 2
- c. Table 3

d. Table 4

Appendix B. Training Information

- a. OSRC/IC, SMT, and QI
- b. Other SMT Members
- c. SROT
- d. Location of Records

Appendix C. Drill Information

Appendix D. Contractual Agreements

Appendix E. Response Equipment

- a. Equipment Inventory
- b. Inspection and Maintenance Programs

Appendix F. Support Services and Supplies

Appendix G. Notification and Reporting Forms

- a. Internal Spill Reporting Forms
- b. External Spill Reporting Forms

Appendix H. Worst Case Discharge Scenarios

- a. Worst Case Discharge Scenario Selection
- b. Worst Case Discharge Scenario Discussion
- c. ASA Oil Spill Trajectory Analysis

Appendix I Oceanographic and Meteorological Information for Subregional OSRP's

- a. Oceanographic information
- b. Meteorological information

Appendix J Bibliography

b. Record of Revisions

Date of Review	Person Conducting Review	Reason for Review (biennial update, amendment, or modification)	Sections Affected	Date Next Review Required

c. Cross Reference Table (30 CFR 254)

A cross reference table will be included in the final OSRP, with appropriate references.

SECTION 3. INTRODUCTION

a. Companies Covered

Cape Wind Associates LLC is the sole developer/owner of the project, and will be the sole operator for the facility. Cape Wind has not entered into any type of OCS lease arrangement at this time. Facility support services may include:

- Clean Harbors, Inc. (or other firm with equivalent capabilities) – Spill Response Contractor. Cape Wind will directly respond only to incidental spills. Incidental spills do not pose a hazard to human health or the environment beyond the hazards associated with normal facility operations. These would include minor drips or leaks that are contained within bermed areas, can be easily cleaned and controlled with minimal amount of sorbents, and are not released to the ocean.
- Applied Science Associates, Inc. (ASA) (or other firm with equivalent capabilities) – Marine Science Consulting. Cape Wind will contract ASA or other qualified entity with similar expertise to provide the computer modeling tools necessary to address oil spills, including trajectory analyses.

b. Purpose and Use

This Oil Spill Response Plan (OSRP) has been prepared in accordance with the Department of the Interior Minerals Management Service's (MMS) regulations at 30 CFR 254, "Oil Spill Response Requirements for Facilities Located Seaward of the Coastline." These regulations require owners/operators of oil handling, storage, or transportation facilities located seaward of the coastline to submit a spill response plan to MMS for approval prior to facility operation.

In accordance with the requirements of 30 CFR 254, this OSRP demonstrates that Cape Wind Associates, L.L.C. (Cape Wind) can respond quickly and effectively in the unlikely event that oil is discharged from the facility. As recommended by the MMS, this OSRP is consistent with MMS Notice to Lessee No. 2002-G09, dated October 1, 2002, which includes the Guidelines for Preparing Regional and Subregional Oil Spill Response Plans.

The Cape Wind facility will be in the lowest potential worst-case discharge rating (Rating A: 0 to 1,000 barrels as defined in the regulations at 30 CFR 254 and associated Guidelines). In the unlikely event of a release of oil to the ocean, Cape Wind employees, its contractors, and its responders will refer to this OSRP to ensure that the appropriate spill response actions are taken in a timely manner to prevent impacts to sensitive receptors. It is noted that, although 30 CFR 254 is only applicable to oil storage and usage, Cape Wind has chosen to incorporate additional materials into this OSRP because the corporate response mechanisms and the spill response measures employed would be similar for all materials at the site.

The MMS requires that an OSRP be prepared when a facility goes into operation. The Cape Wind facility is a proposed offshore wind park that is not currently in operation. This draft OSRP has been prepared to the extent possible based on information that is known about the proposed facility. Some of the components of the plan cannot be completed to the extent required under 30 CFR 254 until the facility is closer to beginning operation. Prior to beginning operation, this plan will be modified and completed as appropriate.

c. Types of Leases and ROW Pipelines

Cape Wind will not maintain any leases or ROW pipelines that may involve oil materials.

d. Facility Information Statement

Appendix A, "Facility Information," includes the listing of all Cape Wind facilities covered by this OSRP.

e. Coverage Area

Cape Wind will not own any offshore land as part of the wind farm. Rather, it is expected that the necessary land would be granted for use by the appropriate governmental authorities.

The final OSRP will include a discussion of geographic boundaries for the facility. Information for the project, as proposed, can be found on the Cape Wind Project Locus (Figure 1 attached)

f. Contract Certification Statement

The contracts/agreements provided in this OSRP are representative examples of the contracts that will be in effect prior to facility operation. These agreements will provide immediate access to appropriate spill response equipment and personnel. As of this writing, the primary spill response contractor for the facility will be Clean Harbors. Information on Clean Harbors is provided throughout this OSRP and its appendices. Service agreement letters/contracts are provided in Appendix C.

SECTION 4. ORGANIZATION

The chain-of-command responsibilities in the event of an emergency, including spill team members, contractors, and outside agencies, are identified below and discussed in detail in the following sections. Specific contact information may be provided in Section 1.

Responsible Person, Contractor, or Agency	Purpose	Qualifications	Responsibilities
Cape Wind Qualified Individual (QI) <i>Temporarily designated as Bob Donahoe – QI and alternate to be determined upon project approval and facility construction/operation</i>	<ul style="list-style-type: none"> Acts as the Qualified Individual (QI) and Information Officer (IO) during response. Primary individual responsible for response oversight and coordination 	<ul style="list-style-type: none"> Familiar with facility operations and the OSRP Has authority to implement emergency responses and allocate funds 	<ul style="list-style-type: none"> Notifies external authorities (oral and written notifications) Provides daily incident reports to federal, state, and local authorities Coordinates with first responders, including response contractor Directs Cape Wind personnel during response activities Provide appropriate PPE to Cape Wind personnel Ensures security and safety during response activities Holds daily safety meetings during emergency situations Coordinates proper cleanup, salvage, and recovery
Cape Wind Responders <i>Individuals to be determined prior to facility operation</i>	<ul style="list-style-type: none"> Likely to be the first responders to a release Notify QI of spill and assist in spill response 	<ul style="list-style-type: none"> Familiar with facility operations and the OSRP 	<ul style="list-style-type: none"> Conduct initial emergency assessment Activates the emergency response system Provides the QI with information regarding the release Assists contractor with spill response, as appropriate Attends daily safety meetings during emergency situations
Spill Response Contractor <i>Expected to be Clean Harbors or other firm with equivalent capabilities</i>	<ul style="list-style-type: none"> Likely to serve as the Oil Spill Response Coordinator (OSRC)/Incident Commander (IC) Provide primary response and cleanup services 	<ul style="list-style-type: none"> Familiar with facility operations and the OSRP Familiar with off-shore response requirements Has equipment and manpower necessary to respond to any level of oil spill at Cape Wind 	<ul style="list-style-type: none"> Work with USCG and local authorities to provide proper cleanup, salvage, and recovery
Cape Wind Public Relations Staff	<ul style="list-style-type: none"> Interact with media and general public during emergency situations 	<ul style="list-style-type: none"> Familiar with facility operations and the OSRP Has reputation for clarity and honesty in dealing with media and public 	<ul style="list-style-type: none"> Issue daily press release during response events Conduct media interviews Respond to public concerns/inquiries
Environmental Regulatory Compliance Consultant <i>Expected to be ESS Group, Inc. or other firm with equivalent capabilities</i>	<ul style="list-style-type: none"> Provide regulatory compliance consultation 	<ul style="list-style-type: none"> Familiar with facility operations and local spill/response regulations 	<ul style="list-style-type: none"> Provided regulatory compliance assistance to Cape Wind, as requested

Responsible Person, Contractor, or Agency	Purpose	Qualifications	Responsibilities
Trajectory Analysis and Modeling Firm <i>Expected to be Applied Science Associates, Inc. or other firm with equivalent capabilities</i>	<ul style="list-style-type: none"> Provide trajectory analysis consultation 	<ul style="list-style-type: none"> Familiar with facility and knowledgeable in the field of oil spill response and trajectory analysis 	<ul style="list-style-type: none"> Provided trajectory analysis assistance to Cape Wind, as requested
USCG/NRC	<ul style="list-style-type: none"> Oversee spill response activities in open water 	NA	<ul style="list-style-type: none"> Attend safety and spill response briefings during emergencies Ensure that spill response activities are completed in an environmentally sound and expeditious manner Work with NOAA to ensure impacts are minimized Provide fire response, if necessary
NOAA	<ul style="list-style-type: none"> Provide technical information during response activities 	NA	<ul style="list-style-type: none"> Assist USGC in ensuring that shorelines and sensitive receptors are not adversely impacted
MA State Police	<ul style="list-style-type: none"> Assist in security during emergency situations 	NA	<ul style="list-style-type: none"> Provide on-shore access control, crowd control, and traffic control
MADEP and SERC	<ul style="list-style-type: none"> Support response activities 	NA	<ul style="list-style-type: none"> Provide on-shore response-related activities, such as cleanup, salvage, and recovery
Local Resources/Agencies (for example, Harbor Masters)	<ul style="list-style-type: none"> Support response activities 	NA	<ul style="list-style-type: none"> Provide information on natural resources Provide hospital/EMS services for injured Provide additional law enforcement assistance Provide additional fire services Provide additional on-shore response assistance (LEPC)
Cape Cod Commission	<ul style="list-style-type: none"> Act as an information liaison between Cape Wind and local towns 	NA	<ul style="list-style-type: none"> Work with locals towns for information exchange during a spill event

a. Qualified Individual (QI)

At this time, during the project development stage, Bob Donahoe (Vice President, Environmental Services) is designated as the temporary QI. Since the facility is in the preliminary development and approval stage, spill response is not necessary. Rather, his primary duties consist of ensuring the facility is developed in an environmentally sound manner that minimizes impacts to the environment. As Vice President, Environmental Services, Mr. Donahoe has full authority to obligate funds, implement response actions, and immediately notify appropriate federal officials and response organizations.

Upon project approval by the Minerals Management Service (MMS) and the US Army Corp of Engineers (USACE), Cape Wind will secure financing, appropriate staff, initiate design and construction. Prior to operation, Cape Wind will designate an appropriate individual to serve as the QI. This person will have full authority to obligate funds, implement response actions, and immediately notify appropriate federal officials and response organizations.

See Appendix B, "Training Information," for a description of the training the QI will receive.

b. Spill Management Team (SMT)

The Cape Wind facility is not yet approved, nor is it operational. When MMS and USACE approval is granted, Cape Wind will structure a spill management team (SMT) using National Interagency Incident Management System (NIIMS) format:

- Command – Sets objectives and priorities and has overall responsibility at the incident or event
- Operations – Conducts tactical operations to carry out the plan, develops tactical objectives, and directs all organizational and equipment resources
- Planning – Develops the action plan to accomplish the objectives, collects and evaluates information, and maintains the situation and resource status
- Logistics – Provides support to meet incident needs, provides resources and all other services needed to support the incident
- Finance/Administration – Monitors cost related to the incident and provides procurement

Prior to commencing operation, Cape Wind will submit a final OSRP that includes the names and describe the duties, responsibilities, and authorities of each SMT member. Sufficient SMT members will be designated and available such that the duties of each individual position on the SMT can be fulfilled on a 24-hour per day basis. Cape Wind will have sufficient equipment and personnel to respond to incidental emergencies at the facility. In the event of any large-scale incident, Cape Wind will enlist the services of outside responders, in particular the response contractor. The Cape Wind QI has full authority to ensure that any incident-related costs will not hamper an incident response at the facility.

The SMT will include a designated trained oil spill response coordinator (OSRC)/ Incident Commander (IC) and alternate, who will be delegated responsibility and authority to direct and coordinate response operations. Because Cape Wind does not plan to allow its employees to fully respond to spills, it is expected that the OSRC/IC will be an employee of the spill response contractor.

A sample letter of intent to provide services from Clean Harbors is included in Appendix D, "Contractual Agreements." Upon project approval and design, Appendix A will include the terms and conditions of spill agreements/contracts between Cape Wind and the designated spill response contractor.

See Appendix B, "Training Information," for a description of the training the SMT members will receive.

c. Spill Response Operating Team (SROT)

The Cape Wind facility is not yet approved, nor is it operational. When MMS and USACE approval is granted, Cape Wind will structure a SROT that consists of trained individuals who are available on a 24-hour per day basis. Cape Wind will have sufficient equipment and personnel to respond to incidental emergencies at the facility. In the event of any large-scale incident, Cape Wind will enlist the services of outside responders, in particular the response contractor. The Cape Wind QI has full authority to ensure that any incident-related costs will not hamper an incident response at the facility.

Prior to commencing operation, Cape Wind will submit a final OSRP that includes the names and describe the duties, responsibilities, and authorities of each SROT member. Sufficient SROT members will be designated and available such that the duties of each individual position on the SROT can be fulfilled on a 24-hour per day basis. Cape Wind will identify organizations that will be relied upon to provide personnel for this team and include the number and types of personnel available from each. Because Cape Wind

does not plan to allow its employees to fully respond to spills, it is expected that the SROT will consist primarily of employee of the spill response contractor.

A sample letter of intent to provide services from Clean Harbors is included in Appendix D, "Contractual Agreements." Upon project approval and design, Appendix A will include the terms and conditions of spill agreements/contracts between Cape Wind and the designated spill response contractor.

d. Oil Spill Removal Organizations (OSRO)

Identify and describe the OSROs who will provide oil spill response materials and supplies, equipment, and dedicated vessels to you in the event you have an oil spill. The supplied equipment and materials will be of sufficient quantity and recovery capacity to respond effectively to oil spills from the facilities and leases covered by your regional or Subregional OSRP.

Appendix E, "Response Equipment," provides an inventory of Clean Harbors' available equipment and materials. A sample letter of intent to provide services from Clean Harbors is included in Appendix D, "Contractual Agreements." Upon project approval and design, Appendix A will include the terms and conditions of spill agreements/contracts between Cape Wind and the designated spill response contractor. Appendix F, "Support Services and Supplies," provides a directory of spill responder services that is expected to be available to Cape Wind upon operation.

SECTION 5. SPILL RESPONSE OPERATIONS CENTER AND COMMUNICATIONS

a. Spill Response Operations Center

Cape Wind's primary location for its Operations Center is planned to be within the inner harbor of Falmouth (Latitude 041° - 32' - 34.9, Longitude 070° - 36 - 25.7"). When the exact location is confirmed, a map designating the facility location will be provided in the final OSRP document. A potential alternative location would be within the Parker's River area in the Town of Yarmouth.

The operations center will be the incident command post for tactical operations and coordinating spill response. Cape Wind will rely on the response contractor for providing all spill response resources. The following describes the key steps in spill response and identifies the measures that will be in place to ensure impacts are minimized.

b. Communications

Communication systems such as telephones, mobile phones, radio communications, and pagers, may be used during a spill event. All employees will be provided with mobile communication devices during work hours. Additional communication devices (telephones, fax machines, computers, etc.) will be located in the Operations Center. Contact information for response team members will be provided in the quick reference guide (Section 1).

Alarms, monitoring devices and level gauges will be provided to indicate if there is an equipment malfunction or loss of fluids from the ESP platform, or if there is a problem with one of the wind turbines. These alarms are monitored in the Operations Center.

SECTION 6. SPILL DETECTION AND SOURCE IDENTIFICATION AND CONTROL

a. Spill Detection

Cape Wind's primary objective is to minimize facility impacts as much as feasible. This includes impacts to the environment, personnel health and safety, and sensitive areas. Other operational response objectives include responding to any incident as quickly and efficiently as possible and ensuring the safety of response personnel, through training and equipment. The procedures identified in this OSRP are provided in order to ensure that Cape Wind meets all of these objectives.

During normal sea conditions, Cape Wind will make routine maintenance visits to the off-shore facility; anticipated at least three days per week to the ESP and five days a week to various sections of the wind farm. During these visits, Cape Wind staff will conduct routine maintenance and assess the equipment for any evidence of leaks, damages, or other problems. Due to the frequency of off-shore visits, it is likely that Cape Wind will be the initial responder in the event of a release.

Any Cape Wind employee detecting a release will immediately notify the QI. The QI will then assess safety precautions, initiate response procedures (including contacting response contractors), and make oral notifications to required agencies. A list of such agencies is provided in the Emergency Contact List provided at the front of this OSRP.

b. Pipeline Spill Detection and Location

There will be no oil-containing pipelines associated with the Cape Wind facility.

c. Source Control

As previously mentioned, the 33 kV inner-array cables and the 115 kV submarine transmission cables are specially designed for marine environments and will not require pressurized dielectric fluid circulation for insulating or cooling purposes. For the ESP and wind farm, the following measures ensure that spills are minimized and spill detection, response, and control will be conducted in a timely manner to minimize shoreline impacts:

- All equipment and storage tanks are designed to minimize the possibility of discharges or releases and are equipped with secondary containment.
- The ESP houses spill response equipment including spill pads, kits, and socks, which can be used for minor spills or releases.
- Alarms and monitoring devices are used to identify material losses in tanks and equipment.
- Cape Wind will use oils that are lighter than water to aid in on-water recovery techniques.
- Cape Wind will maintain work boats and response equipment at the Operations Center allow for quick response.
- A response contractor will be contracted to conduct all response and recovery procedures, using Cape Wind staff and resources as appropriate.
- ASA (or other firm with equivalent capabilities) will be contracted to assist in trajectory analysis. ASA has conducted an oil spill trajectory analysis based upon preliminary information to assist in project planning and regulatory review. The trajectory analysis will be part of Appendix H.
- Cape Wind will visit the ESP at least 3 days each week and various locations in the wind farm at least 5 days per week.
- Cape Wind will follow the spill response procedures stabled in the EIS (to be added upon final EIS issuance).

SECTION 7. QI, SMT, SROT, AND OSRO NOTIFICATIONS (INCIDENTAL SPILLS)

a. Reporting Procedures

Incidental oil spills are those that do not pose a hazard to human health or the environment beyond the hazards associated with normal facility operations. These would include minor drips or leaks that are contained within bermed areas, can be easily cleaned and controlled with minimal amount of sorbents, and are not released to the ocean.

In the event of an **incidental spill**, the Cape Wind employee who discovers the spill will contact the Cape Wind QI (or alternate QI if the QI is not available). This contact will likely be made using pre-determined radio frequency communication. The QI will then be responsible for contacting the appropriate SMT and SROT members. Since incidental spills are not released to the ocean, the use of outside contractors will not be required. Incidental spills do not require reporting to federal, state, or local authorities, but should be recorded on internal spill logs.

In the event of a **non-incidentaI spill of any size**, additional reporting procedures will be required. These procedures are defined in Section 6.0.

It is noted that the spill response procedures for all spills is identical, although the method of spill clean-up will vary depending on spill size and sea state.

b. Company Contact Information

Contact information (work address, work and off-duty telephone numbers, fax number, etc.) for the QI, alternate QI, and other company staff will be provided in the quick reference Section 1.

c. SROT Contact Information

Contact information (work address, work and off-duty telephone numbers, fax number, etc.) for the SMT and SROT members will be provided in the quick reference Section 1.

d. OSRO Contact Information

Cape Wind will be primarily responsible for the first response and for the initiation of the emergency response system. Financial burden for spills that are the responsibility of Cape Wind will be incurred by Cape Wind. If appropriate, additional response actions may be provided by private, federal, state, and local agencies. A list of response agencies is provided below. Roles, qualifications, and responsibilities are provided in Section 4, and additional details regarding support services and capabilities are provided in Appendix F, "Support Services and Supplies." Contact Information will be provided in the quick reference in Section 1, where appropriate.

Private Resources

- Emergency response contractor
- Public relations representative
- Local airstrips
- Local aircraft rentals
- Local boat launches

- Local boat rentals

Federal Resources/Agencies

- Response and restoration agencies
- Fire and rescue services

State Resources/Agencies

- Law enforcement
- Response and restoration agencies

Local Resources/Agencies

- Natural resources
- Environmental
- Law enforcement
- Fire services
- Hospitals/EMS
- Emergency planning/LEPC

e. Internal Spill Reporting Forms

Non-incidentals spills (such as controlled leaks inside a berm) would not require implementation of this OSRP, since there would be no oil released to the ocean. These spills may be recorded in the company maintenance log. All other spills requiring external notification and are discussed in Section 8. External and internal spill incident forms for reportable spills are provided in Appendix G, "Notification and Reporting Forms."

SECTION 8. EXTERNAL NOTIFICATIONS (NON-INCIDENTAL SPILLS)

a. Reporting Procedures

Non-incident oil spills are those that may pose a hazard to human health or the environment beyond the hazards associated with normal facility operations. Any spill that results in any quantity of oil being released to the ocean will be considered a non-incident spill and will be reportable.

Oral Notifications

In the event of a **non-incident spill of any size**, the Cape Wind employee who discovers the spill will contact the Cape Wind QI (or alternate QI if the QI is not available). If the first responder is not a Cape Wind employee, the first responder should contact the Operations Center or any Cape Wind employee to report the spill, or should contact the NRC directly to ensure that Cape Wind is informed of the spill. The QI will contact the following individuals to assist in spill response, as appropriate:

- The response contactor (for example Clean Harbors) for spill control and cleanup
- The trajectory analysis and modeling firm (for example Applied Science Technologies, Inc.) for trajectory analysis
- The environmental compliance consultant (for example, ESS Group, Inc.) for regulatory guidance

Certain non-incident spills are also required to be reported to federal, state, and local authorities. The following lists the external agencies that may be required to be notified in the event of a release.

- USCG/NRC for all oil spills to the ocean
- MMS GOMR for oil spill of one barrel or more
- Massachusetts Department of Environmental Protection for oil spills that may impact shorelines
- MA State Police for any spill that requires onshore security
- Local Authorities (Harbor Master) for oil spills that may impact shorelines

To reduce duplicate reporting of spills, MMS has arranged with the National Response Center to forward reports of offshore spills to the MMS. The MMS only requires direct notification for spills of one barrel or more.

Written Notifications

During the course of an emergency event, Cape Wind will maintain a chronicle of events and response activities. This chronicle will be used to develop daily incident updates and final written release reports. The chronicle will be maintained at the Operations Center and will become a part of Cape Wind's permanent environmental files.

Each day of the response activities, Cape Wind will issue an incident report/update to the appropriate responding authorities. This report will be based on the chronicle log and will include a summary of the prior days efforts and results, summaries of resources at risk, predicted trajectories, and weather and tide predictions. This daily log is not intended for direct public release, but is meant to keep federal, state, and local authorities informed on response progress.

In order to address public concerns, Cape Wind (with guidance from its public relations representative), will provide daily press reports regarding the status of the response activities and

potential concerns. Any additional media or general public inquiries will be directed to the public relations representative.

During a spill event that requires implementation of this OSRP (i.e., for non-incidentals spills), written notifications to federal, state, and local authorities may be required. In such cases, written notifications will be made on agency forms and will include the requested information. If there is no agency form, the written report (if required) will include at least the following information:

- Name, address, and telephone of facility owner or operator
- Date and time of incident
- Name and quantity of materials involved
- The extent of injuries, if any
- Complete description of the circumstances causing the release, including potentially responsible parties
- An assessment of hazards to human health or the environment (e.g., shorelines), if applicable
- Description of containment and removal operations
- Description of any third party damages
- Procedures instituted or planned to prevent a similar event from recurring

b. External Contact Information

Contact information for all individuals/authorities, and timelines for reporting spills will be provided in the quick reference guide in Section 1. All individuals and agencies identified in Section 8.a. will be included. Appendix F provides a list of additional personnel, materials and supplies, equipment, and services.

c. External Spill Reporting Forms

Sample external spill reporting forms, consistent with those required by federal, state, and local agencies are provided in Appendix G.

SECTION 9. AVAILABLE TECHNICAL EXPERTISE

There are a number of resources available that can provide useful information in the event of a release. Some of those resources are listed below.

Resource/Agency	Information Provided
National Ocean Service (NOS) Map Finder	Images and data including coastal aerial photography, nautical charts, coastal survey maps, environmental sensitivity index atlases, hydrographic survey outlines, historical maps, water level station data, geodetic control points, and estuarine bathymetry data
NOAA National Weather Service	Weather data, forecasts, warnings, and current conditions
Weather.gov	Weather watches, warnings, forecasts, and current conditions
NOAA Marine Prediction Center	Forecasts for oceans including real-time buoy observations
NOS Center for Operational Oceanographic Products and Services	Observation and predictions of water levels and currents
US Fish and Wildlife Service	Assistance in sensitive receptor and resource identification for oil spills that reach shorelines
National Marine Fisheries Service	Assistance in sensitive receptor and resource identification for oil spills that reach shorelines

The quick reference guide in Section 1 provides internal and external contacts that may be useful in the event of a release. Names, telephone numbers, and addresses of federal, state, and local agencies will be included in this list along with Cape Wind's spill response and environmental assistance contractors/consultants. Individuals and agencies expected to be listed in the quick reference guide include Cape Wind staff, SMT and SROT member, spill responders, trajectory analysis and modeling firms, environmental consultants, and federal agencies (U.S. Fish and Wildlife Service, National Marine Fisheries Service, USCG), state agencies, and local agencies.

SECTION 10. SPILL ASSESSMENT

a. Locating a Spill

During normal sea conditions, Cape Wind will make routine maintenance visits to the off-shore facility; anticipated at least three days per week to the ESP and five days a week to various sections of the wind farm. During these visits Cape Wind staff will conduct routine maintenance and assess the equipment for any evidence of leaks, damages, or other problems. Due to the frequency of off-shore visits, it is likely that Cape Wind will be the initial responder in the event of a release.

Additional spill location expertise, such as overhead detection, will be obtained from the spill response contractor.

b. Determining the Size and Volume of a Spill

It is expected that a spill would be first detected by a Cape Wind employee either via an equipment alarm or during routine maintenance visits. In such cases, Cape Wind will rely on good engineering practices and equipment-specific information, such as equipment oil storage capacities and estimating the amount of oil remaining in the equipment, to determine the amount of oil spilled.

In the event that site-specific information does not provide a good estimate of the volume of the spill, Cape Wind will rely on the response contractor to conduct an assessment of the size and volume of the oil spill. Assessment methodology, including charts or other aids used in this process, are provided in Appendix G.

c. Predicting Spill Movement

- Cape Wind will rely on qualified professional marine engineering consultants such as Applied Science Associates, Inc. (ASA) to conduct real-time oil spill trajectory simulations. ASA has extensive experience with oil, chemical, and sediment transport simulation and have national and international technical standing in their field. The input variables required (e.g., wind, current, sea state, spill size), the means by which this information will be obtained, and the communications network for the transmission of the information is provided in Appendix H. ASA has conducted an oil spill trajectory analysis based upon preliminary information to assist in project planning and regulatory review. The trajectory analysis will be attached as Appendix H.

d. Monitoring and Tracking Spill Movement

Cape Wind will rely on qualified professional marine engineering consultants such as Applied Science Associates, Inc. (ASA) and the experience of the spill response contractor to track and monitor the movement of an oil spill. The input variables required (e.g., wind, current, sea state, spill size), the means by which this information will be obtained, and the communications network for the transmission of the information is provided in Appendix H. The result of the oil spill trajectory analysis completed by ASA based upon preliminary information will be provided in Appendix H.

SECTION 11. RESOURCE IDENTIFICATION

Numerous field investigations, studies, inquiries with natural resource agents, and research of existing resource mapping have been completed or obtained for the ACOE DEIS. This data will be incorporated into this ORSP after finalization of the EIS and prior to operation of the facility.

SECTION 12. STRATEGIC RESPONSE PLANNING

Cape Wind's response priorities and strategies are simple. Initial objectives are to ensure adequate safety measures and respond to the spill in a timely manner. A regionally recognized emergency response contractor will be used to ensure timely response and recovery. Because of these quick response times and the type of materials used, it is not expected that releases will impact sensitive areas and species. In the unusual event that impact to sensitive areas or wildlife occur, Cape Wind will dedicate the necessary resources (with assistance from the response contractor) and will work with federal, state, and local authorities to fully remedy the impacts.

The response procedures to be established in the final OSRP will ensure that all releases are quickly identified, addressed, and recovered. The final OSRP will also include procedures to prioritize beaches, waterfowl, other marine and shoreline resources, and areas of special economic or environmental importance.

SECTION 13. RESOURCE PROTECTION METHODS

Cape Wind is dedicated to protecting the nearby beaches, waterfowl, wildlife, marine and shoreline resources, and other areas of special economic or environmental importance. Because of the type of oil used at the off-shore site, spilled materials are expected to float and will be easily recoverable via mechanical methods. Response times are expected to be quick and will ensure that oils do not reach sensitive areas.

A key step in the initial response actions is the determination of whether shorelines require protection. Cape Wind will be responsible for making this assessment, with assistance from the response contractors, environmental and civil engineering consultants, and a marine and freshwater environmental modeling firm.

The oils used at Cape Wind are lighter than water and exhibit less harmful characteristics than crude oils that are typically transported on passing sea vessels. Due to short response times, spilled oil is expected to be easily collected. Initial assessment and defensive response actions are expected to occur within two hours of spill detection and full spill response is expected to occur within eight to twelve hours.

In the event of a release that has the potential for shoreline impacts, Cape Wind and the response contractors will employ all available resources to prevent oil from reaching the shore and limit the damage to potentially affected areas. Such resources may include the use of exclusion booming, to keep oil out of a sensitive area, or deflection booming, to divert oil away from a sensitive area or toward a collection point.

Should shoreline cleanup operations become necessary, Cape Wind will work with federal, state, and local authorities to ensure that appropriate techniques are employed in a timely and environmentally-sensitive manner. Such techniques may include:

- Natural recovery
- Manual removal
- Mechanical removal
- Collection with sorbents
- Vacuum
- Sediment reworking/tilling
- Vegetation cutting/removal
- Water washing
- Sand blasting

The response procedures established in this OSRP ensure that all releases are quickly identified, addressed, and recovered. In the unusual event that impact to sensitive areas or wildlife occur, Cape Wind will dedicate the necessary resources (with assistance from the response contractor) and will work with federal, state, and local authorities to fully remedy the impacts.

SECTION 14. MOBILIZATION AND DEPLOYMENT METHODS

Quick mobilization is a key component to response and recovery. In order to minimize the initial response time, Cape Wind will maintain work boats and response equipment at the Operations Center. This will allow initial assessment and defensive response actions to occur within approximately two hours of spill detection and full spill response to occur within approximately eight to twelve hours of spill detection.

Cape Wind has allocated resources and established an emergency response system that will ensure that adequate containment equipment, recovery equipment, and response personnel are mobilized and deployed at the spill site and projected impact locations. To ensure the shortest possible response time, Cape Wind will stock spill equipment at its Operation Center and will use a local response company to provide emergency response and cleanup. The route to the off-shore facility is essentially a direct one.

All emergency response (other than cleanup of incidental leaks and spills) will be conducted by the response contractor. Appendix D provides Cape Wind/Clean Harbors spill response and recovery equipment. Appendix E provides available services and supplies.

SECTION 15. OIL AND DEBRIS REMOVAL PROCEDURES

a. Offshore Procedures

A response contractor will be fully contracted for the containment and removal of oil and contaminated spill debris from offshore waters. The response contractor will also be contracted to collect and return the waste debris to the appropriate disposal facility. Bladders will be used to collect the spilled oil. If necessary, fractionization tanks and/or barges will be used for temporary storage of liquid wastes. For example purposes, Clean Harbors' response and containment procedures are provided in Appendix C. Response equipment information is included in Appendix D.

b. Shallow Water Procedures

A response contractor will be fully contracted for the containment and removal of oil and contaminated spill debris from offshore waters. The response contractor will also be contracted to collect and return the waste debris to the appropriate disposal facility. Bladders will be used to collect the spilled oil. If necessary, fractionization tanks and/or barges will be used for temporary storage of liquid wastes. For example purposes, Clean Harbors' response and containment procedures are provided in Appendix C. Response equipment information is included in Appendix D.

It is noted that it is not expected that oil spills will reach the shoreline, due to the type of oil, the secondary containment provisions, and the availability for quick response. Once specific shoreline habitats are determined, the procedures suggested by the spill response contractor will be followed.

SECTION 16. OIL AND DEBRIS DISPOSAL PROCEDURES

Decanting is the process of draining off recovered water from portable containers to increase the available storage capacity of recovered oil. When decanting is conducted properly, most of the oil can be removed from the water. In accordance with 33 CFR 153.301 and 40 CFR 300, decanting is considered an "incidental discharge" and does not require an additional permit or constitute a prohibited discharge. However, additional authority approval is necessary prior to decanting during oil recovery. Should decanting be deemed necessary during response operation, the response contractor (on behalf of Cape Wind) will request the authority to conduct such operations.

The response contractor is responsible for collecting and transporting any recovered materials from emergency operations. The response contractor will be a full service contractor and permitted hazardous waste transporter capable of transporting materials both off-shore and on-shore.

Any material that is gathered during the emergency response activities will be properly stored and disposed in accordance with state and federal waste regulations. The quantities of waste materials are expected to be minimal, and the following locations have been established for the storage of recovered materials until the ultimate disposition:

- Locations to be determined

These areas are authorized to accept the types of materials that may be collected due to a release from Cape Wind, have adequate space for recovered materials, and are provided with secondary containment.

SECTION 17. WILDLIFE REHABILITATION PROCEDURES

The final OSRP will include a discussion of wildlife mitigation procedures. Information for potential impacts to local wildlife due to the proposed project, can be found in Section 6.0 of the Cape Wind DEIS.

SECTION 18. DISPERSANT USE PLAN

Because of the type of oil used, the quick response time, and the limited potential to reach sensitive areas, the use of dispersants would not be appropriate. Such materials may be more harmful than the oil released, would not be expected to reduce sensitive area potential impacts, and would not be expected to increase the likelihood of recovery.

SECTION 19. IN SITU BURNING PLAN

Because of the type of oils used (flash point > 275°F for mineral oil), the quick response time, and the limited potential to reach sensitive areas, the use of in situ burning methods would not be appropriate. In situ burning would be more harmful to the environment than the oil released, would not be expected to reduce sensitive area potential impacts, and would not be expected to increase the likelihood of recovery.

SECTION 20. ALTERNATIVE CHEMICAL AND BIOLOGICAL RESPONSE STRATEGIES (OPTIONAL)

Because of the type of oil used, the quick response time, and the limited potential to reach sensitive areas, the use of chemical and/or biological response methods would not be appropriate. Such methods may be more harmful than the oil released, would not be expected to reduce sensitive area potential impacts, and would not be expected to increase the likelihood of recovery.

SECTION 21. DOCUMENTATION

The following documents will be maintained to record spill response actions, impacts, recovery methods, and the final outcome of the emergency.

- Internal Log for incidental spills (may be part of the maintenance log)
- Internal spill report for non-incidentals spills
- Telephone conversation logs for oral spill reporting
- Written reports to agencies/authorities (including summary of environmental impacts and discussion of third parties)
- Memos, press releases, and other daily correspondence for non-incidentals spills
- Reports of spill recovery and cleanup activities from the response contractor
- Estimates of the total cost for spill cleanup
- Manifests copies for spill cleanup materials requiring disposal as hazardous waste (or a determination that waste is non-hazardous)
- Updated copies of this OSRP

Where appropriate, examples of these forms are provided in Appendix F.

In addition, after any incident, Cape Wind will examine the causes and effect and will update the OSRP and facility procedures, as necessary, to limit the likelihood of recurrence. Any updates in the OSRP will be forwarded to the appropriate response agencies.

Appendix A

Facility Information

**APPENDIX A
FACILITY INFORMATION**

Table 1

1	2	3	4	5	6	7	8	9	10	11	12	13
Area	Block	Lease	Facility Name	Facility ID	Water Depth	Latitude and Longitude	Distance to Shore	API Gravity (densest oil in area)	Rating	High Well	All Storage	Throughput Volume
<p>The details regarding the project are still being determined. The facility has not yet been approved and has no "existing" platforms. As such, each column in this table will be completed prior to facility operation as part of the final OSRP.</p> <p align="center">It is known that the facility rating will be "A" based on the following guidelines and discussions with the GOMR:</p> <p align="center">Rating Volume (Barrels)</p> <p align="center">A 0 - 1,000</p> <p align="center">B 1,001-3,000</p> <p align="center">C 3,001-10,000</p> <p align="center">D 10,001-20,000</p> <p align="center">E 20,001 +</p>												

Note that Tables 2 through 4 are not applicable to the Cape Wind facility for the following reasons:

- Table 2 – Cape Wind will not have any oil-containing ROW pipelines
- Table 3 – Cape Wind will not have any existing production platforms or satellite structures in State waters seaward of the coastline
- Table 4 – Cape Wind will not have any oil-containing State ROW pipelines in State waters seaward of the coastline

Appendix B

Training Information

APPENDIX B TRAINING INFORMATION

Cape Wind will provide a basic level of annual training for all employees, ensuring that all employees are adequately trained in accordance with 29 CFR 1910.120 and this OSRP. Such training will include triennial exercises. It is expected that Cape Wind employees will have some level of training to allow defensive actions in the event of a release. Actions that are beyond the training level of Cape Wind employees will be handled by a response contractor. Additional external agencies, such as USCG or police may be required, depending on the type of emergency and the level of response necessary. All Cape Wind contractors and outside agencies are responsible for certifying the training of their employees.

In general, training is expected to cover spill response and notification procedures, for example:

- Locations, intended use, deployment strategies, and operational and logistical requirements of response equipment
- Spill reporting procedures
- Oil-spill trajectory analysis and predicting spill movement
- Other responsibilities, as appropriate

The QI and Alternate QI may also receive additional hands-on spill response training.

The response contractor will be responsible for training their personnel to an appropriate level, depending on the required response activities for each individual.

a. OSRC/IC, SMT, and QI

The Cape Wind facility is not yet approved and has not yet designated staff to be trained in spill response. Upon project approval and design, prior to facility operation, Cape Wind will identify a training program that suits the needs of the facility staff. The training will address the requirements specified in 30 CFR 254.41(b), as applicable.

b. Other SMT Members

The Cape Wind facility is not yet approved and has not yet designated staff to be trained in spill response. Upon project approval and design, prior to facility operation, Cape Wind will identify a training program that suits the needs of the facility staff. The training will address the requirements specified in 30 CFR 254.41, as applicable.

c. SROT

The Cape Wind facility is not yet approved and has not yet designated staff to be trained in spill response. Upon project approval and design, prior to facility operation, Cape Wind will identify a training program that suits the needs of the facility staff. The training will address the requirements specified in 30 CFR 254.41(a), as applicable.

d. Location of Records

Records of all Cape Wind employee training will be maintained at the Operations Center. Records of spill response contractor's employee training will be maintained at the appropriate facility.

Appendix C

Drills

APPENDIX C DRILLS

Upon project approval and design, and prior to operation of the facility, Cape Wind will establish an approach for spill response drills that will ensure that all levels of spills are addressed, and that all elements of the OSRP are exercised at least once every three years. During triennial exercises, the entire OSRP (either as a whole or each individual part) will be exercised in accordance with 40 CFR 254.42 and varying levels of spills will be addressed. Records of these drills will be maintained at the Operations Center.

Appendix D

Contractual Agreements

APPENDIX D
CONTRACTUAL AGREEMENTS

(To be executed prior to operation of the facility)

Prior to beginning operations, Cape Wind will contract an emergency response contractor to provide response services during a release to the ocean. In addition, Cape Wind will employ the services of Applied Science Associates, Inc. (or other firm with equivalent capabilities) to conduct trajectory and fates analysis as needed. This firm will be used as an information source in determining spill paths and related information in the event of a release.

Because the project is in preliminary development stages and has not yet been issued MMS and USACE approval, only response contracts are included in this appendix, along with good-faith letters describing Clean Harbor's and ASA's ability and willingness to provide services.



30 Joseph Street
Kingston MA 02364
(781) 585-5112 ext. 506
(781) 585-9797 (facsimile)

October 27, 2004

Mr. Robert Donahoe
Cape Wind
75 Arlington St.
Boston MA 02116

To whom it may concern:

Let this letter serve as notification, to all concerned parties, that on this date, good faith negotiations commenced between Clean Harbors Environmental Services, Inc. (CHESI) and Cape Wind, with the intended objective being the providing of emergency response services, by CHESI, for Cape Wind, for its proposed project in Nantucket Sound.

Furthermore, CHESI expects the negotiations to be relatively simple and straightforward, involving simply the execution of CHESI's standard contract and payment of nominal fees.

CHESI has been serving similar companies, for similar needs in the Cape Cod area for over 20 years, and has all the necessary resources to effectively deal with petroleum and hazardous material spills, both on land and water, including, but not limited to, a fairly complete range of USCG OSRO ratings.

Any questions on this matter should be directed to this writer at (781) 585-5112, ext. 506.

Sincerely,

Hawk H. Hickman
Emergency Response Contract Manager
OPA-90 Program Manager

Cc: Brian Fay-CHES

Appendix E

Response Equipment

APPENDIX E RESPONSE EQUIPMENT

a. Equipment Inventory

CAPE WIND

Because the project has not yet been approved, details regarding spill response equipment are unknown. However, Cape Wind expects to maintain the following response equipment at the Operations Center, for quick deployment (exact details such as size/capacities and quantities to be determined upon project approval):

- One high-speed 30-foot boat for personnel emergencies and quick access
- At least one 65-foot twin-hull work boat for routine access and storage of initial response equipment, including:
 - Containment bladders
 - Personal protective equipment – including boots, gloves, goggles, etc.
 - Broom, shovel, sorbents, pigs, socks, and other equipment for response to minor leaks and spills
 - Spill overpack drum

Cape Wind will maintain the following response equipment at the ESP, for response to minor leaks and contained spills:

- Personal protective equipment – including boots, gloves, goggles, etc.
- Broom, shovel, sorbents, pigs, socks, and other equipment for response to minor leaks and spills
- Spill overpack drum

Cape Wind will inspect the above equipment at least once per month during a routine maintenance visit. A record for each inspection and maintenance procedure will be maintained at the Operations Center.

RESPONSE CONTRACTOR

Because the project has not yet been approved, details regarding spill response equipment are unknown. However, an example of the response equipment that the response contractors could provide is included in the following pages of this Appendix. The chosen response contractor will be responsible for the inspection and maintenance of their equipment on a monthly, or more frequent, basis.

**Boston Service Center
530 East First Street
South Boston, MA 02127**

**24 Hr.# (617) 269-5830
24 Hr.# (800) 654-8265
Fax # (617) 269-2402**

Tom Kelley, General Manager

Personnel authorized to release equipment/materials/manpower/etc.

Steve Ritucci
Tom Kelley
Harry Davidson
Tom Dickey
John Whyte
Mark Purcell

40-Hour OSHA Trained Personnel

Supervisors 10
Foremen 13
Equipment Operators 15
Field Technicians 27

EQUIPMENT LIST

Item Description	Location	Capacity/Size/Model	# of Units
(1) Marine Support Equipment			
7' Skiff Boat	Boston	Open Aluminum	1
12' Flatbottom	Boston	Aluminum	1
14' Starcraft	Boston	Aluminum (Interchangeable 15hp motor)	2
14' Sears Flatbottom	Boston	Aluminum - 15hp outboard	1
17' Starcraft	Boston	Aluminum - 25 hp outboard	1
20' Carolina skiff Flatbottom	Boston	Fiberglass - 88hp outboard	1
21' Carolina skiff	Boston	Fiberglass - 88 hp outboard	1
17' Pointer	Boston	Fiberglass	
(2) Motor Vehicles			
Emergency Response	Boston	85 Ford	1
Vacuum Tractor Trailers	Boston	4,000/5,000/6,000 gals	7
Cusco High Powered Vacuum Truck	Boston		2
Cyclone Vactor	Boston	93 Mack	3
Vactor (Jet Rodder)	Boston	54,000 91 Mack	1
Vacuum Trucks S.S.	Boston	3,000 & 3,500 gals	5
Rack Truck - Prime Mover	Boston	81 International	1
Straight Box Trucks	Boston	87 & (2) 89 Ford	3
Box Trailers	Boston		3
Bulk Hopper	Boston	89 Fruehauf	1
Frac Tanks	Boston	22,500 gallons	25
Rack Truck	Boston		2
10 Wheel Dump Truck	Boston	86 Mack	1
Trailer (Lowboy)	Boston	50 TON	1
Pickup Trucks	Boston	82-89 Various	32
(3) Pumps and Pressure Equipment			
Wilden Diaphragm Pump	Boston	M-15 3"	3
Wilden Diaphragm Pump	Boston	M-8 2"	2
Wilden Diaphragm Pump	Boston	1 1/4 "Poly	1
Wilden Diaphragm Pump	Boston	1 1/2 " M-4	1
Wilden Diaphragm Pump	Boston	1 1/4 " M-2	1
Wilden Diaphragm Pump	Boston	2" Champ Poly (chemical)	2
6" Double Stage Hyd Super Pump	Boston	6"	1
Lister Diesel Pump	Boston	3"	1
Hydraulic Fish Pumps	Boston	4"	3

Item Description	Location	Capacity/Size/Model	# of Units
(3) Pumps and Pressure Equipment (Cont'd)			
Lutz Electric Barrel Pump	Boston	1"	3
Drum Vacuums	Boston		4
Van Hotsy	Boston	87 Ford - 300 psi Hot Water	1
Hot water Hotsy	Boston	3000 psi, trailer mounted	1
Hot water Hotsy	Boston	3000 psi, portable, skid mount	2
Cold Water Pressure Washer	Boston	2000 psi, electric, portable	1
Warren Rupp	Boston	1" SA1A/SB1A	2
Teel Pump	Boston	5H 2" Trash Pump	2
Vactor Hose	Boston		800'
Discharge Hose	Boston	6"	500'
Discharge Hose	Boston	4"	500'
(4) Oil Spill Containment Booms			
Oil Containment Boom	Boston	American Marine 18"	2200'
Oil Containment Boom	Boston	American Marine 36"	1500'
Oil Containment Boom	Boston	Langerman 18"	1100'
(5) Environmental Monitoring Equipment			
HNU Meter	Boston	PI 101	2
HNU Meter	Boston	ISPI 101	1
MSA Gas Indicator	Boston	Minigard II	7
MSA Gas Indicator	Boston	Passport Quad	4
Draeger Pump	Boston	Accuru	5
SKC Personal Air Pump	Boston		5
MSA PIDs	Boston	Passport PIDs	3
(6) Recovery Equipment			
Skidmount Vacuum Unit	Boston	1000 gal	1
Skidmount Vacuum Unit	Boston	300 gal	1
Skimmer	Boston	Skimpac 18000 series	2
Elastec Drum Skimmer	Boston	TDS118	1
Recovery Tank	Boston	2500 gal	2
Recovery Tank	Boston	1000 gal	1
Nilfisk Mercury Vacuum	Boston		1
HEPA Filter Vacuum	Boston		1
HEPA Filter Vactor	Boston		1
Sea Slug Towable Fuel Bladder	Boston	Model #FCB-43E, 4300 gallons	1
(7) Beach or Earth Cleaning and Excavating Equipment			
Bobcat	Boston	Backhoe/Sweeper /Pavement Breaker	1
Backhoe	Boston	436 Cat	2
(8) Generators/Compressors/Light Towers			
Sullair Portable Compressor	Boston	185 Diesel	5
Winco Generator	Boston	K4800/A	2
Coppus Blower	Boston	4" Pneumatic	3
Coppus Blower	Boston	8" Pneumatic	1
Coppus Blower	Boston	10" Pneumatic	1
Coppus Fan	Boston	RF-20	2
(9) Health and Safety Equipment			
MSA S.C.B.A.	Boston	1 Hour/4500	10
Spare Air Cylinders	Boston	4500 PSI (1 HR)	8
MSA SAR	Boston	Pressure Demand	4
MSA Escape Units	Boston	5 Minutes	12

Item Description	Location	Capacity/Size/Model	# of Units
(9) Health and Safety Equipment (Cont'd)			
Breathing Machine (TR)	Boston	6 Man Continuous Flow	1
Encapsulating Suits	Boston	First Responder	3
Encapsulating Suits	Boston	Butyl	2
Mustang Suits	Boston	Foul Weather PFD	6
Flame Retardant Suits	Boston		2
Air Hose	Boston		600'
Hydraulic Hose	Boston		650'
Line	Boston	600' Coils	2
Personal Floatation Devices	Boston		40
Survival Suits	Boston		6
(10) Communications			
Nextel 2-Way Portable Radio/Phones	Boston		66
Nextel Base Station	Boston		1
Marine Radios	Boston	Portable	2
(11) Miscellaneous			
Leroi Jackhammer	Boston	30 / 60 / 90 lbs.	3
Stihl Chain Saw	Boston		1
Amida Light Stand	Boston	50600	2
Amida Towable Light Tower	Boston	GS-82	1
Lincoln Welder	Boston		1
Forklift	Boston	5 Ton	1

EMERGENCY RESPONSE SUB-CONTRACTORS

Boston Line & Service Co.	Barry M. Cox - Owner
Black Falcon Cruise Terminal	Brian J. Cox - Owner
1 Black Falcon Ave.	John J. Rinkus
Boston, MA 02210	Tim Shea
(617) 951-9957	Paul Fratic

Marine Response Equipment

Boats: 45' Tug - Eileen C 400 hp Diesel
37' High speed launch Anna R - twin screw 500 hp diesel
25' Response Boat - 165 hp Volvo Diesel
24' Monark, spill response boat - twin 150 hp outboards - moored in Braintree
23' Monark, spill response boat - 200 hp outboard - moored in Sandwich, MA (Cape Cod Canal)

Boom: 1000' IG Environmental - 18"
1050 American Boom Mach II - 18"

Barge: 50' X 20' Deck Barge - 35 ton capacity

Trucks: 1992 Isuzu Diesel - 10,000 lbs rack truck
1991 Dodge Ram Van - 8 Passenger

Support Vehicles: 1 Crane - 3.5 ton capacity
1 Forklift - 2 ton capacity

EMERGENCY RESPONSE SUB-CONTRACTORS (Cont'd)

Boston Towing and Transportation
36 New Street
East Boston, MA 02128
(617) 567-9100
(617) 567-5896 FAX

Philip K. Chase , GM

Marine Response Equipment

Tug Boats

Harold A. Reinauer II	3000 HP	96.5 ft	East Boston
Vincent D. Tibbetts, Jr	3000 HP	96.5 ft	East Boston
Juillet Reinauer	3000 HP	92 ft	East Boston
Jason Reinauer	2000 HP	96.5 ft	East Boston
Matthew Tibbetts	1800 HP	100 ft	East Boston
H.J. Reinauer	2000 HP	100 ft	East Boston
Karen Tibbetts	1800 HP	100 ft	East Boston
Hercules	1800 HP	104 ft	East Boston
Miriam	1600 HP	99 ft	East Boston
Cornell	1600 HP	100 ft	East Boston
Mars	1200 HP	105 ft	East Boston
Pleon	1200 HP	95 ft	East Boston
Heidi	365 HP	40 ft	East Boston
Murray	225 HP	35 ft	East Boston

Response Barge 42" Boom East Boston

Barges

BFT NO. 50	46,000 bbls	290' x 60'	East Boston
BFT NO. 39	38,951 bbls	260' x 60'	East Boston
BFT NO. 38	38,501 bbls	260' x 60'	East Boston
BFT NO. 31	31,863 bbls	263' x 49'	East Boston
BFT NO. 24	15,000 bbls	209' x 38'	East Boston
BFT NO. 100	9,565 bbls	165' x 34'	East Boston
BFT NO. 300	12,168 bbls	178' x 38'	East Boston (Portland, ME)

Tank Vessels

Bert Reinauer II	24,730 bbls	286' x 43'	East Boston
Vincent Tibbetts	15,793 bbls	243" x 37"	East Boston
Dieselube	440 bbls	47" x 16'	East Boston

Passenger Vessels

Island Run	26 Passenger Crew Boat		East Boston
Seaview	26 Passenger Crew Boat		East Boston

Work Boats

Various	14' - 24'	Quantity 6	East Boston
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Scows

		Quantity 2	East Boston
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EMERGENCY RESPONSE SUB-CONTRACTORS (Cont'd)

City Lights Electrical Co., Inc. Contact: MaryAnn Cataldo
556 East Broadway
South Boston, MA 02127
Tel # (617) 269-5777
Fax # (617) 269-7616

Labor

Environmental Staffing
1 New England Executive Park
Burlington, MA 01803
(781) 221-7444

Onsite Environmental
150 Wood Road, Suite 107
Braintree, MA 02184
(781) 794-1790
(800) 546-6447

Fuel Supplies

Taylor Oil Company
P.O. Box 538
Stoughton, MA 02072
(617) 341-0086

Lodging

Suisse Chalet
Morrissey Boulevard
Dorchester, MA 02124
(617) 287-9100

Portable Tank Storage

Baker Tanks
193 Hartford Turnpike
Shrewsbury, MA 01545
(508) 799-6669

Fishburn Services, Inc.
5012 State Rt. 229, P.O. Box 278
Marengo, OH 43334
(419) 253-6031

Portable Tanks – Transportation

Tino's Tow Service
61 Copeland Street
Quincy, MA 02169
(617) 472-0655

Diving Services

Northeast Diving Services, Inc.
28 West Narragansett Avenue
Newport, RI 02840
(401) 841-0446

Heavy Equipment

Northeast Tank
349 Lincoln Street, Building 48
Hingham, MA 02043
(781) 740-4090

Eastern States Equipment
18 Wolcott Street
Jamaica Plain, MA
(617) 364-9280

Banfield Brothers
42 8th Street, Suite 1000
Charlestown, MA
(617) 242-0202

Hertz Equipment Rental
45 Gerand Street
Boston, MA
(617) 442-4210

b. Inspection and Maintenance Programs

Because the facility is not yet approved, details regarding inspection and maintenance programs are not certain. Upon operation, Cape Wind will ensure that all inspection and maintenance programs comply with 30 CFR 254.43.

During normal sea conditions, it is expected that Cape Wind will make routine maintenance visits to the off-shore facility; anticipated at least three days per week to the ESP and five days a week to various sections of the wind farm. During these visits Cape Wind staff will conduct routine maintenance and assess the equipment for any evidence of leaks, damages, or other problems.

Cape Wind will also inspect the ESP spill response equipment at least once per month during a routine maintenance visit. That equipment may include:

- Personal protective equipment – including boots, gloves, goggles, etc.
- Broom, shovel, sorbents, pigs, socks, and other equipment for response to minor leaks and spills
- Spill overpack drum

A record for each inspection and maintenance procedure will be maintained at the Operations Center.

Appendix F

Support Services and Supplies

APPENDIX F SUPPORT SERVICES AND SUPPLIES

The following provides details for additional personnel, materials and supplies, equipment, and services available in the event of a release. Refer to the Emergency Contact List at the front of this document for specific contact information.

PRIVATE RESOURCES

Clean Harbors (or equivalent) – emergency response and cleanup contractor

See Appendix D for an example of Clean Harbors' list of available equipment, staff, resources, and response methods. See Appendix C for an example of a contractual agreement between Clean Harbors and Cape Wind, which includes a discussion of spill response and recovery capabilities.

Otis ANGB/Air Station Cape Cod - Airstrips/Air Access

This local airport may be used for additional air services.

Corporate Air Charter, Inc. (Green Airport, Rhode Island), Ocean Wings (Nantucket, Massachusetts), and Eastern Air Charter (Norwood, Massachusetts) – air charter services

These businesses provide air service charters that may be used in the event of an emergency. Such services may be useful for quick off-shore access, or to complete fly-over investigations. Between these facilities, a number of aircrafts are available for private use.

FEDERAL RESOURCES/AGENCIES

In the event of an emergency at the facility, federal agencies would be the primary agencies involved in oversight of response activities.

USCG/NRC - response and restoration

The USCG/NRC is primarily responsible for overseeing spill response activities in open water. While this agency is not expected to provide financial assistance, they would be a useful source of information for response methods and procedures. They may also provide some fire services, if necessary.

NOAA - response and restoration

The NOAA would provide additional information in such circumstances, including suggested response methods, environmental damage remedies, coastal resources impact assessment and restoration, discharge and trajectory modeling, oceanic and atmospheric modeling, and other response measure for individually materials.

STATE RESOURCES/AGENCIES

MA State Police - law enforcement and security

The Massachusetts State Police Department may be called upon to work in cooperation with other agencies in providing on-shore access control, crowd control, and traffic control. The State Police have adequate staff and vehicle to address any security situations that might occur at Cape Wind.

MADEP - response and restoration

The MADEP may be called upon in an emergency situation to support response actions. Support services would primarily include on-shore response-related activities, such as cleanup, salvage, and recovery. Financial support would be provided by Cape Wind.

MASERC - response and restoration

The MADEP may be called upon in an emergency situation to support response actions. Support services would primarily include on-shore response-related activities, such as cleanup, salvage, and recovery. Financial support would be provided by Cape Wind.

LOCAL RESOURCES/AGENCIES

Depending on the type and level of emergency, local agencies may be called upon to assist in emergency situations and to provide information. The local agencies that may have responsibilities in the event of a release from Cape Wind include natural resources, environmental, law enforcement, fire services, hospitals/EMS and LEPCs/response teams. Financial support would be provided by Cape Wind.

Boat Launches - The Falmouth Inner Harbor provides a public boat launch that may be used in the event of a release. The following are additional public boat launch locations in the area:

- Childs River, Off Rte 28
- Great Pond, Harrington Street
- Green Pond, Menauhant Road
- Megansett Harbor, County Road
- Waquoit Bay, Seapit Road
- West Falmouth Harbor, Old Dock Road
- Wild Harbor, Old Silver Beach
- Great Harbor, Woods Hole

Additional Agencies – The following agencies may also become involved in an oil spill:

- Coastal Zoning Committee
- Harbor Masters / Natural Resource Agents
- Cape Cod Commission
- Other local authorities (Nantucket, Cape Cod, Martha's Vineyard) if events warrant

The contact information for these agencies will be determined as necessary.

Appendix G

Notification and
Reporting Form

**APPENDIX G
NOTIFICATION AND REPORTING FORMS**

a. Internal Spill Reporting Forms

Cape Wind internal spill forms for reportable releases are provided on the following pages. Non-reportable (i.e., incidental) spills will be recorded on maintenance logs.

Cape Wind Internal Incident Reporting Form

Name: _____ Date Form Filled Out: _____ Report No. _____

1. DATE AND TIME OF INCIDENT:	2. LOCATION OF INCIDENT/RELEASE:												
<table style="width: 100%; border: none;"> <tr> <td style="width: 25%; border: none;">3. TYPE OF INCIDENT: (Check all that apply)</td> <td style="width: 25%; border: none;"><input type="checkbox"/> Spill/Release</td> <td style="width: 25%; border: none;"><input type="checkbox"/> Security</td> <td style="width: 25%; border: none;"><input type="checkbox"/> Other (Describe)</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"><input type="checkbox"/> Fire/Explosion</td> <td style="border: none;"><input type="checkbox"/> Natural Disaster</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"><input type="checkbox"/> Medical</td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>		3. TYPE OF INCIDENT: (Check all that apply)	<input type="checkbox"/> Spill/Release	<input type="checkbox"/> Security	<input type="checkbox"/> Other (Describe)		<input type="checkbox"/> Fire/Explosion	<input type="checkbox"/> Natural Disaster			<input type="checkbox"/> Medical		
3. TYPE OF INCIDENT: (Check all that apply)	<input type="checkbox"/> Spill/Release	<input type="checkbox"/> Security	<input type="checkbox"/> Other (Describe)										
	<input type="checkbox"/> Fire/Explosion	<input type="checkbox"/> Natural Disaster											
	<input type="checkbox"/> Medical												
4. TYPE OF MATERIAL INVOLVED IN INCIDENT/RELEASED (Attach MSDS):	5. QUANTITY OF MATERIAL INVOLVED:												
6. PROVIDE A DESCRIPTION OF THE SOURCE OF THE INCIDENT AND FACTORS CAUSING THE INCIDENT (Include identification of all potentially responsible parties; Attach additional sheets if necessary):													
7. NAME PERSON(S) WHO DISCOVERED INCIDENT AND DESCRIBE HOW IT WAS DISCOVERED:	8. TRANSPORTER INVOLVED, IF APPLICABLE: Name: Company Name: Vehicle ID/Plate #:												
<p>9. PLEASE PROVIDE ANSWERS TO THE FOLLOWING:</p> <p>Did the release enter the ocean? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Did the release result in injury or illness to personnel? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:</p> <p>Did the incident impact other sensitive receptors? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:</p>													
<p>12. INDICATE EMERGENCY PERSONNEL CONTACTED/ON SCENE:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left; border: none;"><u>Contacted</u></th> <th style="text-align: left; border: none;"><u>On Scene</u></th> </tr> </thead> <tbody> <tr> <td style="border: none;"><input type="checkbox"/></td> <td style="border: none;"><input type="checkbox"/> MA Police Dept. (specify whether local or state)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/></td> <td style="border: none;"><input type="checkbox"/> Spill Contractor</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/></td> <td style="border: none;"><input type="checkbox"/> Emergency Medical</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/></td> <td style="border: none;"><input type="checkbox"/> US Coast Guard</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/></td> <td style="border: none;"><input type="checkbox"/> Other (Describe)</td> </tr> </tbody> </table>		<u>Contacted</u>	<u>On Scene</u>	<input type="checkbox"/>	<input type="checkbox"/> MA Police Dept. (specify whether local or state)	<input type="checkbox"/>	<input type="checkbox"/> Spill Contractor	<input type="checkbox"/>	<input type="checkbox"/> Emergency Medical	<input type="checkbox"/>	<input type="checkbox"/> US Coast Guard	<input type="checkbox"/>	<input type="checkbox"/> Other (Describe)
<u>Contacted</u>	<u>On Scene</u>												
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<input type="checkbox"/>	<input type="checkbox"/> Spill Contractor												
<input type="checkbox"/>	<input type="checkbox"/> Emergency Medical												
<input type="checkbox"/>	<input type="checkbox"/> US Coast Guard												
<input type="checkbox"/>	<input type="checkbox"/> Other (Describe)												

14. PROVIDE A DESCRIPTION OF THE RESPONSE TO THE INCIDENT, INCLUDING A DESCRIPTION OF HOW POTENTIAL HAZARDS TO PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT WERE REDUCED OR REMEDIED (Attach additional sheets if necessary):

15. DID THE INCIDENT EXCEED A REPORTING THRESHOLD?

CIRCLE ONE: Federal State Local/Other None

Federal Reportable Quantity (RQ): _____ State RQ: _____ Local/Other RQ: _____

INDICATE AGENCIES NOTIFIED (See Emergency Contact List for phone numbers):

NRC/USCG	<input type="checkbox"/> NA	<input type="checkbox"/> Notified	Date/Time Notified _____
MADEP	<input type="checkbox"/> NA	<input type="checkbox"/> Notified	Date/Time Notified _____
MDEP/MASERC	<input type="checkbox"/> NA	<input type="checkbox"/> Notified	Date/Time Notified _____
Other (Describe)	<input type="checkbox"/> NA	<input type="checkbox"/> Notified	Date/Time Notified _____

IF APPLICABLE, **ATTACH A RECORD OF EACH AGENCY NOTIFICATION.** RECORD MUST INCLUDE: NAME AND TELEPHONE NUMBER OF THE AGENCY NOTIFIED; NAME OF THE PERSON WHO RECEIVED THE NOTIFICATION; DATE AND TIME OF NOTIFICATION; NAME OF TECHNIC PERSONNEL MAKING THE NOTIFICATION; CASE NUMBER ASSIGNED BY AGENCY; AND ANY COMMENTS OR OTHER INFORMATION PROVIDED BY THE AGENCY.

16. DESCRIBE CORRECTIVE ACTIONS/FOLLOWUP NECESSARY:

Responsible Person

Date(s) for Completion

1)

1)

1)

2)

2)

2)

3)

3)

3)

17. ATTACH THE FOLLOWING SUPPLEMENTAL DOCUMENTATION AS APPROPRIATE FOR THE INCIDENT (AS SOON AS IT IS AVAILABLE):

- a) Material Safety Data Sheet(s) (MSDSs) for material released
- b) Record of interviews with Cape Wind or other personnel who caused or discovered the release, and other persons who were witnesses to the release (include name, address, and telephone number of interviewee)
- c) Photographs taken at the site of the release, if available
- d) Documentation of cleanup activities, such as manifests/shipping papers for soil removal, record of payment to emergency spill cleanup contractor, etc.

18. NAME AND TITLE OF PERSON COMPLETING THIS REPORT:

19. SIGNATURE:

20. DATE:

b. External Spill Reporting Forms

MADEP Release Notification forms are included in this appendix. NRC online reporting forms for oil release from a storage tank, release of unknown sheen, and release from offshore/platform can be found at <http://www.nrc.uscg.mil/reporttxt.htm>. Additional local release notification forms may be required if there are shoreline impacts.

In the event that an agency requires a written spill report, but does not have a specified form, the Cape Wind internal spill reporting form may be used.

Appendix H

Worst Case
Discharge Scenarios

APPENDIX H WORST CASE DISCHARGE SCENARIOS

a. Worst Case Discharge Scenario Selection

A Worst Case Discharge Scenario of no more than 42,000 gallons (1,000 barrels) is appropriate for this facility. This is the maximum amount expected to be stored on the ESP and is the largest spill that could reasonably be expected to occur at Cape Wind. This worst case discharge corresponds to the lowest rating of spill, Rating A, and is consistent with guidance provided by the GOMR (Mr. Rusty Wright).

b. Worst Case Discharge Scenario Discussion

(i) Facility Information

The exact area and block number of the facility will be provided upon project approval by the ACOE. At this time, the following facility information is offered:

Cape Wind, a proposed offshore wind park located on Horseshoe Shoal (approximately five miles off the Cape Cod shore in Massachusetts – Latitude 041° - 30' - 31.91", Longitude 070° - 19' - 54.73"), will be equipped with 130 wind turbine generators (WTGs) with a maximum output of approximately 454 megawatts. The wind-generated electricity from each of the turbines will be transmitted via a 33 kV submarine transmission cable system to the Electric Service Platform (ESP) centrally located within the wind turbine array. The ESP utilizes transformers to take the wind-generated energy, step up the voltage, and transmit the resulting electric power to the Cape Cod mainland via 115 kV alternating current solid dielectric submarine transmission lines, which will make landfall in the town of Yarmouth. The 33 kV inner-array cables and the 115 kV submarine transmission cables are specially designed for marine environments and will not require pressurized dielectric fluid circulation for insulating or cooling purposes.

Electric Service Platform (ESP)

The primary oil storage at the Cape Wind facility will be located on the ESP, which is expected to house the transformers, fire protection equipment, emergency backup generators, and other ancillary systems. Total maximum oil storage on the ESP is expected to be approximately 42,000 gallons at any given time. Therefore, Cape Wind will be in the lowest potential worst-case discharge rating (Rating A). The ESP will be designed to include a boat landing dock and a helicopter pad for accessibility. Below is a summary of the ESP and expected materials storage/usage, a general description of each material, the volumetric capacity, and type of product.

Electric Service Platform (ESP) Materials List

Component	Fluid Medium Function	Fluid Type	Approximate Quantity
Oil Storage:			
Four 115 kV Power Transformers	Insulation/heat transfer	Naphthenic mineral oil	10,000 gallons each 40,000 gallons total
Two Diesel Engines	Internal component lubrication	Motor oil	5 gallons each 10 gallons total
Two Diesel Engine Day Tanks	Emergency generation fuel	Diesel oil	100 gallons each 200 gallons total
One Fuel Oil Storage Tank	Emergency generation fuel supply	Diesel oil	1,000 gallons total
Non-Oil Storage:			
Two Diesel Engine Radiators	Heat transfer	Water/glycol	15 gallons each 30 gallons total
Uninterruptible Power Supply (UPS - Direct Current Battery System)	electrolyte	Sulfuric acid	355 gallons total

The ESP is equipped with a number of oil collection systems to prevent oil from being released into the environment in the event of a leak from oil-storing equipment. The entire ESP has sealed, leak-proof decks that act as fluid containment. At least 110% secondary containment is provided for the oil-storing equipment on the ESP, including the transformers, diesel engine storage tank, and diesel engines/day tanks. These containment areas will be routinely checked and maintained to ensure maximum storage capacity in the event of a spill.

Wind Turbine Generators (WTGs)

In addition to the materials stored on the ESP, the WTGs will house certain system components within the nacelle that contain smaller amounts of lubricants and cooling fluid. Total oil storage at each WTG is expected to be approximately 214 gallons at any given time (27,820 gallons for all 130 WTGs). Each WTG will be accessible by service boats. Below is a list of the Wind Farm systems and a summary of the expected materials usage for each system, including a general description, volumetric capacity, and type of product.

Wind Turbine Generator (WTG) Materials List

Component	Fluid Medium Function	Fluid Type	Approximate Quantity Per WTG
Oil Storage:			
Drive Train Main Bearing	bearing lubrication	Mobil SCH 632	19 gallons
Drive Train Main Gear Box	gear lubrication	Optimol Synthetic A320	140 gallons
Drive Train Cooling Systems	cooling & lubrication	Optimol Synthetic A320	21 gallons
Hydraulic System Brake	brake fluid	Mobil DTE 25	2 gallons
Hydraulic System Rotor Lock	hydraulic fluid	Mobil DTE 25	19 gallons
Hydraulic Crane Cylinder	transmission fluid	ATF 66	5 gallons
Yaw System (drive gear)	gear lubrication	Mobil SHC 630	7 gallons
Pitch System (pitch gear)	gear lubrication	Mobil SHC XMP 220	0.25 gal
Pitch System (pitch gear)	gear lubrication	Mobil SHC XMP 460	1 gallons
Non-Oil Storage:			
Oil Coolers	heat dissipation	water/glycol	20 gallons

The WTG's are equipped with a number of oil collection systems to prevent oil from being released into the environment in the event of a leak. Oil sumps or guide plates will be located underneath the main bearing and oil cooler of each WTG. The oil they collect runs into a central oil sump that is integrated into the top tower platform and is collected and disposed of as necessary.

(ii) Volume

Based on conversations with the GOMR, and assuming all material is released from the ESP, the worst case scenario is 42,000 gallons. Given the controls and countermeasure in place, this is an unlikely scenario. The oils used at the facility are easily dispersible (often on their own) and would typically float on the surface. Because the operation is a static one with no potential for continuous discharge, a spill from the facility will be easily managed and controlled. The facility will be located five miles from shore. An oil spill trajectory analysis that was performed based upon preliminary information is provided in Section c. of this appendix.

(iii) Land Segment Identification

This information will be provided in the final OSRP, to be completed upon project approval by the MMS and USACE and prior to facility operation. An oil spill trajectory analysis that was performed based upon preliminary information is provided in Section c. of this appendix.

(iv) Resource Identification

This information will be provided in the final OSRP, to be completed upon project approval by the MMS and USACE and prior to facility operation. A list or map of resources with special economic or environmental importance that could be impacted will be provided for the highest probability land segment. Detailed strategies to protect these resources will also be identified. This will be determined using ASA's oil spill trajectory analysis during expected sea conditions (see Section c. of this appendix for an oil spill trajectory analysis that was performed based upon preliminary information).

(v) Response

All equipment and storage tanks at Cape Wind are designed to minimize the possibility of discharges or releases and are equipped with secondary containment that is capable of holding the contents of the largest container in that containment area, plus adequate freeboard for fire protection. In addition, the ESP houses spill response equipment including spill pads, kits, and socks, which can be used for minor spills or releases.

In the unlikely scenario of a release outside the secondary containment areas, the response contractor will conduct all response and recovery procedures, using Cape Wind staff and resources as appropriate. In order to minimize the initial response time, Cape Wind will maintain work boats and response equipment at the Operations Center proposed in Falmouth Inner Harbor. This will allow initial assessment and defensive response actions to occur within approximately two hours of spill detection and full spill response to occur within approximately eight to twelve hours of spill detection.

Because the oils used at Cape Wind are lighter than water, it is expected that all oil will be recoverable using on-water techniques. Such techniques may include:

- Mechanical removal and recovery of floating oil by sorbent methods, vacuum equipment, and skimming devices
- Use of containment booming to control the spill area and protect shorelines
- Use of bladders to capture oil and safely transport it to shore for disposal

A full discussion of the response equipment available and expected response procedures in the event of a release are included in Appendix D.

Additional information for response in adverse weather will be provided in the final OSRP, to be completed upon project approval by the ACOE and prior to facility operation. A description of the response equipment that will be used to contain and recover the discharge to the maximum extent practicable. Types, quantity, and capabilities of the equipment that will be provided by the response contractor will be addressed. If applicable, effective daily recovery capacities will be calculated using the methods described in 30 CFR 254.44.

The spill response contractor will provide a narrative of personnel, materials, and support vessels necessary to ensure that response equipment is deployed and operated promptly and effectively. They will also provide confirmation of the time needed for procurement of response resources

(containment, recovery, and storage, transportation vessels, response personnel, etc.), travel to the deployment site, and equipment deployment.

(1) A description of the response equipment

This information is provided, where known, in Appendix E.

(2) A description of the personnel, materials, and support vessels that would be necessary to ensure that the identified response equipment is deployed.

This information will be provided in the final OSRP, to be completed upon project approval by the MMS and USACE and prior to facility operation.

(3) A description of your oil storage, transfer, and disposal equipment.

This information was provided in the Facility Information Section of this Appendix.

(4) An estimation of the individual times needed for various response actions.

This information will be provided in the final OSRP, to be completed upon project approval by the MMS and USACE and prior to facility operation.

c. ASA Oil Spill Trajectory Analysis

The oil spill trajectory analysis was performed based upon preliminary information available about this project. A copy of the analysis will be included in the Final OSRP. To review a copy of the analysis please refer to Appendix 2.0-C of the FEIR.

Appendix I

Oceanographic and Meteorological Information for Subregional OSRP's

APPENDIX I
OCEANOGRAPHIC AND METEOROLOGICAL INFORMATION FOR SUBREGIONAL OSRP'S

a. Oceanographic information

The following summarizes the Met-Ocean data for the Wind Farm:

Extreme Wind Speed – 123 MPH (50 year return)

Extreme wave height – 16.2 feet (50 year return)

Wave period – 6.3 seconds

Extreme waste level variation – 11 feet (from MLLW)

Extreme current velocity – 3 knots

Datum (elevation0) - MLLW

b. Meteorological information

The range of air temperatures is –10°F to 95°F. Average monthly temperatures are:

Month	Average Temperature (°F)
January	32
February	32
March	38
April	48
May	58
June	66
July	71
August	69
September	63
October	53
November	45
December	35

The final OSRP will include a discussion of relevant meteorological information, including prevailing and worst case currents, range of tides, range of water depths, and a discussion of how these factors could hinder ability to track and monitor an oil spill. Seasonal conditions will be included. Information for the project, as proposed, can be found in Section 5.2 of the Cape Wind DEIS.

Appendix J

Bibliography

**APPENDIX J
BIBLIOGRAPHY**

All applicable references will be included in the final OSRP.



The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Minerals Revenue Management** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.

