



Appendix I-D

Draft Oil Spill Response Plan (OSRP)

DRAFT
OIL SPILL RESPONSE PLAN
For
ATLANTIC SHORES OFFSHORE WIND, LLC

November 2020

Revised December 2021 and August 2022

A Response Plan Cover Sheet, presenting basic information regarding Atlantic Shores Offshore Wind, LLC is provided below:

Response Plan Cover Sheet

Owner/operator of facility:	Atlantic Shores Offshore Wind, LLC			
Facility name:	Atlantic Shores			
Facility mailing address:	One Dock 72 Way, Brooklyn, NY 11205			
Facility phone number:	858-946-3235	Latitude:	°N 39.361336774	
SIC code:	TBD	Longitude:	°W 74.053319796	
Dun and Bradstreet number: TBD				
Largest oil storage capacity (gals):	130,000 per 1,200 Megawatt Offshore Substation [MW OSS] (power transformer, 2 units)	Maximum oil storage capacity (gals):	205,015 (per large OSS)	
Capacity of aboveground oil storage tanks:	20,000 per large OSS (day tanks and storage tank)	Worst case oil discharge amount (gals):	205,015 (per large OSS)	
Applicability of Substantial Harm Criteria:				
Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?	YES	X	NO	
Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and, within any storage area, does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation?	YES		NO	X
Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?	YES		NO	X
Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?	YES		NO	X
Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?	YES		NO	X

Management Certification

This plan was developed to prevent and/or control the spills of oil. Atlantic Shores Offshore Wind, LLC herein commits the necessary resources to fully prepare and implement this plan and obtain through contract the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst-case discharge or substantial threat of such a discharge.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate and complete.

Signature: _____

Title: _____

Name: _____

Date: _____

Plan Distribution

Plan Number	Plan Holder	Location
1	Atlantic Shores Facility Office * Primary onshore location where the OSRP is kept with all associated records of its testing and implementation	Atlantic Shores Offshore Wind, LLC One Dock 72 Way Brooklyn, NY 11205
2	Qualified Individual	Atlantic Shores Offshore Wind, LLC One Dock 72 Way Brooklyn, NY 11205
3	Alternate Qualified Individual	Atlantic Shores Offshore Wind LLC 1 Beacon Street, 15th Floor Boston, MA 02108
4	Operations Center	TBD
5	Bureau of Safety and Environmental Enforcement (BSEE) Supervisor – Oil Spill Preparedness Division Gulf of Mexico Region OSP Section – GE 921	BSEE Oil Spill Preparedness Division Gulf of Mexico Region OSP Section – GE 921 1201 Elmwood Park Boulevard New Orleans, LA 70123-2394
6	Bureau of Ocean Energy Management (BOEM) Atlantic OCS Region	BOEM Atlantic OCS Region 1201 Elmwood Park Boulevard New Orleans, LA 70123-2394

Plan Number	Plan Holder	Location
7	EPA Region 1 (New England)	EPA Region 1 Emergency Planning and Response Branch 5 Post Office Square Suite 100 (OSRR02-2) Boston, MA 02114-2023
8	EPA Region 2 (New York and New Jersey)	EPA Region 2 Emergency Planning and Response Branch Ted Weiss Federal Building, 290 Broadway New York, NY 10007
9	EPA Region 3 (Pennsylvania, Delaware, Maryland, West Virginia, District of Columbia, and Virginia)	EPA Region 3 Emergency Planning and Response Branch 1650 Arch Street Philadelphia, PA 19103
10	USCG First Coast Guard District (D1)	USCG D1 408 Atlantic Avenue Boston, MA 02110
11	USCG Fifth Coast Guard District (D5)	USCG D5 431 Crawford Street Portsmouth, VA 23704
12	USCG Sector Delaware Bay	USCG Sector Delaware Bay 1 Washington Ave Philadelphia, PA 19147
13	USCG Sector New York	USCG Sector New York 212 Coast Guard Drive Staten Island, NY 10305
14	USCG Sector Long Island Sound	USCG Sector Long Island Sound 120 Woodward Avenue New Haven, CT 06512
15	New Jersey Department of Environmental Protection (NJDEP)	NJDEP 401 E State Street Trenton, NJ 08608

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List of Acronyms

ACP	Area Contingency Plan
APE	Area of Potential Effect
AQI	Alternate Qualified Individual
bbls	Barrels
BOEM	Bureau of Ocean Energy Management
BSEE	Bureau of Safety and Environmental Enforcement
COP	Construction and Operations Plan
COTP	Captain Of The Port
CFR	Code of Federal Regulations
CTV	Crew Transfer Vessels
DOI	Department of the Interior
ECC	Export Cable Corridors
ERMA	Environmental Response Management Application
EPA	Environmental Protection Agency
ERT	Emergency Response Team
ESI	Environmental Sensitivity Index
FDR	Facility Design Report
FIR	Fabrication and Installation Report
FOSC	Federal On-Scene Coordinator
gals	Gallons
GBS	Gravity Based Structure
GRP	Geographic Response Plan
GRS	Geographic Response Strategy
HDD	Horizontal Directional Drilling
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
ICS	Incident Command System
IMT	Incident Management Team
MW	Megawatt
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NJDEP	New Jersey Department of Environmental Protection
NJOEM	New Jersey Office of Emergency Management
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
OCS	Outer Continental Shelf
OFW	Offshore Floating Wind

O&M	Operation and Maintenance
OSHA	Occupational Safety & Health Administration
OSPD	Oil Spill Preparedness Division
OSRO	Oil Spill Removal Organization
OSRP	Oil Spill Response Plan
OSRV	Oil Spill Recovery Vessel
OSS	Offshore Substation
PDE	Project Design Envelope
PPE	Personal Protective Equipment
QI	Qualified Individual
RCP	Regional Contingency Plan
RRT	Regional Response Team
SHPO	State Historical Preservation Office
SOSC	State On Scene Coordinator
SOV	Service Operations Vessels
SPCC	Spill Prevention, Control, and Countermeasures
TBD	To Be Determined
UC	Unified Command
USCG	United States Coast Guard
Vol	Volume
WTA	Wind Turbine Area
WTG	Wind Turbine Generators

1. Plan Introduction Elements

1.1 Purpose and Scope of Plan Coverage

This Oil Spill Response Plan (OSRP) covers the offshore wind energy generation project – Atlantic Shores Offshore Wind Project 1 and Atlantic Shores Offshore Wind Project 2 (known collectively in this plan as “the Project”) within the southern portion of Lease Area OCS-A 0499 (the Lease Area). The OSRP provides clear notification and activation procedures and identifies shore-based resources to respond to an oil spill or the substantial threat of an oil discharge from any Wind Turbine Generator (WTG) and Offshore Substation (OSS) at Atlantic Shores. This current OSRP is a draft plan because of the Project Design Envelope (PDE) approach that Atlantic Shores is taking. Once the project is approved, the OSRP will be finalized for Bureau of Safety and Environmental Enforcement (BSEE) and Bureau of Ocean Energy Management (BOEM) review and approval prior to construction. This OSRP focuses on planning for an oil spill response in the offshore environment. Individual OSRPs for Project 1 and Project 2 will be developed for BOEM review and acceptance prior to construction with each Project’s Facility Design Report (FDR) and Fabrication and Installation Report (FIR). A Spill Prevention Control and Countermeasures (SPCC) Plan will be developed to detail the plan for a potential oil spill response from the onshore facilities and activities.

Atlantic Shores, a 50/50 joint venture between EDF Renewables North America and Shell New Energies US LLC, is proposing to develop an offshore wind energy generation project (the Project) within the southern portion of Lease Area OCS-A 0499, which has been designated by BOEM for wind energy development. The Project also includes offshore export cables (export cables) within federal and New Jersey state waters, onshore interconnection cables and onshore substations within New Jersey, and operations and maintenance (O&M) facilities in New Jersey. The Project is being permitted using a PDE which provides a reasonable range of designs for proposed components (e.g., foundations, WTGs, OSS, export cables, onshore elements).

Lease Area OCS-A 0499 is located on the Outer Continental Shelf (OCS) within the New Jersey Wind Energy Area. Atlantic Shores’ proposed offshore wind energy generation facility will be located in an approximately 102,055-acre (413-km²) Wind Turbine Area (WTA) located in the southern portion of the Lease Area. Figures of the Lease Area can be found in Annex 1. At its closest point, the WTA is approximately 8.7 miles (mi) from the New Jersey shoreline. Within the WTA, Projects 1 and 2 will include up to 200 wind turbine generators (WTGs) and up to 10 offshore substations (OSSs). The WTGs and OSSs will be connected by a system of 66 kV to 150 kV inter-array cables. OSSs within the WTA will be connected by 66 kV to 275 kV inter-link cables.

The WTGs will be aligned in a uniform grid with multiple lines of orientation allowing straight transit corridors through the WTA. The oil sources in the WTGs potentially include emergency generator oil, hydraulic fluid, grease, gear and bearing lubricating oil, and transformer oil with a maximum volume of approximately 3,781 gallons per WTG. The total potential oil quantity for 200 WTGs is 756,200 gallons.

Atlantic Shores is considering three sizes of OSS. Depending on the final OSS design, there will be up to 10 small OSSs, up to five medium OSSs, or up to four large OSSs. Small OSSs will be located no closer than 12 miles (19.3 km) from shore whereas medium and large OSSs will be located at least 13.5 mi (21.7 km) from shore. The worst-case oil discharge is conservatively assessed as a catastrophic release of all oil contents from a large OSS located closest to shore. Oil sources in the OSSs include main power transformers, auxiliary/earthing transformers, reactors, diesel storage tanks, and diesel engines. Oil

sources presented in this document are associated with the large OSS. The oil sources associated with one large OSS are approximately 205,015 gallons.

All fluids used on these offshore structures are contained on the structure. Each fluid source has drip trays, pans or other devices to collect any leaks. Each pan or tray has a drain system leading to a collection tank. This design will act to prevent most possible incidents at the WTA.

The WTA is located in the OCS, as defined by 30 CFR 254.6 and Section 2 of the Submerged Lands Act (43 U.S.C. 1301). Therefore, this plan is written in accordance with the requirements of 30 CFR Part 254, Subpart B, Oil Spill Response Plans for Outer Continental Shelf Facilities. In accordance with 30 CFR 254, the OSRP demonstrates that Atlantic Shores can respond effectively in the unlikely event that oil is discharged in the WTA. The State of New Jersey does not require planning and response submittals for review and approval with regards to offshore oil.

The purpose of this OSRP is to provide a written procedure for directing a plan of action in the event of a discharge of oil in the WTA. The discharge may be the result of a spill, accident, natural disaster, or civilian threat. This OSRP adopts procedures to allow for a uniform plan of action that will assist in a systematic and orderly manner of response to any oil discharge incident. This plan of action will minimize confusion and indecision, prevent extensive damage or injury to personnel, and minimize exposure to the public and the environment. Routine training and exercises regarding the content of this plan will provide the confidence needed for personnel to perform their assigned duties if such an event occurs. Designated Qualified Individual (QI) and Alternate Qualified Individuals (AQI) are considered Emergency Coordinators. In addition, a Spill Response Coordinator and alternate Spill Response Coordinator will be identified to lead any spill response effort. Personnel, through the use of this OSRP, will utilize all resources necessary to bring any discharge under control. In order to prepare for such control, all personnel will be well-trained and knowledgeable as to their various roles during a release.

A Regulatory Compliance and Cross-Reference Matrix is included in this OSRP as Annex 6 clearly showing how this plan covers all regulatory requirements of 30 CFR §254.

The OSRP was prepared considering the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR §300), the Region 2 Regional Response Team (RRT) Regional Contingency Plan (RCP), and the Delaware Bay Area Contingency Plan (ACP).

- The RRT2 RCP is available at <https://www.nrt.org/sites/47/files/Final%20R2%20RCP%20Revised%20December%202020.pdf>
- The Delaware Bay ACP is available at <https://homeport.uscg.mil/Lists/Content/Attachments/2887/Delaware%20Bay%20ACP%20-%202019.1.pdf>.

The location of the Atlantic Shores WTA offshore of Atlantic City, New Jersey is within the Delaware Bay ACP Planning Area and under the U.S. Coast Guard (USCG) Federal On-Scene Coordinator (FOSC) at Sector Delaware Bay. This location is unique for oil spill response regulations and federal oversight. It is within the Region 2 RRT and the Environmental Protection Agency (EPA) Region 2, both based in New York and covering the states of New York and New Jersey. However, for USCG Area of Responsibility, this area of New Jersey is under jurisdiction of Sector Delaware Bay based in Philadelphia, Pennsylvania and regionally under the Fifth Coast Guard District based in Portsmouth, Virginia. Figure 1-1 shows the relation of the Lease Area to these regulatory areas. The locations of the USCG Districts can be seen in Figure 1-2.

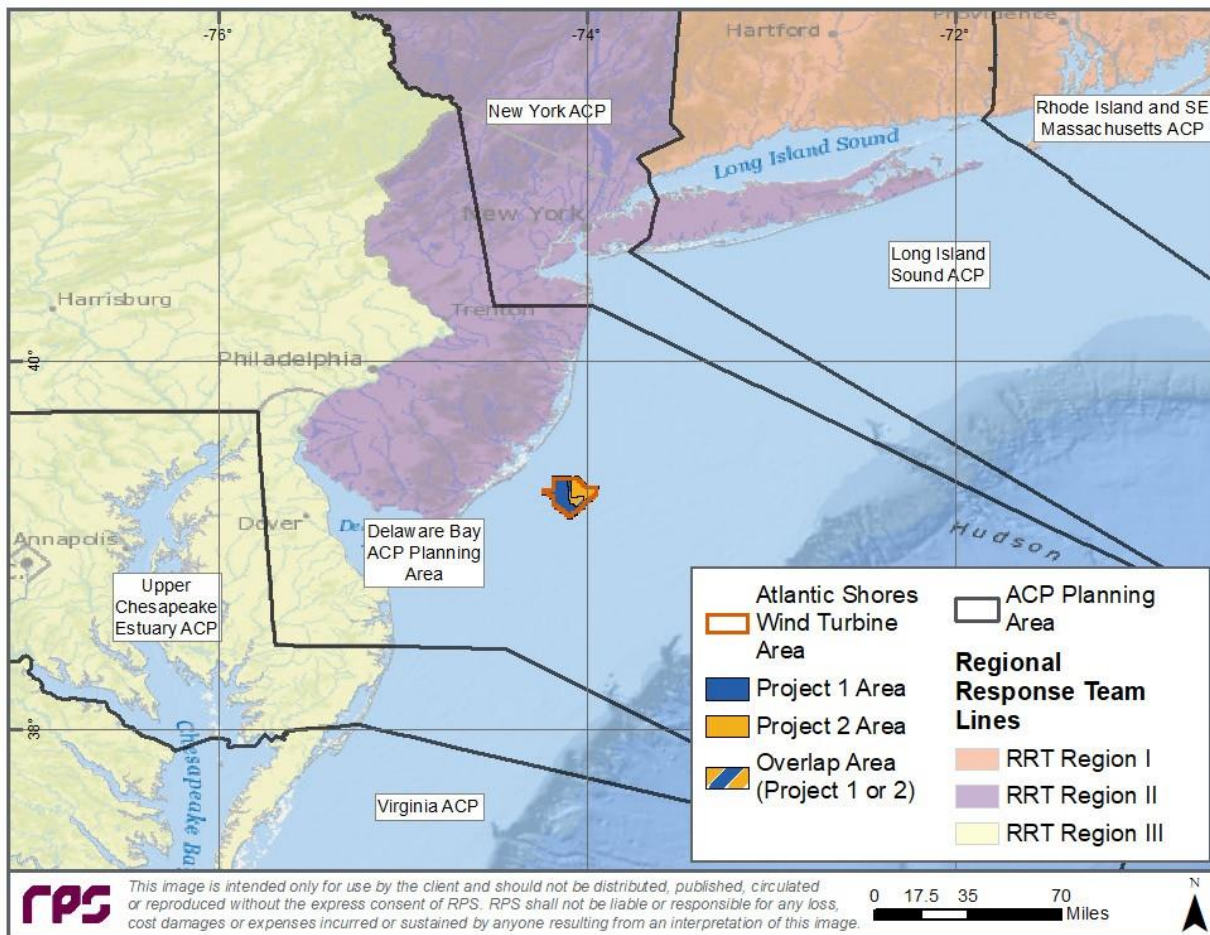


Figure 1-1. Atlantic Shores Lease Area in relation to federal regulatory areas.



Figure 1-2. Location of USCG Districts and Areas (from www.boatharbors.com).

Although unlikely, an oil spill from Atlantic Shores could potentially impact the states of Pennsylvania, Delaware, Connecticut, Rhode Island, or Massachusetts. A trajectory analysis was performed in accordance with 30 CFR 585.701 and 702 to determine what areas could be impacted. In all seasons for each of the modeled sites, there is a 1–20% probability of oil above a minimum thickness of 100 µm (100 g/m² on average over the grid cell) reaching the shorelines of New Jersey within a minimum of 2 days from release. In the spring, summer, and fall seasons there is a <10% probability that oil above 100 µm (100 g/m² on average over the grid cell) would reach the southern coasts of Long Island, NY within 10 days at the earliest. In the summer season, there is a small probability (<5%) that that oil above 100 µm (100 g/m² on average over the grid cell) would reach small portions of coastline on Block Island, RI and Martha's Vineyard/Nantucket, MA. However, the oiling would not occur for at least 15 days after the release in most cases and would likely be largely mitigated with response measures within this time. More details on the modeling results can be found in Annex 11.

The areas outside of New York and New Jersey are covered by the Region 3 RRT for Pennsylvania and Delaware to the south and the Region 1 RRT for New England to the north. During an incident that impacts more than one region, a lead RRT would be agreed upon to provide guidance. For a response impacting these additional areas, the FOSCs from the appropriate Coast Guard Sector could be involved in the response with the USCG Sector Delaware Bay FOSC as the lead.

The OSRP is consistent with the RCPs and ACPs in that it provides a method and process for communication, coordination, containment, removal, and mitigation of pollution and other emergencies. The preparation of this plan utilized the detailed information provided in the Region 2 RCP and the Delaware Bay ACP. The specific guidelines presented in this plan were carefully thought out, prepared in accordance with safe practices, and are intended to prepare personnel to respond to oil spills and other environmental emergencies. Atlantic Shores commits to the necessary resources to implement this plan.

Specifically, this OSRP:

- Identifies the QIs or Person in Charge with full authority to implement this response plan;
- Requires immediate communication with the appropriate federal, state, and local officials, and entities/persons providing personnel and equipment;
- Identifies and ensures by contract or other means the availability of personnel and equipment necessary to remove a worst-case discharge and mitigate or prevent a substantial threat of such a discharge; noting the specific Oil Spill Removal Organization (OSRO); and
- Describes training, equipment testing, periodic unannounced drills, and response actions.

1.2 Regulatory Applicability

The NCP, RRT 2 RCP, and the Delaware Bay ACP were reviewed, and this plan was written to comply with all federal, state, and local oil spill response regulations.

1.3 General Facility Information

The WTA is located on property in the OCS in the southern portion of BOEM Lease Area OCS-A 0499 approximately 8.7 miles from the New Jersey shoreline at its closest point. A figure of the WTA is located in Annex 1, Figure A1. The mailing address for Atlantic Shores is One Dock 72 Way, Brooklyn, NY 11205.

The Project consists of WTGs, OSSs, and associated foundations; inter-array and inter-link cables; and export cables. Oil sources in the WTGs may include emergency generator oil, hydraulic fluid, grease, gear and bearing lubricating oil, and transformer oil with maximum volume of approximately 3,781 gallons (90 bbls) per WTG and 756,200 gallons (18,005 bbls) for the 200 WTGs in the WTA. Oil sources in the OSSs may include main power transformers, auxiliary/earthing transformers, reactors, diesel storage tanks, and diesel engines. Oil sources presented in this document are associated with the large OSS. The oil sources associated with one large OSS total approximately 205,015 gallons (4,881 bbls) with a maximum of 820,060 gallons (19,525 bbls) for four large OSSs.

Table 1-1 provides general information for the Project as it pertains to planning for potential oil spills. Annexes 1, 3, and 7 provide discussion of facility operations in greater detail regarding equipment description, drainage, secondary containment, and emergency planning scenarios.

Table 1-1 Facility Summary Information

Facility Owner	Atlantic Shores Offshore Wind Project 1, LLC / Atlantic Shores Offshore Wind Project 2, LLC ¹
Facility Name	Atlantic Shores
Facility Mailing Address	One Dock 72 Way, Brooklyn, NY 11205
Facility Qualified Individual	To Be Determined (TBD) ²
Facility Phone Number	858-946-3235
E-mail Address	info@atlanticshoreswind.com
Latitude	°N 39.361336774
Longitude	°W 74.053319796
SIC Code	TBD ¹
Wind Turbine Generators (WTGs)	<ul style="list-style-type: none"> • Up to 200 WTGs in the WTA • Largest oil source in the WTGs is the 66-kilovolt transformer: 1,800 gallons per WTG • Total oil storage is 3,781 gallons per WTG • WTGs are equipped with secondary containment which is sized according with the largest container.
Offshore Sub Stations (OSSs): Diesel Fuel Storage Tank	<ul style="list-style-type: none"> • Up to 10 small or 4 large OSS in the WTA • 20,000 gallons per large OSS
OSS: Diesel Engines	<ul style="list-style-type: none"> • Up to 10 small, 5 medium, or 4 large OSS in the WTA • Internal motor lubrication oil in the diesel engines is 15 gallons per large OSS
OSS: Transformers	<ul style="list-style-type: none"> • OSS will have power transformers and auxiliary/earthing transformers containing 130,000 gallons of oil per large OSS. These transformers are the largest oil source in each OSS. • Total oil storage is 205,015 gallons per large OSS
OSS: Reactors	<ul style="list-style-type: none"> • Reactors: 55,000 gallons per large OSS
Materials Stored / Oil Storage Start-Up Date	See Annex 7 / 2025
Worst-Case Discharge Volume ³	205,015 gallons per large OSS
Maximum Most Probable Discharge Volume (United States Coast Guard [USCG]) ⁴	20,502 gallons per large OSS
Average Most Probable Discharge Volume (USCG) ⁴	2,050 gallons per large OSS
Oil Spill Removal Organization (OSRO)	TBD ²

Notes:

1. This plan is representative and covers Project 1 and Project 2 collectively. However, separate plans will be provided for each project for BOEM review and acceptance prior to construction with each Project's FDR and/or FIR.
2. This information will be provided as part of the final OSRP that will be submitted prior to construction.
3. The BSEE/BOEM "Oil Spill Response Plan (OSRP) for Offshore Wind Facilities Discussion Handout" provided guidance on worst-case discharge volume for an offshore wind facility.
4. Definitions in 33 CFR 155.1020 are based on percentage of cargo from a vessel during oil transfer operation. These same percentages were used here.

1.4 Operations at Atlantic Shores

During the Installation, Operations, and Decommissioning phases, the project will use crew transfer vessels (CTVs) and/or service operations vessels (SOVs). In addition to CTVs and SOVs, other vessels may be used to support O&M activities over the lifetime of the Project:

- Helicopters may offer support services for multiple O&M strategies.
- Large support vessels (e.g., jack-up vessels) may be required for service activities requiring crane access, including major component replacement (MCR), some routine maintenance activities, and periodic corrective maintenance.
- Survey vessels would be required for cable and foundation inspection campaigns and cable repair vessels would support cable repair campaigns.
- Other monitoring and inspection needs may be met by Unmanned Aerial Vehicles (UAV), Remotely Operated Vehicles (ROV), or underwater drones.

Oil spills from these vessels, vehicles, and aircraft could also occur in the area. Notifications, assessments, and response operations for these incidents would follow the same general structure of this plan. The non-tank vessels of 400 GT or larger on site will also maintain their own Shipboard Oil Pollution Emergency Plan (SOPEP) and Vessel Response Plan (VRP) under international and national regulations, respectively, to manage an oil spill response from these vessels.

The categories of oil and chemical spills that may potentially be associated with Atlantic Shores include:

- Spills from wind facility components caused by damage from external environmental forces (natural events), including earthquakes, tsunamis, and storms (hurricanes);
- Spills caused by fires and explosions in facility structures;
- Spills resulting from structural or equipment failures in facility structures;
- Spills resulting from operations (refueling, maintenance);
- Spills caused by intentional damage (vandalism, terrorism, war);
- Spills from wind facility components due to vessel allisions with wind facility structures;
- Spills from vessels due to vessel allisions with wind facility structures; and
- Spills from vessels resulting from vessel collisions and groundings attributable to presence of the facility.

1.5 Plan Review and Revision

In accordance with 30 CFR §254.30, the OSRP will be reviewed at least every two years from its effective date. It is important to note that this plan is a living document that will be updated as project details change.

Documentation of this review will be provided in the Review Table presented at the front of this OSRP. If the review does not result in modifications to the OSRP, the Chief of the BSEE Oil Spill Preparedness Division (Chief, OSPD) will be notified in writing that there are no changes.

The OSRP will be modified and submitted to the Chief, OSPD for approval within 15 days when the following occurs:

- A change occurs which significantly reduces response capabilities;
- A significant change occurs in the worst-case discharge scenario or in the type of oil being handled, stored, or transported at the facility;
- A change in the name(s) or capabilities of the OSROs cited in the OSRP;
- A significant change to the ACP(s) for the region; or
- The Chief, OSPD requires that Atlantic Shores resubmit the OSRP.

2. Emergency Response Action Plan

2.1 Oil Spill Detection, Notifications, and Initial Response

Detection of a spill or emergency is the first step in a response. There are several methods by which an emergency situation at Atlantic Shores may be discovered including the following:

- Automated equipment monitoring system alarm
- Discovered by company personnel during scheduled or unscheduled maintenance; or
- Reported by private citizens or by public officials.

In every case, it is important to collect accurate information and immediately notify the On-Duty Supervisor and any affected area personnel. Initial response will take place as indicated in Table 2-1 Initial Response Actions Checklist. The Initial Notification Data Sheet Form (Annex 4) will be completed by the On-Duty Supervisor while discussing the incident when it is initially reported by the person detecting the spill/discharge. Information not immediately known may be added to the form as it becomes available.

The On-Duty Supervisor will notify the QI or AQI upon receiving notification of an emergency event. The QI, AQI, or designee will make notifications as discussed in Section 2.2 to federal, state, and local agencies (Figure 2-1 and Table 2-3) immediately and shall assure that all required documentation is kept.

When making the initial notifications to the On-Duty Supervisor and affected personnel, one should attempt to provide the following information:

- Name of caller and callback number;
- Exact location (i.e. structure number and latitude and longitude coordinates) and nature of the incident (e.g., fire, oil spill);
- Time of incident;
- Name and quantity of material(s) involved, or to the extent known;
- The extent of personal injuries, damage and/or fire, if any;
- The possible hazards to human health, or the environment, outside the facility;
- Body of water or area affected;
- Quantity in water (size and color of slick or sheen) or amount released to the land or atmosphere;
- Present weather conditions—wind speed and direction, movement of slick or sheen, current/tide;
- Potential for fire; and
- Action being taken to control the discharge

A log should be maintained which documents the history of the events and communications that occur during the response (see Annex 4). It is important to remember that the log may become instrumental in legal proceedings, therefore:

- Record only facts, do not speculate.
- Do not criticize the efforts and/or methods of other people/operations.

- Do not speculate on the cause of the spill.
- If an error is made in an entry, do not erase; draw a line through it, add the correct entry above or below it and initial the change.
- Always evaluate safety throughout the response actions.

Table 2-1 Initial Response Checklist

Action	Comments
First Person on Scene	
Take personal protective measures and/or distance.	
Identify and control source, if possible (identify damaged equipment, deploy alternate containment or absorbent material). Eliminate ignition sources.	
Notify the On-Duty Supervisor.	
Notify the affected personnel of the incident.	
Warn personnel in the area and enforce safety and security measures.	
If possible, implement countermeasures to control the emergency. If personal health and safety is not assured, do not attempt to reenter the emergency site.	
Designate a Staging Area where the Emergency Response personnel and equipment can safely report to without becoming directly exposed to the emergency release (until QI arrives).	
On-Duty Supervisor	
Activate local alarms and evacuate non-essential personnel.	
Notify QI.	
Initiate defensive countermeasures and safety systems to control the emergency (booms, sorbent material, loose dirt, sandbags, or other available materials). Eliminate ignition sources.	
Initiate Emergency Response notification system.	
Dispatch response resources as needed.	
Monitor and or facilitate emergency communications until QI arrives.	
Keep the public a safe distance from the spill.	
Qualified Individual (QI) or Designee	
Notify federal, state and local agencies and other external stakeholders.	
Establish On-Scene Command and an Incident Command Post.	
Assess situation and classify incident.	
Determine extent and movement of the spill	
Identify sensitive areas and determine protection priorities.	
Request response resources from Oil Spill Removal Organization (OSRO) and Spill Management Team	
Establish Isolation Zones (Hot, Warm, Cold) and Direct On-Scene Response Operations.	
Keep the public a safe distance from the spill.	
Form Unified Command with the USCG FOSC and State On Scene Coordinator (SOSC). Direct operations until relieved by Incident	

Action	Comments
Management Team's Incident Commander, Owner's Representative, or the incident response is complete.	

2.2 Notifications

2.2.1 When to Notify

When there is a discharge of oil, or substantial threat of a discharge of oil, or a sheen observed in or outside the WTA, the following notifications must be made:

2.2.2 Internal Notifications

The individual discovering the spill will call the On-Duty Supervisor immediately and report initial facts about the incident. The On-Duty Supervisor will record the facts (see forms in Annex 4) and immediately (within 15 minutes) notify the QI. Table 2-2 lists the QIs and their 24-hour contact information. The QI or designated alternate on duty will be available 24-hours per day and capable of arriving to the Atlantic Shores WTA in a reasonable amount of time after contacting (typically within one hour). A Spill Response Coordinator and Alternate Spill Response Coordinator will also be available to assist in the oil spill response effort. The Spill Response Coordinators will be members of a Spill Management Team (SMT) that will be available to mobilize to the incident 24 hours a day, 7 days a week. This SMT will staff an incident response organization set up in a standard National Incident Management System Incident Command System organization with appropriate positions activated, as needed. A Spill Response Operating Team will also be available on a 24-hour basis to deploy and operate spill-response equipment at the WTA.

Other than the Spill Response Operating Team, these Atlantic Shores response personnel will manage any incident from the O&M facility which will act as a spill-response operations center and will include provisions for primary and alternate communications systems available for use in coordinating and directing spill-response operations.

Table 2-2 Internal Atlantic Shores Notifications

Name ¹	Position	Cell	Email
Person A	Qualified Individual, Atlantic Shores	(516) 578-9642	lowell.dickerson@atlanticshoreswind.com
Person B	Alternate Qualified Individual	(XXX) XXX-XXXX	XXX@XXX.com
Person C	Spill Response Coordinator	(XXX) XXX-XXXX	XXX@XXX.com
Person D	Alternate Spill Response Coordinator	(XXX) XXX-XXXX	XXX@XXX.com
Persons E-Z	Other Spill Management Team Members		

Note 1: Names and contact information for all Internal Notifications will be provided as part of the final OSRP which will be submitted prior to construction.

2.2.3 External Notifications

Any person or organization responsible for an oil spill is required to notify the federal government when the amount reaches a federally-determined limit. This federally-determined limit is based on the "Discharge of Oil" regulation. The Discharge of Oil regulation is more commonly known as the "sheen rule" and requires notifications of:

- Discharges that cause a sheen or discoloration on the surface of a body of water;
- Discharges that violate applicable water quality standards; and
- Discharges that cause a sludge or emulsion to be deposited beneath the surface of the water or on adjoining shorelines.

Anyone who discovers an oil spill meeting any of the above criteria must contact the National Response Center (NRC) at (800) 424-8802 as soon as knowledgeable of the spill. Notifying the NRC meets all federal reporting requirements, including USCG, BSEE, and the Bureau of Ocean Energy Management (BOEM). Atlantic Shores will provide the following information, if it is known:

- Name, location, organization, and telephone number
- Name and address of the party responsible for the incident; or name of the carrier or vessel, the railcar/truck number, or other identifying information
- Date and time of the incident
- Location of the incident
- Source and cause of the spill
- Types of material(s) spilled
- Quantity of materials spilled
- Medium (e.g., land, water) affected by spill
- Danger or threat posed by the spill
- Number and types of injuries or fatalities (if any)
- Weather conditions at the incident location
- Whether an evacuation has occurred
- Other agencies notified or about to be notified
- Any other information that may help emergency personnel respond to the incident

State of New Jersey Notifications and Response

In addition to federal notifications, Atlantic Shores will immediately complete all required state notifications.

New Jersey Law requires that discharges of hazardous materials be immediately reported to the New Jersey Department of Environmental Protection (NJDEP) HOTLINE 1-877-WARNDEP / 1-877-927-6337. Generally, emergency responders are deployed immediately upon a credible report of medium or major oil spills anywhere and minor spills in pristine waters

For a worst-case discharge, NJDEP, the New Jersey Office of Emergency Management (NJOEM), and the NJ State Police Marine Bureau and/or the Division of Criminal Justice will likely respond physically to the scene.

The following information must be reported to NJDEP for the discharge of any hazardous substance (which by New Jersey Law included any petroleum products):

- The name, title, affiliation, address and telephone number of the person reporting the discharge;

- The location of the discharge, including the name of the water body, location of the discharge with reference to a fixed point or points, and a description of the area which the discharge may reach;
- The common name of the hazardous substance(s) discharged;
- An estimate of the quantity of each hazardous substance discharged, including best estimates if the quantities are unknown;
- The date and time at which the discharge began, and whether the discharge is continuing, intermittent or terminated;
- The actions such person proposes to take to contain, clean up and remove the hazardous substance(s) discharged; and
- The name and address of any person responsible for the discharge.

Atlantic Shores will also notify the New Jersey Historic Preservation Office (HPO) in the event sensitive historic and prehistoric resources could be impacted by the spill. The HPO will evaluate areas where response actions are to be conducted for potential impact to historic and culturally sensitive sites.

Additional Notifications

The QI, AQI, or designee will make all initial and follow-up federal, state, and local agency notifications. Atlantic Shores will use forms provided in Annex 4 to document details of notifications and ensure accurate information is being passed along. Although notification to NRC completes ALL federal agency notification requirements, Atlantic Shores will follow-up directly with the appropriate agencies as needed. Specific phone numbers for initial federal, state, and local response agencies are included in Table 2-3. Although not required by regulations, courtesy calls can be placed directly to local offices of federal agencies in order to establish lines of communication, if desired. A complete list of phone numbers for agencies, resources, and stakeholders who may need to be contacted during a particular incident are provided in Annex 2.

The Atlantic Shores-contracted OSRO will be notified immediately following any oil spill that cannot be contained on the OSS or WTG. They may initially be placed on standby as more details are being gathered about the spill, or they may be immediately activated to the scene.

There are a number of other contacts that will be made if required, and they may include:

- Emergency Medical Personnel;
- Occupational Safety & Health Administration (OSHA); and
- Wildlife rehabilitation personnel.

Table 2-3 lists initial emergency notifications. Annex 2 provides a complete list of potential response resources, trustees, and federal, state, and local agencies.

Table 2-3 Initial Agency Notifications

Agency	Phone	Requirements for Notifications
Federal Agencies		
National Response Center (NRC)	(800) 424-8802 (serves to notify all federal agencies)	Immediate notification is required for all discharges of oil sufficient to produce a sheen on the surface of a body of water of the United States. Spills of dielectric insulating fluid or other synthetic oil may not produce a sheen capable of being detected visually. Known spills of these fluids must also be reported to the NRC immediately.
USCG Sector Delaware Bay	215-271-4800	Atlantic Shores' notification to the NRC completes all federal agency notifications. Atlantic Shores will notify USCG Sector Delaware Bay directly to provide additional information.
BSEE Atlantic OCS Region	504-736-0557	. Pursuant to 30 CFR 250.187(d) and 30 CFR 254.46(b), Atlantic Shores will notify BSEE without delay for a spill that is one (1) barrel or more or, if the volume is unknown, is thought to be one barrel (1) or more.
BOEM Atlantic OCS Region	1-800-200-4853	Atlantic Shores will directly notify BOEM for a spill on the OCS.
State Agencies		
New Jersey Department of Environmental Protection (NJDEP)	1-877-WARNDEP / 1-877-927-6337	Immediately after a discharge commences, any person or persons responsible for a discharge who knows or reasonably should know of the discharge, shall immediately notify the Department. In the event that the 877 number is inoperable, any person or persons responsible for a discharge shall immediately notify the State Police at 609-882-2000
Local Authorities		
Atlantic City Fire Department	609-347-5590	Notify the local fire department for any incident at Atlantic Shores to expedite local response resources to the scene.
USCG Station Atlantic City	609-344-6594	NRC will notify the Coast Guard. However, local contact for updating information can assist the federal response. USCG Station Atlantic City can respond for Search and Rescue on board Coast Guard small boats.
USCG Air Station Atlantic City	609-677-2000	NRC will notify the Coast Guard. However, local contact for updating information can assist the federal response. USCG Air Station Atlantic City can provide aviation resources.
OSRO		
TBD		
Contact information for additional agencies or services that may become involved in an incident is provided in Annex 2.		

2.3 Establishment of a Unified Command

The QI at the facility will initially be the Incident Commander during any spill. As the incident escalates, personnel from the facility, particularly the Spill Response Coordinator and/or Alternate Spill Response Coordinator, as well as federal, state, and local agencies will augment the response forming a Unified Command (UC) managed by an interagency Incident Management Team (IMT). The National Incident Management System (NIMS) will be used by the facility, in concert with OSROs and federal, state, and

local agencies. An outline of the ICS structure can be found in Annex 3. Because the use of NIMS ICS is mandated for all levels of government by Homeland Security Presidential Directive 5 (HSPD-5), Atlantic Shores will ensure that this flexible system is implemented in the event of an incident.

The designated QI or AQI for Atlantic Shores is English-speaking, located in the United States, available on a 24-hour basis, familiar with implementation of this response plan, and trained in the responsibilities under the plan. The QI and designated AQI have full written authority to implement this response plan, including:

- Activating and engaging in contracting with identified OSROs,
- Acting as a liaison with the pre-designated FOSC and SOSC; and
- Obligating, either directly or through prearranged contracts, funds required to carry out all necessary or directed response activities.

2.3.1 General Spill Mitigation

The Atlantic Shores facility will be designed to ensure that any temporary connections transporting oily substances (e.g., between diesel storage container and emergency generator) are made using offshore certified dry-break connectors and placed above a drip tray. A simple oil spillage kit, allowing to mitigate small, local spillage during maintenance, will be part of the delivery. In the WTGs and OSSs are designed to have a secondary containment system, which will be sized according to the largest container.

While the above design parameters will act to prevent spills, incidents can still occur. In case of an oil discharge or other marine casualty, the highest priority is always the safety of the personnel. The mitigation procedures included in this section provide general guidance in responding to a casualty or oil spill and are supplements to the advisements contained in the Project Operations Manual. There is no substitute for training of the Spill Response Operating Team and onboard drills on all emergency procedures to mitigate the casualty or environmental impact.

All fluids used on the offshore structures are contained on the structure. Each fluid source has drip trays, pans or other devices to collect any leaks. Each pan or tray has a drain system leading to a collection tank.

2.3.2 Preliminary Assessment

After initial response is taken to secure the source of the spill, and notifications are made to the required agencies, further spill containment, recovery, and disposal operations can begin. It is important to first identify the magnitude of the problem and resources threatened. The QI or designee will:

1. Classify the type and size of spill.
2. Determine chemical and physical properties of spilled material for potential hazards (see Annex 10, Material Safety Data Sheets).
3. Obtain on-scene weather forecast such as wind speed, wind direction, and tide schedules (12, 24, 48, and 72-hour).
4. Track oil movement or projected movement. Consider need for overflights and possible challenges in visually detecting spills of dielectric insulating fluid or synthetic oil.
5. Continuously assess human health and environmental concerns.

6. Determine extent of contamination and resources threatened (i.e., waterways, wildlife areas, economic areas).
7. Start chronological log of the incident.

As part of this Preliminary Assessment, Atlantic Shores will classify the incident to quickly categorize the appropriate level of response, notifications, and resources which may be necessary to mitigate the emergency. The incident will be categorized based upon the nature of the incident, degree of containment and isolation, materials involved or size of the spill, and any other additional information provided by the person reporting the spill. Incident levels may be upgraded or downgraded from the initial determination as further information is determined or the situation changes. The Incident Classification levels are presented in Figure 2-1. A Level One incident will require only the mobilization of Atlantic Shores personnel.

Level One – Minimal danger to life and property and the environment. Project personnel are capable of responding to the incident. The problem is limited to the immediate work area or release site and spills are generally less than 42 gallons.

Level Two – Serious situation or moderate danger to life, property, and the environment. The problem is currently limited to the WTA, but it does have the potential for either involving additional exposures or migrating offsite. The incident could involve a large spill of oil, a fire, or a loss of electrical power.

Level Three – Crisis situation or extreme danger to life, property, and the environment. The problem cannot be brought under control, goes beyond the WTA, and/or can impact public health and safety, and the environment, or a large geographic area for an indefinite period of time. Such incidents include a vessel fire or release of oil in a volume that can impact surrounding areas.

Figure 2-1 Guidelines for Determining Incident Classification

Based on the preliminary assessment, additional cleanup personnel and equipment will be dispatched to the site and deployed to control and contain the spill.

2.3.3 Establishment of Objectives and Priorities

Emergency conditions will be managed in a controlled manner, and oil spill response operations will be conducted with the following objectives:

1. Provide for the safety and security of responders and maximize the protection of public health and welfare.
2. Initiate actions to stop or control the source, and minimize the total volume released.
3. Determine oil fate and trajectories.
4. Contain, treat, and recover spilled materials from the water's surface
5. Conduct an assessment and initiate shoreline cleanup efforts.
6. Identify and protect environmentally sensitive areas, including wildlife, habitats, and historic properties. Develop strategies for protection and conduct pre-impact shoreline debris removal.
7. Identify threatened species and prepare to recover and rehabilitate injured wildlife.
8. Investigate and apply alternative technologies to support response efforts where feasible.
9. Establish and continue enforcement of safety and security zones.
10. Manage a coordinated interagency response effort that reflects the composition of the UC.
11. Inform the public, stakeholders, and the media of response activities.

During a major oil spill, resource, time, and various response constraints may limit the amount of areas that can be immediately protected. Every attempt will be made to prevent impacts to areas surrounding a spill site.

2.3.4 Implementation of Tactical Plan

The general procedures for implementation of a tactical plan are likely to include:

- Maximize protection of response personnel.
- Deploy containment resources, and, if appropriate, divert spill to a suitable collection points that are accessible and create the least impact to surrounding areas.
- Maximize on-water containment and recovery operations.
- Protect sensitive areas.
- Handle wastes to minimize secondary environmental impacts.

Atlantic Shores will establish contractual agreements with an OSRO to conduct oil spill response operations. The Spill Response Operating Team will use containment equipment available at the site to surround or divert the spill until the OSRO arrives on scene. If the spill is large enough to require a UC and Incident Management Team, the Incident Action Planning cycle will begin and will establish incident objectives, strategies, and tactics. The UC would likely be made up of the USCG FOSC, the NJDEP SOSC, and the Atlantic Shores Incident Commander. For small spills, the QI will manage the incident. Although not expected, if the spill is large enough to impact multiple USCG FOSC/Captain of the Port (COTP) Zones and RRT Regions, a lead FOSC and RRT will be determined.

2.4 Oil Spill Response Strategies

2.4.1 General Response

The physical-chemical properties of the oils used are important in spill response contingency planning. Any spill response at Atlantic Shores' offshore facilities will be guided by the Safety Data Sheets (SDSs) (see Annex 10). For example, dielectric insulating fluids or synthetic oils have an environmental fate/transport and affinity for sorbent booms that differs from petroleum oils. Booms made of natural fiber (e.g., coconut husk) can be more effective than traditional polyethylene boom to cleanup spills of these fluids/oils. These fluids/synthetics are commonly light-colored, milky white, or frothy in appearance on the water surface in relatively protected marine environments. There may be no obvious rainbow sheen. In un-protected marine environments, these sheens might be very difficult to detect. In the open ocean near where Atlantic Shores' offshore facilities are located, the high-energy environment will readily disperse this oil into the water column. This tendency will be considered when selecting a response option to this type of spill. Drum or disk skimmers have been shown in lab tests to be most effective on these oils. Atlantic Shores will closely monitor the area for incidents, and the likelihood of any spills is believed to be very low. All equipment will be carefully maintained at all times to reduce the possibility of an incident. In addition, Atlantic Shores' staff will be trained (See Section 3.2) on how to observe spills of mineral oils or dielectric fluids.

2.4.2 Operating Environments

Offshore

The initial response to mitigate/contain a spill offshore is to utilize large OSRVs or other advancing skimming systems to recover the oil before it reaches the shoreline. Oil discharged offshore is generally distributed by the wind. In addition, wave action causes emulsification of the oil, decreasing the recoverable amount and increasing the area of contamination. If the oil does reach the shoreline, GRSs from the ACP will be utilized to protect environmentally sensitive sites.

The WTA is located in the OCS. Water depths in the area range from 19 to 37 meters. However, oils stored in the WTGs and OSSs have a specific gravity of less than 1.0 and would float on the surface of the water. Therefore, feasible mechanical response methods include skimming, booming, and improvised barriers.

Banks

The nearest land mass to the WTGs and OSSs is the New Jersey shoreline, which is located approximately 8.7 miles west of Atlantic Shores. Due to the close proximity of the WTA to the shoreline, it is possible that a discharge of oil would impact the terrain alongside the bed of a river, creek, or stream. A trajectory analysis is included in this OSRP as Annex 11 illustrating what specific areas could be impacted.

Bays

Silver Bay, Barnegat Bay, Manahawkin Bay, Great Bay, Reeds Bay, Absecon Bay, Lakes Bay, Great Egg Harbor Bay, and Ludlam Bay are located along the New Jersey coastline with access to the Atlantic Ocean. It is anticipated that a discharge of oil from a WTG or OSS could reach these bodies of water. A trajectory analysis is included in this OSRP as Annex 11 illustrating what specific areas could be impacted.

Atlantic Shores will ensure that swift response actions are implemented in order to protect the many bays along the coastline of New Jersey. These bays present environmentally sensitive areas which are critical to protect. The bottom sediments close to shore can be soft and muddy, and the surrounding land can include wetlands and marshes. Floating vegetation can be common. Atlantic Shores will deploy boom to prevent oil from entering the bays. If oil does enter any bays, response measures will be implemented to contain the oil to a small area.

2.4.2 Resources at Risk

Tribal Lands

Atlantic Shores is committed to tribal coordination and already coordinated with tribal nations in the area of the WTA. The tribal nations with whom Atlantic Shores is already coordinating include:

- Absentee-Shawnee Tribe of Indians of Oklahoma
- Delaware Nation, Oklahoma
- Delaware Tribe of Indians
- Mohican Nation Stockbridge – Munsee Band
- Narragansett Indian Tribe
- Shinnecock Indian Nation
- Stockbridge Munsee Community of New York
- Nanticoke Lenni-Lenape Tribal Nation
- Ramapough Lenape Indian Nation of New Jersey
- Powhatan Renape Nation
- Unkechaug Indian Nation

- Lenape Indian Tribe of Delaware

Wildlife

Several National Wildlife Refuges located in New Jersey, Delaware, and New York could be impacted by a spill from Atlantic Shores. These refuges include Cape May, Edwin B. Forsythe, and Supawna Meadows in New Jersey, Prime Hook and Bombay Hook in Delaware, and Lido Beach, Seatuck, and Wartheim on Long Island, New York. Figure 2-3 shows the location of the National Wildlife Refuges located closest to the Lease Area. The primary National Wildlife Refuge of concern is the Edwin B. Forsythe area, due to its proximity to the WTA.

Because it is illegal to possess wildlife in New Jersey without a permit, Atlantic Shores will ensure any injured, orphaned, or ill wildlife are taken directly to a permitted wildlife rehabilitator. Permitted wildlife rehabilitators by county can be found at https://www.state.nj.us/dep/fgw/pdf/rehab_list.pdf

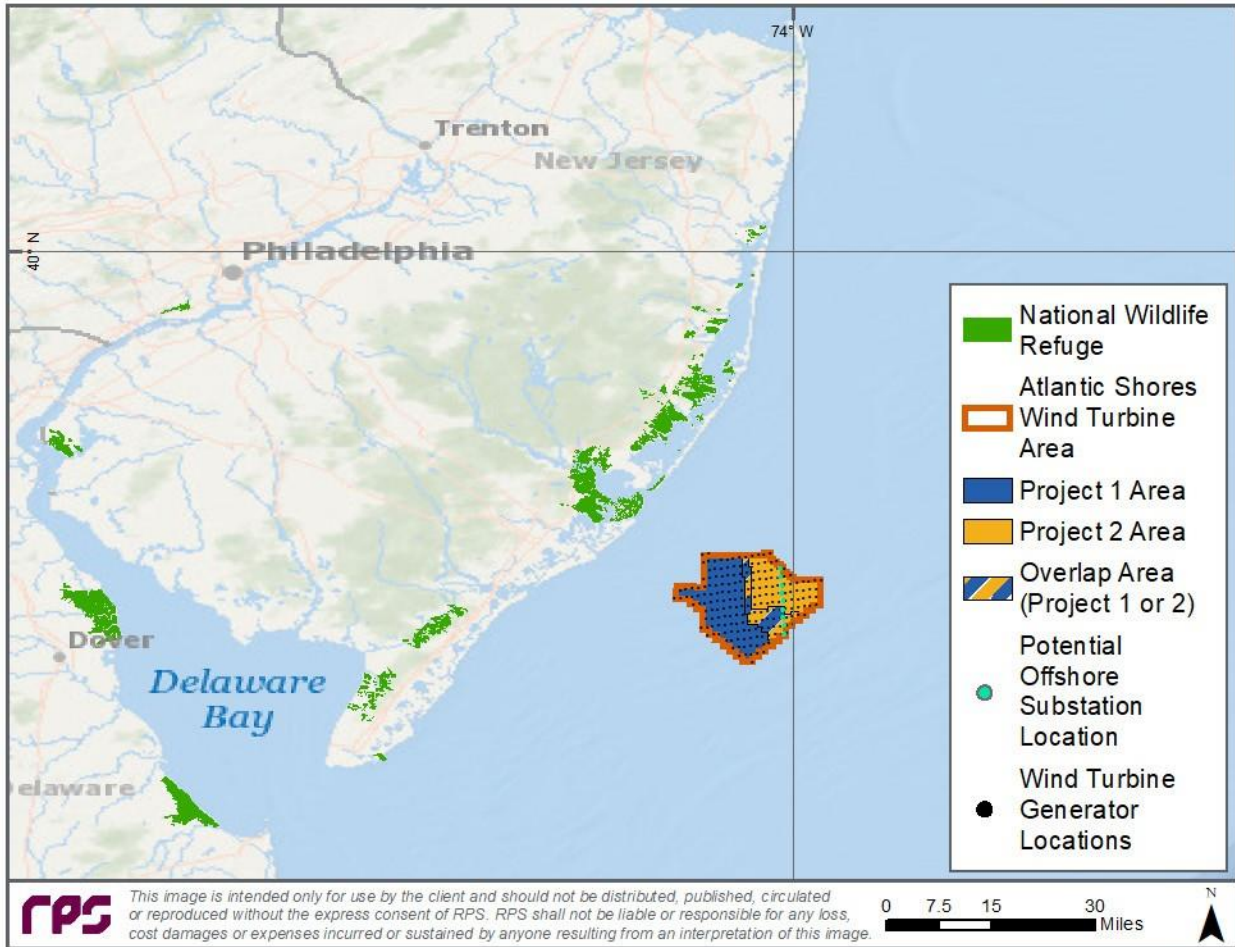


Figure 2-2. National Wildlife Refuges in relation to the Atlantic Shores Lease Area.

Sensitive Sites

Sensitive sites exist in the area that could be impacted by a spill from the Atlantic Shores Project. These sites include environmental, historical, cultural, and socioeconomic areas. Environmental Sensitivity Index maps, available from the National Oceanic & Atmospheric Administration (NOAA), provide a summary of coastal resources that are at risk if an oil spill occurs in the area. The maps are available in pdf format at: <https://response.restoration.noaa.gov/maps-and-spatial-data/download-esi-maps-and-gis-data.html>.

GRSs, developed by the Area Committee, are booming strategies to protect these sensitive areas. These strategies can be viewed on the NOAA Environmental Response Management Application (ERMA at <https://response.restoration.noaa.gov/atlantic-erma>). Atlantic Shores will ensure these strategies are implemented in the Incident Action Plan (IAP).

2.4.3 Containment and Mechanical Recovery Methods

The objective of the initial phase of the containment procedure is to prevent the spread of the spill, especially on water, and confine it to as small an area as possible. The containment goals are to prevent liquid or vapors from reaching a possible ignition source (i.e., boat engines, electrical equipment) and any environmentally sensitive area (i.e., water, wetland, wildlife management area). The primary methods to be used in containing a discharge would be sorbents or containment boom. It will likely be necessary to use many different methods to respond to a spill.

Atlantic Shores will use sorbents to remove minor on-water spills on the WTGs and OSS. The majority of the oil mixture contained in the OSSs is a dielectric or synthetic oil, which require different techniques for detection and response than petroleum oils. Traditional polyethylene sorbents are best used for petroleum-based oils, such as the hydraulic oil in the WTG or the diesel oil in the OSS. Sorbent boom or pads made of natural fiber (e.g., coconut husk) can be more effective to cleanup spills of dielectric fluids/synthetic oils, such as the naphthenic or ester oils in the WTGs and/or OSSs. In addition, floating barriers or other mechanical means can be used to contain the oil. Once contained, skimmers can collect these oils in order to remove them from the environment. Drum and disk skimmers work best for removing spills of dielectric fluids/synthetic oils.

For larger spills, Atlantic Shores will use mechanical recovery as the first response measure following an oil spill. These operations will include removing oil using advancing and stationary recovery systems. Oil Spill Recovery Vessels (OSRVs) will be mobilized by the OSRO to remove fresh oil from the water's surface. Adequate storage for recovered oily water will be available to ensure skimming operations can continue. Storage on-board vessels, as well as storage bladders and tanks, may be used in order to extend the recovery operations. In order to protect shorelines from any oil, booming strategies from the Delaware Bay ACP GRS will be employed to divert, deflect, and exclude oil from impacting particularly sensitive areas. The GRS booming strategies developed by the Delaware Bay Area Committee are shown in Figure 2-2.

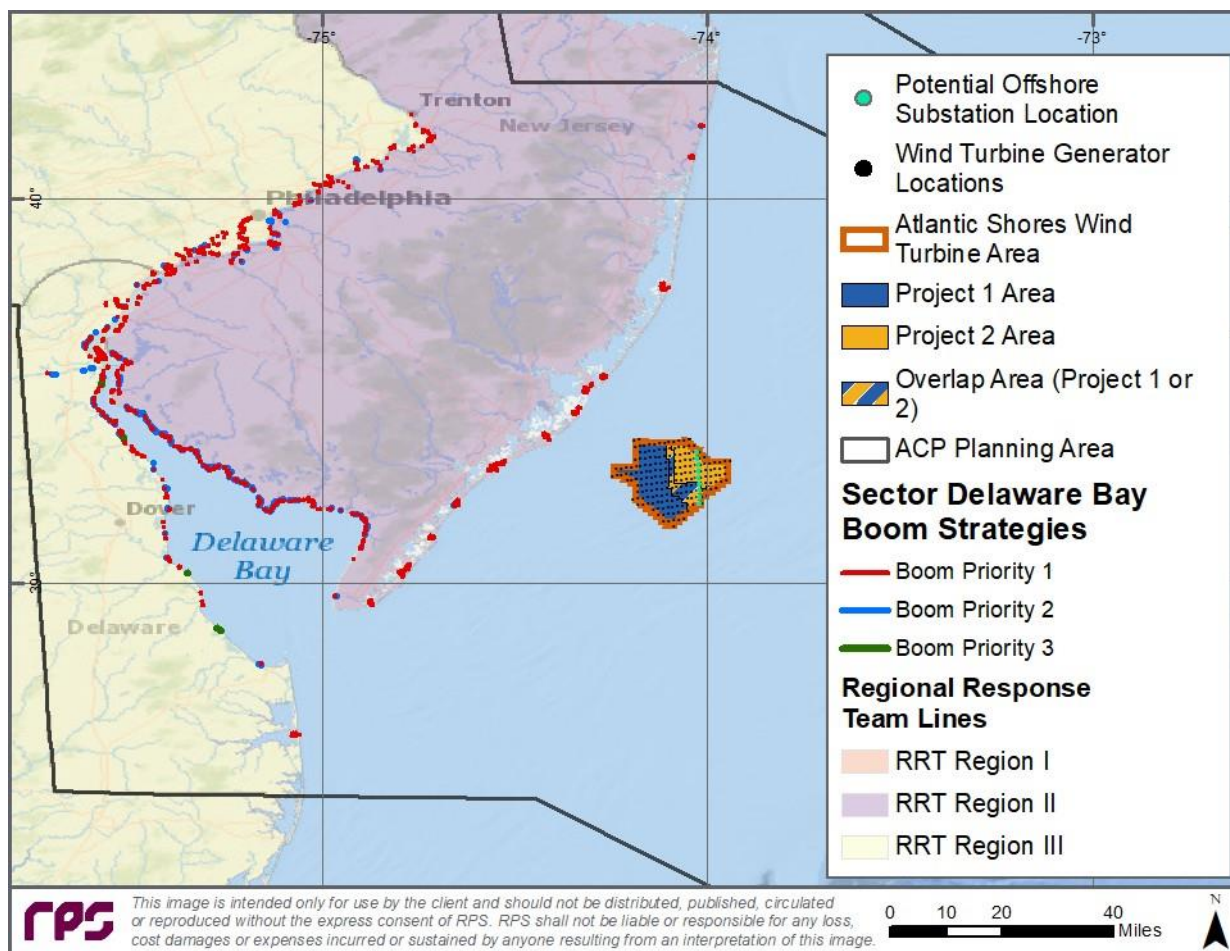


Figure 2-3. Delaware Bay Area Committee Booming Strategies from the GRS.

A summary of the booming techniques for both aquatic and onshore scenarios described in the Delaware Bay ACP GRS is provided in Table 2-4.

Table 2-4 Booming Techniques

Type of Boom	Use of Boom
Containment Booming	<ul style="list-style-type: none"> • Boom is deployed around free oil. • Boom may be anchored or left to move with the oil.
Diversion Booming	<ul style="list-style-type: none"> • Boom is deployed at an angle to the approaching oil. • Oil is diverted to a less sensitive area. • Diverted oil may cause heavy oil contamination to the shoreline downwind and down current. • Anchor points may cause minor disturbances to the environment.
Exclusion Booming	<ul style="list-style-type: none"> • Boom deployed to protect a sensitive area by preventing oil from entering that area

Waste Disposal and Oil Recovery

Oil spill cleanup from recovery operations will involve the handling of recovered oil and oiled materials. The different types of wastes generated during response operations require different disposal methods. Waste will be separated by material type for temporary storage prior to transport to an approved recovery or treatment/storage/disposal facility.

These materials will be directed to a state-approved reclamation/disposal site. Normally, the waste generated from a recovery operation will be classified as a non-Resource Conservation & Recovery Act state regulated waste. New Jersey classifies used or unused waste oil that is not otherwise Resource Conservation & Recovery Act hazardous waste as a Class D regulated recyclable material. In rare instances, where it is suspected that extraneous substances were introduced into a spill, it is appropriate to test the recovered oil for hazardous waste characteristics (ignitability, reactivity, corrosivity, and toxicity).

Because decanting is vital to the efficiency of mechanical recovery of spilled oil by allowing maximum use of limited storage capacity and thereby increasing recovery operations, Atlantic Shores will request approval. Approval will be obtained from federal and state agencies before any decanting is used.

Recovered oil may be transferred to portable tanks. It is important to ensure temporary storage devices are of sufficient size to allow continued operations.

Oily debris collected requires specific handling. Contaminated materials will be placed in leak proof, sealable containers, such as drums or roll-off boxes, and transported to appropriate facilities for processing, recycling, or disposal.

In the unlikely case that oil reaches the shoreline, clean sand and shoreline materials can be separated from oiled materials and returned to the shoreline. Not only is this cost effective from an operations perspective, it also provides an efficient means of returning clean, excavated material back to the shoreline as a restorative measure.

2.4.4 Use of Dispersants

Although it is unlikely that dispersants will be required for a spill from the facility, Atlantic Shores will consider the use of dispersants in any appropriate scenario as an effective means to quickly remove oil from the water's surface and disperse it into the water column. If the UC determines that dispersants could be an effective countermeasure, the use of dispersants will be requested from the RRT.

The Region 2 RRT developed a Memorandum of Understanding (MOU) for pre-approval of chemical countermeasures in different areas of the Region. Atlantic Shores is located in Zone 2, which is defined as waters under the jurisdiction of the COTP of Delaware Bay that lie between 0.5 nm and 3 nm from the Territorial Sea Baseline along the coast of New Jersey. In Zone 2, the FOSC has advance approval to use chemical countermeasures listed in the NCP Product Schedule on a trial basis.

In 1995, the MOU extended the southern boundary of preauthorization from the northern boundary of the Delaware Bay COTP to the boundary between Federal Region 2 and Federal Region 3. This extended area added the WTA to this pre-authorization policy.

The trial application will, however, not take place if threatened or endangered species are known to be present. The trial application, should it be deemed appropriate, will be performed on a portion of the spill

covered by less than 1,000 gallons to determine the product's efficacy on the specific oil under the current set of environmental and meteorological conditions. The quantity of chemical countermeasures utilized should not exceed 110 gallons. The trial application may begin prior to the initial request to the RCP concurrence network for operational use of the chemical countermeasures on a greater portion of the spill. This initial application will be supervised by a trained observer and be reported as qualitative observation (pass/fail).

For operational use in Zone 2, the FOSC will follow the "RRT OSC Dispersant Decision Process" shown in Figure 2-4 which includes the concurrence of USCG, EPA, and the affected state(s), and consultation of DOI and NOAA. The information obtained during the decision process will be provided to these agencies. This initial notification will include, but is not limited to, the following information to the extent available:

- Type and amount of oil discharged;
- Area affected;
- The projected area of impact of the oil if not dispersed Reasons why chemical agent has been selected;
- Type of chemical agent to be used;
- Application rate and method of application; and
- On-scene weather.

The UC will only consider chemical countermeasures included in the NCP Product Schedule.

The UC would decide whether to pursue use of dispersants from the RRT following the trial application process. Figure 2-4 shows the pre-approval zones designated under this policy. If the use of dispersants is approved, the dispersant will be applied by vessel or by aircraft. When an OSRO is contracted, Atlantic Shores will update details on this Dispersant Plan to include an inventory and location of the dispersants that will be used on the oils handled, stored, or transported; a summary of toxicity data for the dispersants; a description and location of the application equipment required and an estimate of time to begin application after approval is obtained; and the vessel and aerial application procedures.

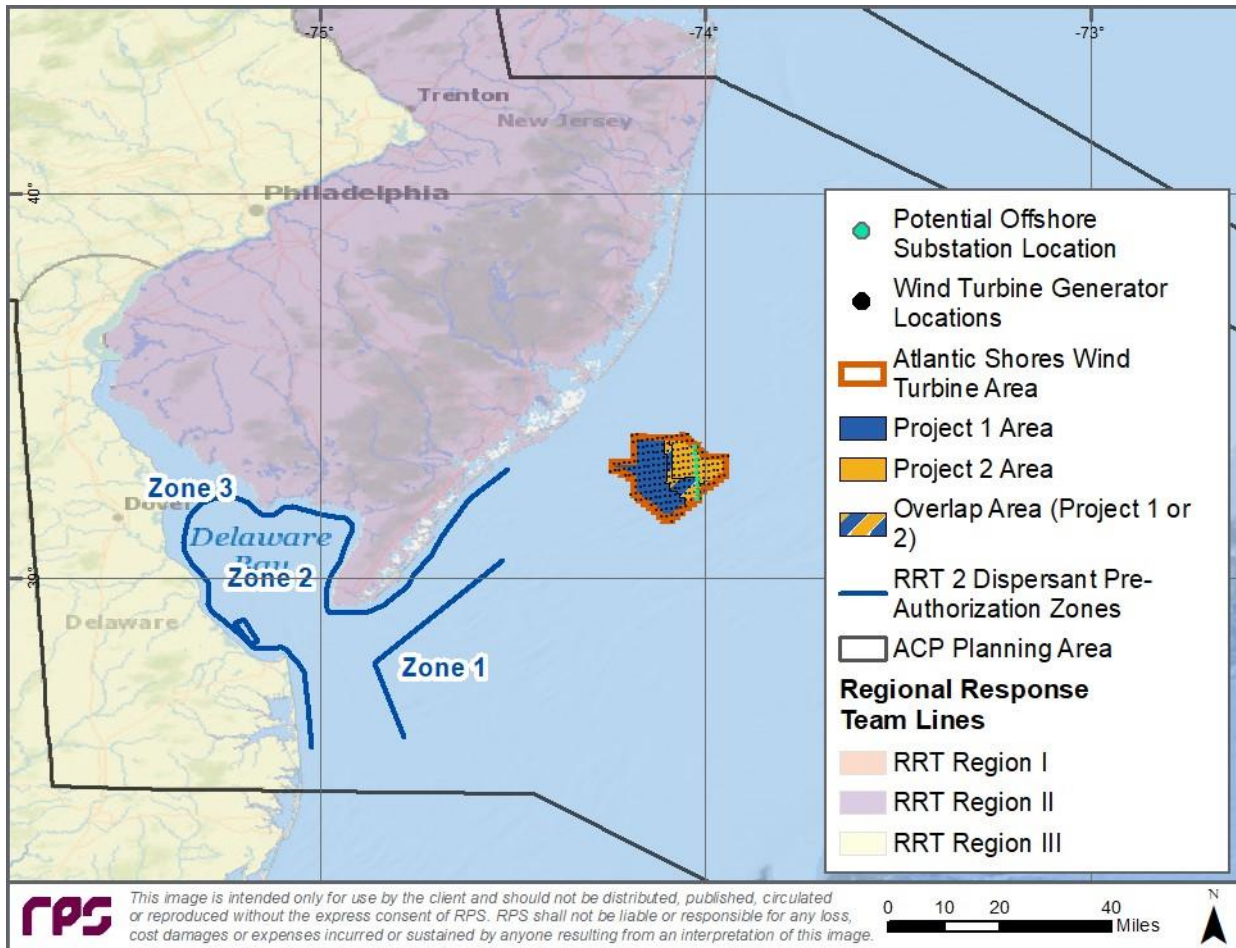


Figure 2-4. RRT 2 Dispersant Pre-Authorization Zones.

RRT II OSC DISPERSANT DECISION PROCESS

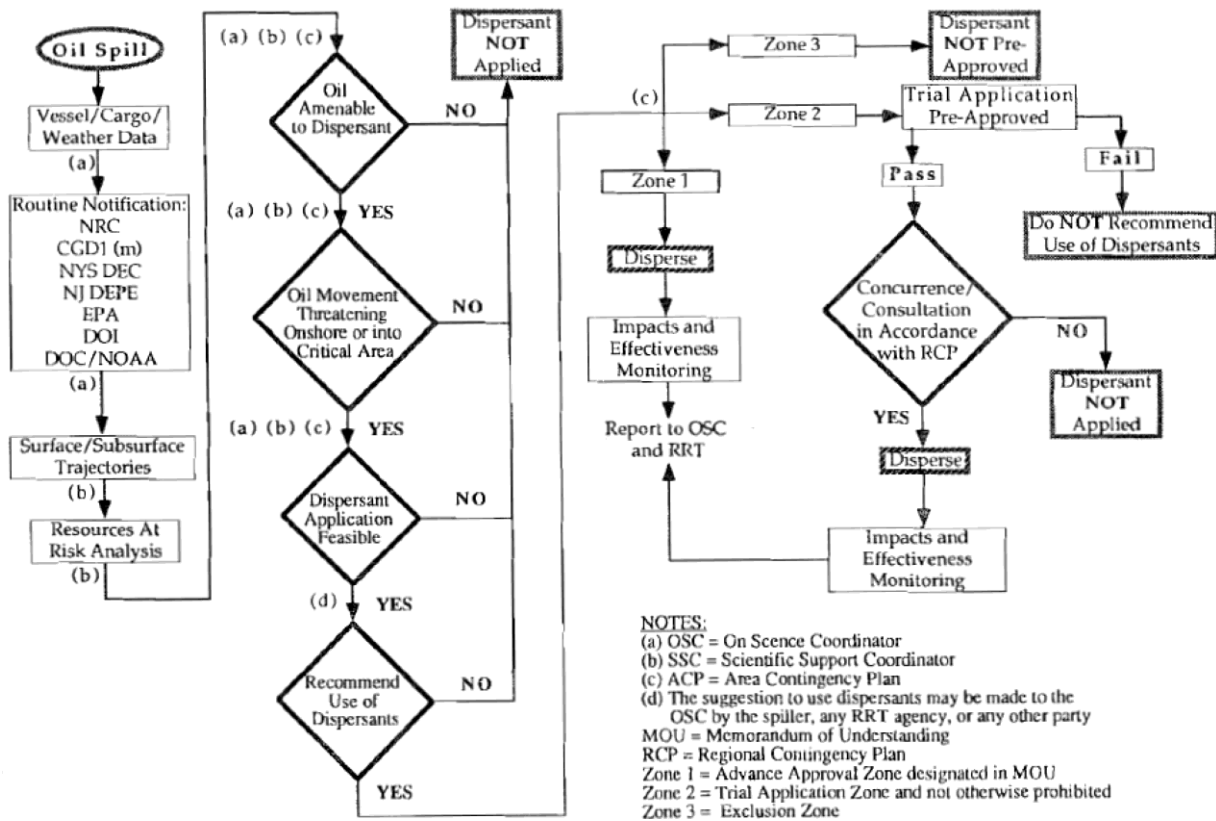


Figure 2-5. OSC Dispersant Decision Process from the RRT 2 RCP.

2.4.5 Use of In-Situ Burning

Although it is unlikely that in-situ burning will be required for a spill from the facility, Atlantic Shores will consider the use of in-situ burning in any appropriate scenario as another response countermeasure that can be employed to remove the oil from the water surface. A controlled burn reduces the oil on the water's surface by releasing the particles into the atmosphere. Spilled oil is contained within fire boom and ignited using an ignition source. The spilled oil must be approximately 2-3 mm thick in order to burn.

From the American Petroleum Institute, in-situ burning offers a practical method to remove large quantities of oil from the water very quickly. However, there are many limiting factors that should be considered before a burn is conducted. Physical limitations, such as wind speed, wave height, thickness of the oil, oil type, how weathered the oil is, and how emulsified the oil is, will limit the ability to conduct an in-situ burn operation. Environmental impacts that must be considered are human exposure to smoke, monitoring requirements, accessibility to the impacted site, and recovery of burned/unburned product and residue.

As with dispersant use, the use of in-situ burning can provide a means of oil removal when mechanical recovery cannot be effective or timely. The Governor of the State of New Jersey designated the Commissioner of NJDEP with the authority and responsibility to approve for the use of in-situ burning.

The Region 2 RRT developed an MOU for pre-approval of in-situ burning in certain areas of Region 2. Atlantic Shores is located in Zone A where open water in-situ burning is authorized. Zone "A" is defined as waters under the jurisdiction of RRT 2 that lie 6 nautical miles (nm) and seaward of the Territorial Sea Baseline (as defined in 30 CFR 2.05-10) along the coast of New Jersey (north of the demarcation between Federal Region 2 and Region 3). Within Zone "A", the decision to use in-situ burning rests solely with the OSC. No further concurrence or consultation on the part of the OSC is required with EPA, NOAA, DOI, or the state of New Jersey. However, if threatened or endangered species are present in the burn area, then the trustee agency must be consulted prior to initiating burning operations.

The USCG will immediately notify EPA, NOAA, DOI, and the state of New Jersey of a decision to conduct burning within the "A" zone via each agency's respective RRT representative. In the case of a spill at Atlantic Shores, the UC would decide whether to use in-situ burning as a response countermeasure. Figure 2-6 shows the pre-authorization zones for in-situ burning in Region 2.

When an OSRO is contracted, Atlantic Shores will update details on this In-Situ Burning Plan to include a description of in-situ burn equipment, including its availability, location, and owner, a description of the in-situ burning procedures, including ignition, and safety guidelines.

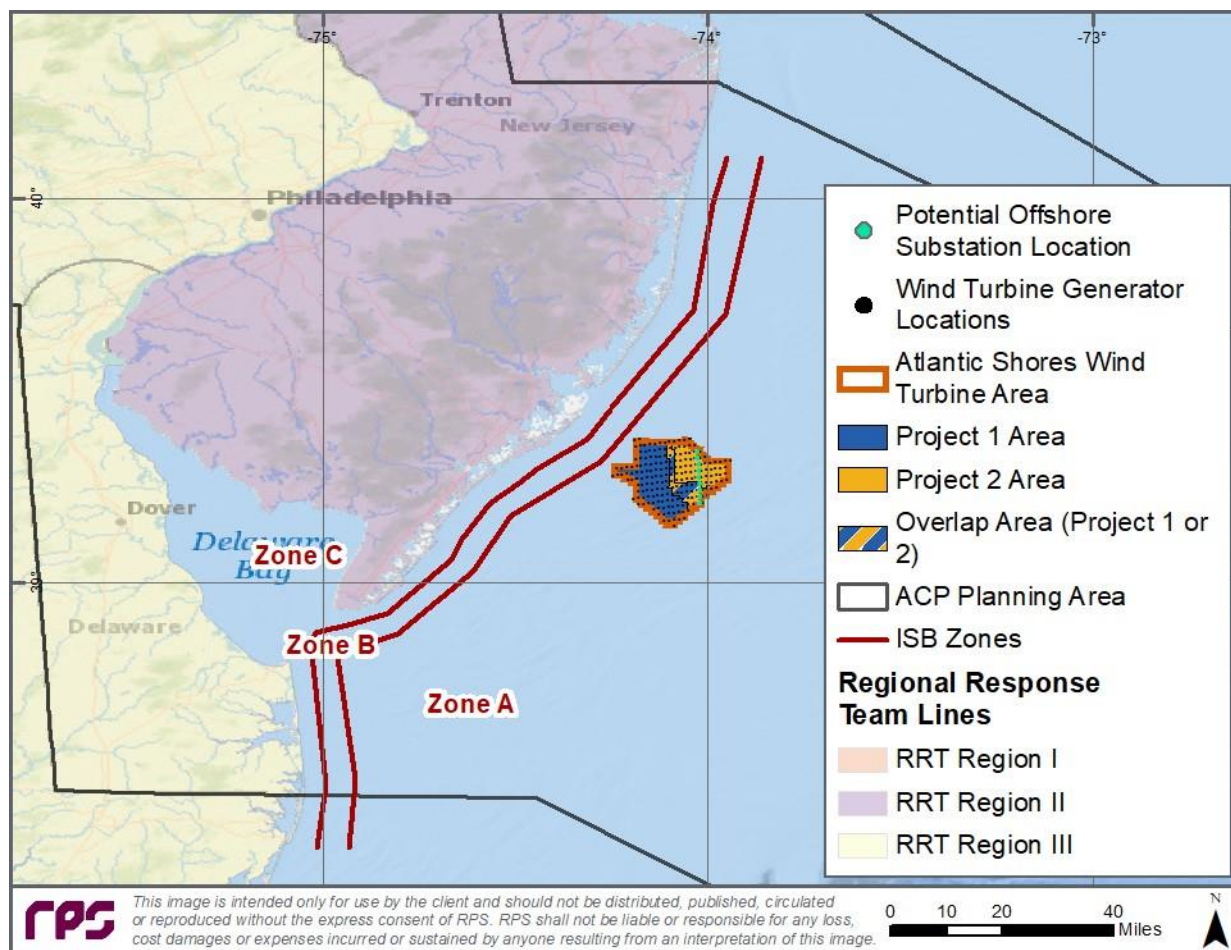


Figure 2-6. RRT 2 In-Situ Burning Pre-Authorization Zones.

2.5 Potential Failure Scenarios

The Project is being developed and permitted using a PDE concept. The PDE allows Atlantic Shores to properly define and bracket the characteristics of the facility for the purposes of environmental review and permitting while maintaining a reasonable degree of flexibility with respect to selection and purchase of key components.

Potential failure scenarios will be dependent on the final project to be constructed and operated. However, comprehensive spill mitigation procedures for the facility overall are defined in Section 2.4 and included in Annex 3. Any additional information required on these procedures will be added and submitted for approval to BSEE.

2.6 Procedures for Mobilization of Resources

A major consideration during a spill is the organization and direction of the transportation of manpower, equipment, and materials used in response operations. The QI will work with local authorities (e.g., state police) to establish land routes to expedite the movement of personnel, equipment, materials, and supplies to an established Staging Area and waste products from the Staging Area. The Staging Area is an ICS facility used as a forward operations location to mobilize response resources to the spill site. A Staging Area Manager will be responsible for managing the Staging Area and will utilize status boards to coordinate all equipment, personnel, and materials mobilized to the spill site. Equipment will first be mobilized from the OSRO warehouse to the Staging Area. The Staging Area Manager will direct response equipment to the appropriate Branch/Division/Group/Task Force/Strike Team. The O&M facility may or may not act as the Staging Area location depending on the location of the spill response. Multiple Staging Areas will be established, if necessary, depending on the complexities of the spill response.

Once the Project is installed, tested, and commissioned, the offshore wind facility will enter a 30-year operating phase. In support of operations and the necessary maintenance activities, Atlantic Shores will establish management and administrative team offices, a control room, and O&M facilities. Details regarding spill response materials, services, equipment, and response vessels are not finalized at this time. Atlantic Shores will retain a third-party OSRO that is licensed as a hazardous waste transporter and can provide emergency response services and cleanups of oil and/or hazardous material (OHM) spills. Response times for mobilization of OSRO resources will be dependent on the location of the OSRO.

2.7 Sustained Actions

The WTGs and OSSs are equipped with secondary containment, which reduce the potential need for a sustained action. Sustained action is a term regularly used in oil spill response to capture the ongoing response once the initial emergency response phase is complete. This phase includes establishing an incident management organization, procuring response and support resources, implementing security measures at the ICS facilities, establishing oil waste decontamination and disposal procedures, and initiating public relations outreach.

The UC will manage response operations 24-hours a day, seven days a week, until the operation is complete. The Atlantic Shores' IMT will cascade in to support response operations when necessary. Once the initial emergency stage of the spill situation transitions to the sustained action stage, the response management structure will also transition to prolonged mitigation and/or recovery action strategies.

Most incidents would be handled by a few individuals without implementing an extensive response management system and would not continue into this sustained action phase.

2.8 Termination and Follow-Up Actions

Cleanup will be conducted as thoroughly as possible, but will be terminated when, in the opinion of the FOSC and the QI/Atlantic Shores Incident Commander:

- There is no recoverable oil in the water;
- Further removal actions would cause more environmental harm than the remaining oil;
- Cleanup measures would be excessive in view of their insignificant contribution to minimizing a threat to the public health, welfare, or the environment; and
- Actions required to repair unavoidable damage resulting from removal activities are complete.

Once the determination is made that the response can be terminated, certain regulations may become effective once the “emergency” is declared over. Orderly demobilization of response resources will need to occur. Follow-up actions, such as accident investigation, response critique, plan review, and written follow-up reports, will be conducted.

The Atlantic Shores IMT Planning Section will develop a Demobilization Plan to ensure that an orderly, safe, and cost-effective demobilization of personnel and equipment is accomplished.

General considerations for the Demobilization Plan include ensuring that comprehensive check-out procedures are developed, that a process for equipment return is included, and that all personnel return to their home location safely.

Resources will be demobilized in accordance with priorities and procedures set by the UC/Incident Command. As the response transitions from the emergency response phase to a planned recovery effort, the demobilization of incident resources must be conducted in an efficient and safe manner and shall not interfere with ongoing incident operations.

The UC/Incident Commander will approve the demobilization of critical resources identified by command staff prior to demobilization from the incident. Those resources will be identified daily in the daily operational period planning cycle. All releases from the incident will be initiated in the Planning Section, Demobilization Unit after UC/Incident Commander approval.

In accordance with 30 CFR 254.56(b), Atlantic Shores will file a written follow-up report for any spill from the facility of 1 barrel or more to the Chief, OSPD within 15 days after the spillage is secured. All reports will include the cause, location, volume, and remedial action taken. Reports of spills of more than 50 barrels will include information on the sea state, meteorological conditions, and the size and appearance of the slick. Atlantic Shores will provide additional information to the BSEE Regional Supervisor if it is determined that an analysis of the response is necessary.

3. Drills, Exercises, and Training

Facility response training, Incident Command System (ICS) training, personnel response training, drills/exercises, and spill prevention meetings in this section comply with the requirements of 30 CFR 254.41. Per 30 CFR 254.41(d), training certificates and training attendance records will be maintained in a designated location for at least two years. Atlantic Shores will maintain documentation of training in the Brooklyn, New York office. Training records will be made available to any authorized BSEE representative upon request. The Emergency Response Critique forms used to document inspections, drills and training are included in Annex 5.

3.1 Drills and Exercises

Per 30 CFR 254.42(a), the entire Oil Spill Response Plan (OSRP) will be exercised at least once every three years. However, to satisfy this requirement, separate exercises may be conducted over a three-year period. Exercises will simulate conditions in the area of operations, including seasonal weather variations, to the extent practicable. In addition, exercises will cover a range of scenarios, such as spills of a short duration and limited volume and the worst-case discharge scenario.

A schedule of exercises will be determined by management in accordance with 30 CFR §254.42(b). The Chief, BSEE OSPD may require a change in the frequency of required exercises. Actual training exercises will be coordinated with the OSRO. Response training programs will comply with the Preparedness for Response Exercise Program (PREP) and the USCG/EPA training guidelines for oil spill response. In Annex 5, Table A5-1 includes a list of regular personnel training exercises, and Tables A5-2, A5-3, and A5-4 present Drill/Exercise Documentation Forms associated with the training exercises.

The Chief, OSPD and BOEM must be notified at least 30 days prior to the following exercises: annual incident management team tabletop exercise; annual deployment exercise of response equipment identified in the OSRP that is staged at onshore locations; and semi-annual deployment exercise of any response equipment which the BSEE Regional Supervisor requires Atlantic Shores to maintain at the facility or on dedicated vessels. The annual Incident Management Team (IMT) tabletop exercise will include the actual notification to the National Response Center (NRC), BSEE Regional Supervisor, BOEM, and the OSRO, to determine availability and response times. Each call that is made will begin with the statement "This is a drill".

As detailed in this annex, several types of drills are conducted as part of the drill program as follows:

- Notification drills to test communications procedures will be conducted monthly.
- QI notification drills will be conducted at least quarterly to verify that the QI can be reached in an emergency situation to perform required duties.
- The spill management team will participate in a table-top drill annually. This table-top drill will be included in other drills as often as possible.
- Unannounced annual notification drills will be performed. These drills will be conducted with BOEM and OSRO participation. These annual drills will simulate a response action and conveyance of key information between the QI, BOEM, and the BSEE OSPD.
- Every effort will be made to cooperate in local drills requested by regulatory agencies and neighbors.
- Spill removal organizations under contract will be drilled at least annually.

- Full-scale exercises will be conducted every four years and will involve federal, state, and local government agencies, including BSEE, BOEM, and USCG.

The annual notification drill will be an opportunity for the QI, BOEM, and OSPD to simulate an incident command post setting that is capable of supporting response efforts (e.g., deployment of personnel and equipment, tracking containment efforts, taking samples, shoreline cleanup, etc.) for a variety of spill scenarios. Prior to the drill, the size and scope of the drill will be defined and will be structured with various levels of complexity to test events ranging from implementation of specific components of the OSRP to full implementation of the plan.

Facility spill response drills are comprehensive and designed to improve response actions at the level of the first responder. A tabletop planning session is held prior to the drill, with a limited number of supervisory personnel informed of the drill.

Drills are conducted to enable personnel who will act as initial responders during an actual spill to become familiar with response equipment. During spill drills, the techniques of pulling and placing boom such as for diversion, deflection, and containment are practiced. Drills are also conducted to allow personnel to become familiar with climatic conditions, such as the interactions of wind, tide, and wave actions and their effect on oil movement. In spill drills, consideration is given to sensitive areas which may be affected and need protection.

As part of the drill process, a critique is held following the drill. All personnel who participate in the drill, including observers, also participate in the critique. The purpose of this is to review the drill for procedures which worked well and procedures which did not work well. Each individual has an opportunity to provide for input. Recommendations are submitted to management.

Annually, at least one of the exercises listed in Annex 5, Table A5-1 must be unannounced. Unannounced means the personnel participating in the exercise must not be advised in advance, of the exact date, time, and scenario of the exercise. The staff from Atlantic Shores will also participate in unannounced exercises as directed by the lead federal agency. The objectives of the unannounced exercises will be to test notifications and equipment deployment for response to the average most probable discharge. After Atlantic Shores personnel successfully complete a Government-Initiated Unannounced Exercise (GIUE), they will not be required to participate in another one for at least 36 months from the date of the exercise.

Atlantic Shores personnel will also participate in exercises of the Area Contingency Plan (ACP) as directed by the United States Coast Guard (USCG) Federal On-Scene Coordinator (FOSC). As part of the National PREP, the USCG Sector Delaware Bay FOSC will either direct a government-led PREP exercise where Atlantic Shores could participate as the Responsible Party, or Atlantic Shores could lead the exercise design and facilitation effort for an industry-led PREP exercise. These exercises are typically full-scale exercises involving both an Incident Command Post element exercising the IMT and a field deployment element where spill response equipment is actually deployed. Area exercises test the ACP and are required on a quadrennial schedule. In either a government-led or industry-led PREP exercise, Atlantic Shores would be a main player on the Exercise Design Team along with the USCG, New Jersey Department of Environmental Protection (NJDEP), and other federal, state, and local stakeholders.

An Exercise Drill Log will be developed and maintained by the Training Department at Atlantic Shores to record all drills and exercises completed at the facility. Exercise documentation will include type of exercise, date and time of exercise, description of exercise, objectives met, and lessons learned. An example training log form is presented in Annex 5, Table A5-2. Records of these activities will be maintained for a period of three years, as per 30 CFR 254.42(e).

Credit for any of the above drills and exercises may be taken by Atlantic Shores if an actual incident occurs, and records of the incident will be maintained to show evidence of complying with any of the above drill or exercise requirements.

3.2 Planned Training

Planned training sessions are held for staff and operations personnel on an annual basis to gain an understanding of the OSRP process. The intent of these sessions is to keep personnel informed of their obligation to respond to all emergencies, to prevent pollution incidents, to improve spill control and response techniques, and to gain a comprehensive understanding of the ICS and their responsibilities on the IMT. These briefings highlight and describe known spill events or failures, malfunctioning components, and recently developed precautionary measures to prevent spills.

Members of the spill response operating team who are responsible for operating response equipment will attend hands-on training classes at least annually. This training will include the deployment and operation of all response equipment. Supervisors of the team will receive this training and will also be trained annually on directing the deployment.

All field personnel and members of the spill response management team or IMT, including the Spill Response Coordinator and alternate Spill Response Coordinators, will receive annual training on their duties. This training will include:

- The proper procedures for the reporting of spills, including procedures for contacting the QI on a 24-hour basis.
- Locations, intended use, deployment strategies, and operational and logistical requirements of response equipment. They will also review procedures on how and where to place facility containment/recovery materials depending on where the spill occurs and various seasonal conditions. Personnel will be informed that detergents or other surfactants are prohibited from being used on an oil spill in the water and that dispersants may only be used with the approval of the RRT.
- Oil spill trajectory analysis and predicting spill movement.
- Other responsibilities of the IMT, including ICS procedures and roles.

The QI, Spill Response Coordinator, and alternate Spill Response Coordinators will receive specific training to ensure they are sufficiently trained to perform their duties.

Records of all training activities are maintained for at least two years following completion of training. The facility will maintain records for each individual as long as these individuals are assigned duties in this plan. Individuals will sign documentation when participating in training classes or exercises. A sample training log is included in this OSRP in Annex 5, Table A5-5.

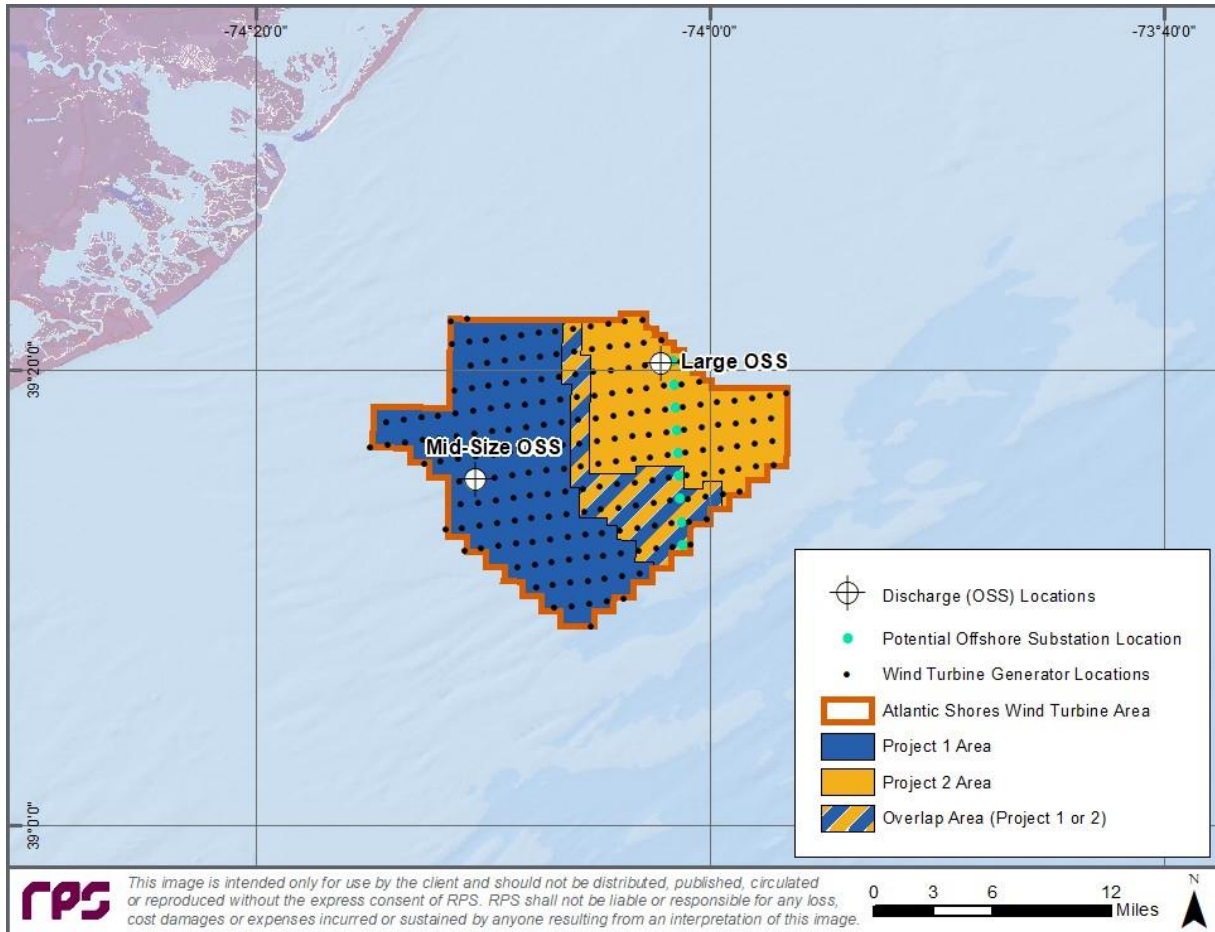
3.3 Training Documentation and Record Maintenance

Spill response personnel training records will be maintained at the Atlantic Shores office in Brooklyn, New York. Records will be maintained at this location for two years and will include:

- Documentation of annual training associated with the OSRP as provided to the QI, Alternate QI, Spill Response Coordinator, alternate Spill Response Coordinator, IMT members, and other facility personnel,
- Records of personnel training in accordance with OSHA, 29 CFR §1910.120 regulations,
- Records of training provided for response contractor personnel will be maintained at the respective contractor's office and will be verified by facility personnel on-site, and
- Logs of volunteer workers (if applicable) and activities performed.

Annex 1 – Facility Diagrams

Figure A1: Atlantic Shores Wind Turbine Area (WTA)



Annex 2 – External Agency, Resources, and Trustees Directory

Table A2-1 External Agencies, Resources, and Trustees Directory

Agency	Location	Telephone
Government Agencies		
National Response Center	2703 Martin Luther King Jr. Avenue SE Washington, D.C. 20593	800-424-8802 (24 hour)
US Coast Guard Sector Delaware Bay	1 Washington Avenue Philadelphia, PA 19147	215-271-4800
US Coast Guard Station Atlantic City	900 Beach Thorofare Atlantic City, NJ 08401	609-344-6594
EPA Region 2	Ted Weiss Federal Building 290 Broadway New York, NY 10007	877-251-4575
OSHA (fatality or 3 or more employees sent to hospital)	200 Constitution Avenue Washington, D.C. 20210	800-321-6742
New Jersey Department of Environmental Protection (NJDEP)	762 Stage Road Tuckerton, NJ 08087	877-WARNDEP or 609-296-1114
New Jersey Office of Emergency Management (NJOEM)	New Jersey State Police Division Headquarters P.O. Box 7068 West Trenton, NJ 08628	609-882-4201
New Jersey State Emergency Operations Center (State EOC, when activated)	New Jersey State Police Division Headquarters P.O. Box 7068 West Trenton, NJ 08628	609-882-4201
New Jersey State Historical Preservation Office (SHPO) – when historical or cultural resources are threatened by a spill	501 East State Street Station Plaza, Building 5, 4 th Floor Trenton, NJ	609-984-0176
USCG Classified Oil Spill Removal Organizations (OSRO)		
Atlantic Shores has not formalized a contract with an OSRO at this time. However, plans are in place to contract with Marine Spill Response Corporation (MSRC).		
Weather		
National Oceanic & Atmospheric Administration (NOAA) National Weather Service	732 Woodlane Road Mount Holly, NJ 08060	609-261-6600 http://www.weather.gov/phi/
NOAA Weather Radio Atlantic City, NJ	Philadelphia/Mt Holly, NJ	Call sign: KHB38 VHF: 162.400
NOAA National Data Buoy Center	http://www.ndbc.noaa.gov/maps/Northeast.shtml	
Atlantic City Airport (ACY)	https://www.sjta.com/acairport	
Aviation Resources		
Atlantic Shores did not select aviation resources at this time. New Jersey charter operators include Ultimate Jetcharters, LLC (330-620-9400, aircraft located in Teterboro, NJ and Atlantic City, NJ) and East Coast Flight Services, Inc. (800-554-0550)		
Marine Resources		
New Jersey State Police Marine Services Bureau		609-882-2000
Seastreak Ferry	2 First Avenue Atlantic Highlands, NJ 07716	800-262-8743
Cape May Ferry	1200 Lincoln Boulevard North Cape May, NJ 08204	800-643-3779

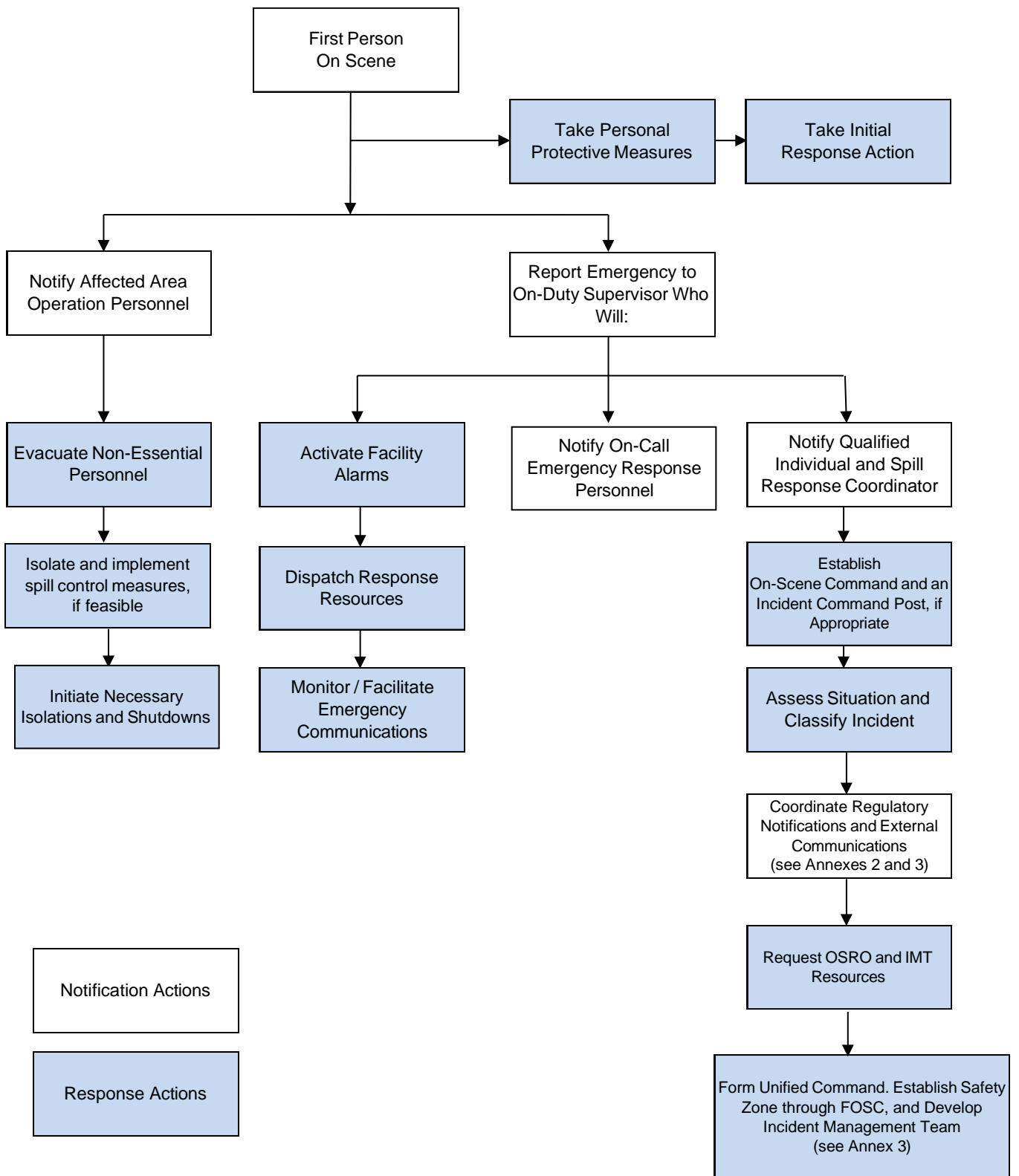
Agency	Location	Telephone
Lewes Ferry	43 Cape Henlopen Drive Lewes, DE 19958	800-643-3779
Regulatory Agencies for Wildlife		
US Fish and Wildlife Service Northeast Region	300 Westgate Center Drive Hadley, MA 01035	413-253-8200
US Fish and Wildlife Service New Jersey Field Office	4 E. Jimmie Leeds Road, Suite 4 Galloway, NJ 08205	609-646-9310 or 609-383-3938
New Jersey Division of Fish and Wildlife	RR 9 360 Port Republic, NJ 08241	609-748-2050
Other Wildlife Resources		
Avian Wildlife Center (for reporting injured wildlife)		973-702-1957
Cape May National Wildlife Refuge	24 Kimbles Beach Road Cape May Court House, NJ 08210	609-463-0994
Edwin B. Forsythe National Wildlife Refuge	P.O. Box 72 Oceanville, NJ 08231	609-652-1665
Supawna Meadows National Wildlife Refuge	199 Lighthouse Road Pennsville, NJ 08070	609-463-0994
Prime Hook National Wildlife Refuge	11978 Turkle Pond Rd Milton, DE 19968	302-684-8419
Bombay Hook National Wildlife Refuge	2591 Whitehall Neck Road Smyrna, DE 19977	302-653-9345
Lido Beach National Wildlife Refuge (longislandrefuges@fws.gov)	340 Smith Road Shirley, NY 11967	631-286-0485
Seatuck National Wildlife Refuge (longislandrefuges@fws.gov)	340 Smith Road Shirley, NY 11967	631-286-0485
Wartheim National Wildlife Refuge (longislandrefuges@fws.gov)	340 Smith Road Shirley, NY 11967	631-286-0485
NOAA National Marine Fisheries Services New Jersey	232 U.S. 9 Marnora, NJ 080223	609-390-8303
National Audubon Society	New York, NY	212-979-3196
New Jersey Association of Wildlife Rehabilitators (NJAWR)	141-1 Route 130 S, Suite 243 Cinnaminson, NJ 08077	908-730-8300
Wildlife Aid (Atlantic County)	155 Asbury Road Egg Harbor Township, NJ 08234	609-927-0538
Garden State Wildlife Center (Monmouth County)	P.O. Box 424 Howell, NJ 07731	732-908-2345
Toms River Avian Care (Ocean County)	1916 Kenilworth Court Toms River, NJ 08753	732-255-9270
Licensed Wildlife Rehabilitation Providers		
The State of New Jersey maintains a list of licensed wildlife rehabilitators at: https://www.state.nj.us/dep/fgw/pdf/rehab_list.pdf		
Medical Facilities		
AtlantiCare Regional Medical Center, Atlantic City Campus	1925 Pacific Avenue Atlantic City, NJ 08401	609-345-4000
AtlantiCare HealthPlex	1401 Atlantic Avenue Atlantic City, NJ 08401	609-345-4000
Shore Medical Center	100 Medical Center Way Somers Point, NJ 08244	609-653-3500

Agency	Location	Telephone
Ambulances		
Exceptional Medical Transport	2318 Atlantic Avenue Atlantic City, NJ 08401	609-344-6165
Egg Harbor Township Emergency Medical Services	3125 Fire Road Egg Harbor Township, NJ 08234	609-383-0003
AtlantiCare Canale Station	8 Canale Drive Egg Harbor Township, NJ 08234	609-646-3620
Absecon Emergency Medical Services	435 W Absecon Boulevard Absecon, NJ 08201	609-645-1493
Emergency Flight Services		
Angels Medical Transport (Air lift)	300 N Georgia Avenue Atlantic City, NJ 08401	609-449-8453
Coast Guard Air Station Atlantic City (Medevac)	FAA Technical Center, Bldg 350 Atlantic City International Airport Egg Harbor Township, NJ 08234	609-677-2000
Fire Aid (911)		
Atlantic City Fire Department	2715 Atlantic Avenue Atlantic City, NJ 08401	609-347-5590
Ocean City Fire Department	550 Asbury Avenue Ocean City, NJ 08226	609-525-9182
Sea Isle City Fire Department	233 John F. Kennedy Boulevard Sea Isle City, NJ 08243	609-263-4311
Wildwood Fire Department	4400 New Jersey Avenue Wildwood, NJ 08260	609-846-2060
Cape May Fire Department	712 Franklin Street Cape May, NJ 08204	609-884-9512
Egg Harbor Township Fire Department	3515 Bargaintown Road Egg Harbor Township, NJ 08234	609-926-4070
Police Aid (911)		
Atlantic City Police Department	2715 Atlantic Avenue Atlantic City, NJ 08401	609-347-5300
Atlantic County Sheriff	1201 Bacharach Boulevard Atlantic City, NJ 08401	609-909-7200
Ocean County Sheriff	120 Hooper Avenue Toms River, NJ 08753	732-929-2044
Monmouth County Sheriff	2500 Kozloski Road Freehold, NJ 07728	732-431-6400
New Jersey State Police	1200 N Rhode Island Avenue Atlantic City, NJ 08401	609-441-3586
New Jersey Department of Law and Public Safety	800 Carranza Road Tabernacle, NJ 08088	609-268-1440
US Marshals Services	402 E State Street Trenton, NJ 08608	609-989-2069
Federal Bureau of Investigation	1601 New Road #201 Northfield, NJ 08225	609-677-6400
Local Government and Agencies		
Nanticoke Lenni Lenape Indians	18 E Commerce Street Bridgeton, NJ 083012	856-455-6910

Agency	Location	Telephone
Atlantic County Division of Public Health	201 Shore Road Northfield, NK 08225	609-645-5935
Atlantic City Public Health	1301 Bacharach Boulevard #403 Atlantic City, NJ 08401	609-347-5663
Greater Atlantic City Chamber of Commerce	12 Virginia Avenue Atlantic City, NJ 08401	609-345-4524
Ocean County Health Department	175 Sunset Avenue Toms River, NJ 08755	732-341-9700
Cape May County Health Department	6 Moore Road Cape May Court House, NJ 08210	609-465-1187
Cape May County Chamber of Commerce	13 Crest Haven Road Cape May Court House, NJ 08210	609-465-7181
Other Industrial Facilities in Local Area		
Not Applicable		

Annex 3 – Response Management System

Figure A3-1 Initial Response Flowchart



Annex 4 – Incident and Other Documentation Forms

Incident Documentation

The Qualified Individual (QI) will coordinate documentation during and following the incident, in conjunction with federal, state, and local officials. Forms to assist in documentation and presentation of consistent notification information are presented at the end of this Annex for use during an incident. These include:

- Initial Notification;
- Agency Call Back for Information;
- Chronological Log of Incident; and
- Incident Report.

Atlantic Shores personnel may use these forms or may simply collect the same information to be saved electronically. The Project records, including incident records, will be digital and accessible via database.

As an alternative, or in addition to these forms, the National Incident Management System (NIMS) Incident Command System (ICS) Forms noted below may also be used. These can be accessed online at: <https://www.fema.gov/media-library/assets/documents/103505>. Any response where a UC is formed will use the ICS forms for all incident management activities and Incident Action Plan preparation.

Table A4-1 NIMS ICS Forms

ICS Form No.	Description
IAP	Cover Sheet Incident Action Plan
201	Incident Briefing
202	Incident Objectives
203	Organization Assignment List
204	Assignment List
204a	Assignment List Attachment
205	Incident Communications Plan
206	Medical Plan
207	Incident Organization Chart
208	Site Safety Plan
209	Incident Status Summary
210	Resource Status Change
211	Incident Check-In List
213	General Message
213-RR	Resource Request
214	Unit Log
215	Operational Planning Worksheet
215a	IAP Safety Analysis Form
218	Support Vehicle/Equipment Inventory
219	Resource Status Card (T-Cards)
220	Air Operations Summary
221	Demobilization Checkout
224	Crew Performance Rating
225	Incident Personnel Performance Rating
230	Daily Meeting Schedule
232	Resources at Risk Summary

ICS Form No.	Description
232a	ACP Site Index
233	Incident Open Action Tracker
234	Work Analysis Matrix
235	Facility Needs Assessment

The post-incident investigation will begin after the source of the incident is secured and repaired, and the facility is declared safe by the QI. The QI will take the following steps during a post-incident investigation:

- Obtain all data, information, and reports pertaining to the incident.
- Interview in person, or by telephone, each person knowledgeable of the incident.
- Review the response of operations personnel to see if procedures and training were adequate or if changes are warranted.
- Evaluate other potentially dangerous situations which could have occurred, and if the response of personnel and safety systems would have accommodated those situations had they occurred.
- Prepare recommendations as appropriate for changes to:
 - Design of facility;
 - Operating procedures;
 - Training;
 - Communications; and
 - Emergency response plans and procedures.
- The QI will prepare and issue a written report to all supervisors with any changes deemed appropriate.

The QI will prepare a post-incident report. This report will contain an account of the incident, including proof that Atlantic Shores met its legal notification requirements for any given incident (i.e. signed record of initial notifications and certified copies of written follow-up reports submitted after a response).

Examples of routine equipment and maintenance checklists/logs are also provided. These include:

- Response Equipment Inspection Log;
- Secondary Containment Checklist and Inspection Form;
- Tank Inspection Form; and
- Maintenance Log.

Form A4-10 Initial Notification Data Sheet

Date:	Time:
INCIDENT DESCRIPTION	
Reporters Name:	Position:
Reporters Phone Number:	Address:
Company:	
Latitude:	Longitude:
Date of Incident:	Time of Incident:
Spill/Incident Location:	Source and/or Cause of spill/incident:
Material spilled and total volume:	Vessel Name and Number (if applicable):
Is the material spilled in water?	Is the source secured?
Weather conditions:	Precipitation?
Incident Description:	
Name of Incident Commander:	Where is the Incident Command Post (directions)?
RESPONSE ACTIONS	
Actions taken to correct, control or mitigate incident:	
Number of injuries:	Number of deaths:
Were there evacuations?	Number of evacuated:
Areas affected:	Damage estimate:
Any other information about impacted medium:	
CALLER NOTIFICATIONS	
National Response Center (NRC): 800-424-8802	NJDEP
NRC Incident Assigned Number:	Other Agencies Notified: <input type="checkbox"/> USCG <input type="checkbox"/> EPA <input type="checkbox"/> OSHA <input type="checkbox"/> USFWS <input type="checkbox"/> NMFS
Other Information Not Recorded Elsewhere:	

Note: Do Not Delay Notifications Pending Collection of All Information. Notify NRC immediately.

Form A4-13 Incident Report

Incident No. _____

Reviewed by:	Final Date:
<input type="checkbox"/> Attach Initial Notification Form for basic data, update as incident progresses.	
Incident Duration (dates and time):	Type and Location of Incident:
Categorical Level of Incident and what portions of response team were assembled? Identify all leader positions and names.	Does the incident create a potential compliance issue? If yes, describe.
Material discharged:	Final discharged volume:
Were there any abnormal operating conditions immediately before the emergency? If yes, describe.	Were there any equipment problems or changes immediately before the emergency? If yes, describe.
Description of impacts:	Were all impacts cleaned up to the satisfaction of regulatory agencies?
Type and volume of waste generated (attach waste tracking log if applicable):	How and where was waste disposed or recovered?

Were all spilled materials recovered? If not, describe what was not recovered and why.	
Provide description of cleanup methods utilized:	
Describe decontamination procedures and include pieces of equipment decontaminated:	
Has stock of emergency equipment been replenished to pre-incident conditions?	Date demobilization was completed:
Describe what worked and did not work during incident:	
Recommendations for improvement:	

Form A4-15 Secondary Containment Checklist and Inspection Form

Incident No. _____

Area(s) Inspected:	Date/Time:	Inspected By:
Inspection Item	Acceptable (Y/N)	Comments/Corrective Action
Level of precipitation in containment		
Presence of spilled or leaked material		
Operational status of drainage valves		
Debris		
Location/status of pipes, inlets, drainage		
Cracks		
Discoloration		
Corrosion		
Valve conditions		

Form A4-16 Annual Checklist and Inspection Form

Incident No. _____

This form is currently a draft. It will be finalized before the Project is complete. All oil-containing equipment will be listed here at that time as items to be inspected annually.

Tank(s) Inspected:	Date/Time:	Inspected By:
Inspection Item	Acceptable (Y/N)	Comments/Corrective Action

Inspect for the following:

- **Support structure is in good condition (no corrosion or damage)**
- **External shell structure is in good condition (no corrosion or damage)**
- **Drip pans are in place (if applicable)**
- **Liquid level gauge is in place and in good working condition (if applicable)**

Remarks:

Annex 5 – Drills, Exercises, and Training Forms and Logs

Table A5-1 Drills and Exercises

Exercise	Purpose/Scope	Objectives	Frequency	Participants
QI Notification Exercise	Ensure the QI can be contacted in a spill response emergency in order to carry out required duties.	<ul style="list-style-type: none"> • Contact QI by telephone, radio, fax, pager, or email. • Confirmation received from QI of notification. 	Monthly	Qualified Individuals
Incident Management Team (IMT) Tabletop Exercise (TTX)	Ensure the IMT is familiar with the emergency response procedures and the Incident Command System.	<ul style="list-style-type: none"> • IMT is familiar with emergency response procedures. • Employs proper procedures during a simulated emergency response. 	Annually	IMT, OSPD, BOEM
On-Site Equipment Deployment Exercise	Verify that required response equipment is operable and facility personnel are capable of deploying the equipment.	<ul style="list-style-type: none"> • Verify that designated equipment is available. • Deploy at least minimum required equipment during exercise. • Verify that personnel tasked with deployment have received required training. 	Annually	Project Response Team, OSPD, BOEM, OSRO
OSRO Equipment Deployment Exercise	Same as above, but performed by OSRO	<ul style="list-style-type: none"> • Same as above 	Annually	OSRO
Discharge Prevention Briefings	Conduct Discharge Prevention Briefings	<ul style="list-style-type: none"> • Personnel have adequate understanding of the OSRP. • Describe known discharges or failures. • Discuss any recently developed precautionary measures. 	Annually (optional)	Oil-handling Personnel
Simulated Spill Drill ²	Test the resources and response capabilities of the OSRO.	<ul style="list-style-type: none"> • Demonstrate OSRO's ability to deploy resources to include: <ul style="list-style-type: none"> ○ On water containment and recovery ○ Sensitive habitat protection • Storage 	Every 3 years	Oil-handling Personnel
Full-Scale Exercise (FSE)	Test the IMT's capability of establishing a UC and developing an Incident Action Plan. In addition to the work within the Incident Command Post, field personnel will deploy equipment in the field using the same exercise scenario.	<ul style="list-style-type: none"> • Demonstrate IMT's ability to establish the ICS, transfer incident management to a UC formed with government personnel, and produce an Incident Action Plan • Demonstrate field personnel's capability to deploy oil spill response equipment to protect sensitive sites 	Every 4 years	QI, Spill Response Coordinator, IMT, federal, state, and local government personnel including OSPD, field personnel

Notes:

1. In a 3-year period, at least one of these exercises must include a worst-case discharge scenario.
2. In a 3-year period, all components of the response plan must be exercised.
3. Annually at least one of the first three exercises listed must be unannounced to participants.

Table A5-2 Spill Response Drill Form Notification Exercise

**ATLANTIC SHORES OFFSHORE WIND, LLC
SPILL RESPONSE DRILL/EXERCISE DOCUMENTATION FORM
NOTIFICATION EXERCISE**

1. Date performed: _____
2. Exercise or actual response: _____
3. Facility initiating exercise: _____
4. Name of person notified: _____
Is this person identified in your response plan as qualified individual or designee? _____
5. Time initiated: _____
Time in which qualified individual or designee responded: _____
6. Method used to contact:
____ Telephone
____ Pager
____ Radio
____ Other _____
7. Description of notification procedure:

8. Evaluation of Drill:

9. Lessons Learned:

10. Changes to be implemented (if any):

Certifying Signature _____

Table A5-3 Incident Management Team Tabletop Exercise

**ATLANTIC SHORES OFFSHORE WIND, LLC
SPILL RESPONSE DRILL/EXERCISE DOCUMENTATION FORM
INCIDENT MANAGEMENT TEAM TABLETOP EXERCISE**

1. Date performed: _____
2. Exercise or actual response: _____
If an exercise, announced or unannounced: _____
3. Location of tabletop: _____
4. Time started: _____
Time completed: _____
5. Response plan scenario used (check one):
 Average most probable discharge Worst case discharge
 Maximum most probable discharge Size of (simulated) spill-bbls/gals
6. Describe how the following objectives were exercised:
 - a) Spill management team's knowledge of oil-spill response plan:

 - b) Proper notifications:

 - c) Communications system:

 - d) Spill management team's ability to access contracted oil spill removal organizations:

 - e) Spill management team's ability to coordinate spill response with On-Scene Coordinator, State and applicable agencies:

INCIDENT MANAGEMENT TEAM TABLETOP EXERCISE (Continued)

- f) Spill management team's ability to access sensitive site and resource information in the Area Contingency Plan:

- 7. Evaluation of Exercise:

- 8. Lessons Learned:

- 9. Changes to be implemented (if any):

Certifying Signature: _____

Table A5-4 Spill Response Drill Form Equipment Deployment Exercise

**ATLANTIC SHORE OFFSHORE WIND, LLC
SPILL RESPONSE DRILL/EXERCISE DOCUMENTATION FORM
EQUIPMENT DEPLOYMENT EXERCISE**

1. Date performed: _____
2. Exercise or actual response: _____
If an exercise, announced or unannounced: _____
3. Deployment location(s):

4. Time started: _____
_____ Time OSRO called (if applicable)
_____ Time on-scene
_____ Time boom deployed
_____ Time recovery equipment arrives on-scene
_____ Time completed
5. Equipment deployed was:
_____ Facility-owned
_____ OSRO-owned; if so, which OSRO: _____
_____ Both
6. List type and amount of all equipment (e.g., boom and skimmers) deployed and number of support personnel employed:

7. Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested. Attach a sketch of equipment deployments and booming strategies:

EQUIPMENT DEPLOYMENT EXERCISE (Continued)

8. For deployment of facility-owned equipment, was the amount of equipment deployed at least the amount necessary to respond to your facility's average most probable spill?

9. Was the equipment deployed in its intended operating environment?

10. For deployment of OSRO-owned equipment, was a representative sample (at least 1000 feet of each boom type and at least one of each skimmer type) deployed?

11. Was the equipment deployed in its intended operating environment?

12. Are all facility personnel that are responsible for response operations involved in a comprehensive training program, and all pollution response equipment involved in a comprehensive maintenance program?

13. Date of last equipment inspection: _____

14. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? _____

15. Was all deployed equipment operational? If not, why not?

16. Evaluation of Exercise:

17. Lessons Learned:

18. Changes to be implemented (if any):

Certifying Signature: _____

Annex 6 – Regulatory Compliance and Cross-Reference Matrix

Table A6-1 Oil Spill Response Plans for Outer Continental Shelf Facilities Cross-Reference

Oil Spill Response Plans for Outer Continental Shelf Facilities 30 CFR 254, Subpart B		Plan Reference
254.21(b)(1)	Table of Contents	Table of Contents
254.21(b)(2)	Emergency response action plan	OSRP Section 2, Annex 3
254.21(b)(3)(i)	Equipment response inventory	Annex 9
254.21(b)(3)(ii)	Contractual agreements	Annex 8
254.21(b)(3)(iii)	Worst case discharge scenario	OSRP Section 1.1, Annex 7
254.21(b)(3)(iv)	Dispersant use plan	OSRP Section 2.4.9, Annex 7:
254.21(b)(3)(vi)	In situ burning plan	OSRP Section 2.4.10, Annex 7:
254.21(b)(3)(vi)	Training and drills	Annex 5
254.22(a)	Facility location and type	OSRP Section 1.3
254.22(b)	Table of Contents	Table of Contents
254.22(c)	Record of changes	OSRP Page iv
254.22(d)	Cross reference table	Annex 6
254.23(a)	Designation of QI	OSRP: Section 2.2, Table 2-2, Section 2.3
254.23(b)	Designation of spill management team	TBD ¹
254.23(c)	Spill response operating team	TBD ¹
254.23(d)	Spill response operation center	TBD ¹
254.23(e)	Oil handled, stored, or transported	Annex 7
254.23(f)	Procedures for early detection of a spill	OSRP Section 2.1
254.23(g)(1)	Spill notification procedures	OSRP Section 2.2, Annex 4
254.23(g)(2)	Methods to detect/predict spill movement	TBD
254.23(g)(3)	Methods to prioritize areas of importance	OSRP Section 2.4.7, Annex 7
254.23(g)(4)	Methods to protect areas of importance	OSRP Section 2.4.7
254.23(g)(5)	Containment and recovery equipment deployment	OSRP Section 2.4
254.23(g)(6)	Storage of recovered oil	OSRP Section 2.4.8
254.23(g)(7)	Procedures to remove oil and oil debris from shallow waters	OSRP Section 2.4.8
254.23(g)(8)	Procedure to store, transfer, and dispose of recovered oil and oil-contaminated materials	OSRP Section 2.4.8
254.23(g)(9)	Methods to implement dispersant use plan and in situ burning plan	OSRP Section 2.4.9, 2.4.10:
254.24(a)	Inventory of spill response resources	Annex 9
254.24(b)	Procedures for inspecting and maintaining spill response equipment	Annex 9
254.25	Contractual agreements	Annex 8

Oil Spill Response Plans for Outer Continental Shelf Facilities 30 CFR 254, Subpart B		Plan Reference
254.26(a)	Volume of worst-case discharge	OSRP Section 1.1, Annex 7
254.26(b)	Trajectory analysis	Annex 11
254.26(c)	List of special economic and environmentally important resources	Annex 7
254.26(d)(1)	Response equipment	Annex 9
254.26(d)(2)	Personnel, materials, and support vessels	TBD
254.26(d)(3)	Oil storage, transfer, and disposal equipment	Annex 9
254.26(d)(4)	Estimation of time to mobilize	TBD ¹
254.26(e)	Suitability of response	TBD ¹
254.27	Dispersant use plan	OSRP Section 2.4.9, Annex 7:
254.28	In situ burning plan	OSRP Section 2.4.10, Annex 7:
254.29(a)	Training	Annex 5
254.29(b)	Drills	Annex 5
254.30	Revision of OSRP	OSRP Page iv

Annex 7 – Worst-Case Discharge – Planning Calculations for Discharge Volumes, Response Equipment, and Detailed Spill Response Plan

Planning Calculations for Discharge Volumes and Response Equipment and Detailed Spill Response Plan

Per 30 CFR 254.26, the volume of the worst-case discharge scenario must be determined using the criteria in 30 CFR 254.47. The criteria in 30 CFR 254.47 applies to oil production platform facilities and pipeline facilities. Per the for Bureau of Safety and Environmental Enforcement (BSEE)/Bureau of Ocean Energy Management (BOEM) guidance titled, "Oil Spill Response Plan (OSRP) for Offshore Wind Facilities Discussion Handout" dated August 21, 2019 and provided to Atlantic Shores on February 11, 2021, the worst-case discharge for a renewable energy facility is defined as the release of all oil from a component located at an offshore facility, such as a WTG or an OSS.

A7.1 Facility Information

Facility information on Atlantic Shores is included in this plan in Section 1.3.

Table A7-1 Wind Turbine Generator Oil Storage

Wind Turbine Generators (WTG)								
Component	Fluid Function	Representative Fluid Type	Maximum Approximate Volume per WTG			Total Maximum Volume for Project		
			Liters	Gallons	Barrels	Liters	Gallons	Barrels
Emergency Generator Fuel	Diesel Fuel	Marine Diesel	1,514	400	10	302,833	80,000	1,905
Hydraulic Systems (Pitch, rotor lock, etc.)	Hydraulic Fluid	Mobil DTE 25 Castrol Hyspin AWH-M32 Kluber Summit HySyn FG 32 Mobil AW46 Shell Tellus 46	1,325	350	8	264,979	70,000	1,667
Yaw / pitch system grease	Grease	Castrol Tribol Kluberplex AG 11-462	568	150	4	113,562	30,000	714
Drive Train, yaw, pitch system	Gear and Bearing Lubricating Oil	Mobil SHC 630/632/XMP220/XMP320/XMP460 Optimol Synthetic A320 Castrol Optigear Synthetic X 320 Mobility 007 Shell Rhodina BBZ Fuchs Renolin Unisyn CLP 220 Staburags NBU 12 ALTEMP Kluberplex BEM 41-141	1,893	500	12	378,541	100,000	2,381
Gearbox	Gear and Bearing Lubricating Oil	Mobil SHC 630/632/XMP220/XMP320/XMP460 Optimol Synthetic A320 Castrol Optigear Synthetic X 320 Mobility 007 Shell Rhodina BBZ Fuchs Renolin Unisyn CLP 220 Staburags NBU 12 ALTEMP Kluberplex BEM 41-141	2,199	581	14	439,865	116,200	2,767
Transformer	Biodegradable Dielectric Insulating Fluid / Synthetic Ester	Midel 7131	6,814	1,800	43	1,362,748	360,000	8,571
Total Oil Storage			14,313 L	3,781 gal	90 bbl	2,862,529 L	756,200 gal	18,005 bbl

Table A7-2 Oil Storage for Offshore Substations (OSS)

Offshore Substations (OSS)											
Component	Fluid Category	Representative Fluid Type	Maximum Approximate Volume Small OSS			Maximum Approximate Volume Medium OSS			Maximum Approximate Volume Large OSS		
			Liters	Gallons	Barrels	Liters	Gallons	Barrels	Liters	Gallons	Barrels
Diesel Fuel Storage	Diesel Fuel	Marine Diesel	28,391	7,500	179	45,425	12,000	286	75,708	20,000	476
Diesel Engines	Internal Motor Lubrication	Motor Oil	19	5	0	38	10	0	57	15	0
Main Power Transformers Earthing Transformers	Biodegradable Dielectric Insulating Fluid, mineral oil, or synthetic ester oil	Midel 7131	98,421	26,000	619	295,262	78,000	1,857	492,104	130,000	3,095
Reactors	Gear and Bearing Lubricating Oil	Midel 7131	41,640	11,000	262	124,919	33,000	786	208,198	55,000	1,310
Total Oil Storage			168,470 L	44,505 gal	1,060 bbl	465,644 L	123,010 gal	2,929 bbl	776,066 L	205,015 gal	4,881 bbl
Total Storage for 10 Small, 5 Medium, or 4 Large OSS			1,684,470 L	445,050 gal	10,600 bbl	2,328,220 L	615,050 gal	14,645 bbl	3,104,264 L	820,060 gal	19,524 bbl

A7.2 Oil Volume and Spill Containment

If all the oils associated with the OSSs were released, the maximum worst-case scenario would be 205,015 gallons from a large OSS. However, control measures (e.g., containment structures) would be in place to contain a release of oil. Where possible, biodegradable oils will be used. In addition, monitoring equipment will be used to detect a release of oil. Monitoring equipment (e.g., tank level, containment liquids, , oil detection equipment for the sump tanks) will be integrated in the Project's SCADA system and will cause an alarm and notification to O&M personnel. Project status, alarms and notifications are monitored 24 hours a day. Specific details will be identified in the final version of the OSRP.

Cooling oil for transformers, reactors, and other power electronics equipment is completely contained within the equipment. Containment tanks are used to capture any leaks from fill or drain connections. Open equipment (e.g. temporary diesel generators) that contains environmentally harmful substances are placed above drip trays.

Any temporary connections transporting oily substances (e.g., between diesel storage container and emergency generator) will be made using offshore certified dry-break connectors and placed above a drip tray. A simple oil spillage kit, allowing to mitigate small, local spillage during maintenance, will be part of the delivery. The WTGs contain up to approximately 3,781 gallons of oil per WTG. Equipment in the WTGs are designed to have a secondary containment system, which would be sized according to the largest container.

A7.3 Oil Spill Trajectory

An oil spill modeling study was performed to assess the trajectory and weathering of oil following a catastrophic release of all oil contents from the toppling of a large and mid-size OSS located closest to shore within the WTA. This would be the worst-case discharge scenario, involving the unlikely release of a relatively small and finite amount of oil (on the order of 3,000-5,000 barrels (bbl) in comparison to a larger multi-million bbl catastrophic release such as the Deepwater Horizon oil spill). It is important to note that the modeling conducted includes the conservative assumption that no oil spill response or mitigation would occur. In fact, Atlantic Shores would employ containment and recovery methods, including response equipment employed on water that would be used to prevent the spread of the spill, contain the oil to as small an area as possible, and protect sensitive areas before they are impacted. A full description of the oil spill modeling and results are provided in Annex 11 of this OSRP.

A7.4 Resources of Special Economic or Environmental Importance

According to the RRT 2 RCP, NJDEP is the designated representative of the Region 2 RRT for the State of New Jersey. In addition, the NJDEP Office of Natural Resource Restoration is the Trustee for Natural Resources under the Oil Pollution Act of 1990.

At its closest point, the WTA is located approximately 8.7 miles from the New Jersey coastline in the vicinity of Atlantic City. The entire southern portion of the state along the coastline from the middle section of Monmouth County and south is made up of the Kirkwood-Cohansey aquifer system. The Cohansey aquifer is confined to Cape May County. The Kirkwood aquifer underlies the remainder of the region. This aquifer system is highly permeable due to the dominance of well-sorted, medium- to coarse-grained sand. There are three National Wildlife Refuges (NWR) in New Jersey that could be impacted by a spill from Atlantic Shores. The Edwin B. Forsythe NWR is located just north of Atlantic City. The Cape May NWR is located at the southern tip of the state on the coast. The Supawna NWR is located to the north and well inside Delaware Bay. Because of their locations, it is very unlikely that the Cape May and Supawna NWRs will be impacted from an incident at Atlantic Shores.

The New Jersey HPO maintains a registry of national and state historic places. This registry can be accessed at https://www.nj.gov/dep/hpo/1identify/nrsr_lists.htm.

The entire shoreline of the state of New Jersey can be considered an important economic site. New Jersey tourism relies heavily on visitors to the state's famous beaches. Any spill occurring in the summer months in the state that results in beach closures for any extended period of time will result in significant economic impact.

ESI maps, available from the National Oceanic & Atmospheric Administration, provide a summary of coastal resources that are at risk if an oil spill occurs in the area. The maps are available in pdf format at: <https://response.restoration.noaa.gov/maps-and-spatial-data/download-esi-maps-and-gis-data.html>.

The oil spill modeling results (provided in Annex 11 of this OSRP) conservatively assume that no oil spill response or mitigation would occur. This is a very conservative assumption as the OSSs will be designed with containment and Atlantic Shores would employ containment and recovery methods to contain and recover onshore and aquatic petroleum spills. Under these very conservative assumptions, the modeling results indicate there is $\leq 20\%$ probability of oil above a minimum thickness of $100 \mu\text{m}$ (100 g/m^2 on average over the grid cell) reaching the shorelines of New Jersey within a minimum of 2 days from release. In the spring, summer, and fall seasons there is a $< 10\%$ probability that oil above $100 \mu\text{m}$ (100 g/m^2 on average over the grid cell) would reach the southern coasts of Long Island, NY within 10 days at the earliest. In the summer season, there is a small probability ($< 5\%$) that that oil above $100 \mu\text{m}$ (100 g/m^2 on average over the grid cell) would reach small portions of coastline on Block Island, RI and Martha's Vineyard/Nantucket, MA. However, the oiling would not occur for at least 15 days after the release in most cases and would likely be largely mitigated with response measures within this time. Some of the specific areas of environmental concern along the shores of New Jersey that would be taken into special consideration in the event of an oil spill include the Cape May, Edwin B. Forsythe, and Supawna Meadows Refuges.

A7.5 Response

The WTGs and OSSs are designed to utilize secondary containment systems to prevent a discharge of oil to the environment. Containment will be provided considering the size of the largest container. The secondary containment for the OSSs is connected to a sump tank.

Oils used by Atlantic Shores are expected to have a specific gravity of less than 1.0. Therefore, any discharges of oil to water would float on the surface of the water, and on-water mechanical recovery techniques could be used to recover the released oil.

Atlantic Shores will retain a third-party OSRO to assist in the unlikely event of a release of oil to the environment. In addition, Atlantic Shores will maintain a location for CTV operations near the lease area. CTVs are purpose built to support offshore wind energy projects. They are typically 75 ft in length and set up to safely and quickly transport personnel, parts and equipment. In addition to vessels, Atlantic Shores will maintain spill response equipment such as a spill overpack drum, containment bladders, absorbent booms, pigs, socks, and other sorbent materials. In addition, Atlantic Shores will ensure personal protective equipment (PPE) is on hand, such as goggles or safety glasses, face shields, gloves, and disposable chemical and oil resistant suits (e.g., Tyvek suits).

Atlantic Shores will contract with a USCG Classified OSROs which are listed at: <https://cgri.uscg.mil/UserReports/WebClassificationReport.aspx>. Once an OSRO is contracted, additional details will be provided regarding spill response resources and the time needed for procurement. In addition, a discussion of response to worst case scenario in adverse weather conditions will be addressed.

The UC will consider the use of alternate response countermeasures, such as dispersants and in-situ burning, for any spill at Atlantic Shores. Sections 2.4.4 and 2.4.5 of the main OSRP detail these policies and considerations.

Annex 8 – Agreement with Oil Spill Removal Organization

Atlantic Shores understands that a list of Oil Spill Removal Organizations (OSROs) that are available to respond to a worst-case discharge (WCD) of oil from our offshore facilities and their contact information is required for the complete OSRP. While this information cannot be provided during the early stages of permitting, Atlantic Shores is committed to submitting this list of OSROs and contact information for the finalized OSRP which will be provided prior to construction.

Atlantic Shores also understands that map(s) showing equipment storage sites and staging location(s) for the oil spill response equipment that would be deployed by our facility operators or the OSRO(s) listed in the plan in the event of a discharge is required for the complete OSRP. While this information also cannot be provided now during the early stages of permitting, Atlantic Shores is committed to submitting these map(s) of equipment storage sites and staging location(s) for the finalized OSRP which will be provided prior to construction.

Details regarding contractual agreements will be provided for review and approval prior to construction.

Annex 9 – Equipment Inventory

Details regarding spill response materials, services, equipment, and response vessels for the Project will be provided for review and approval prior to construction.

A9.1 Maintenance Facilities

In support of necessary Operation & Maintenance (O&M) activities, Atlantic Shores will maintain a management and administrative team, a “control room” operation, and maintenance facilities.

The technicians and engineers responsible for long-term maintenance will operate from O&M facilities. The O&M facilities will include office and training space, shop space, warehouse space for parts and tools, and a location for crew transfer vessel (CTV) operations. CTVs are purpose-built to support offshore wind energy projects. They are typically 75 ft in length and set up to safely and quickly transport personnel, parts, and equipment. The maintenance operation may also make use of larger Service Operations Vessels (SOVs). SOVs are typically 260 to 300 ft in length with accommodations for maintenance crews for up to two weeks operation in the WTA between returns to port for refueling and resupply. Helicopters can be used for fast personnel transfer or for visual inspections as needed.

In addition to the vessels above, it is anticipated that Atlantic Shores will maintain spill response equipment such as a spill overpack drum, containment bladders, absorbent booms, pigs, socks, and other sorbent materials. In addition, Atlantic Shores will maintain stockpiles of PPE such as goggles or safety glasses, face shields, gloves, and disposable chemical and oil resistant suits (e.g., Tyvek suits).

A9.2 Offshore Substations

Atlantic Shores will maintain spill response equipment at the OSSs. Brooms, shovels, sorbents, pigs, socks, and a spill overpack drum will be maintained at each OSS for response to minor leaks and spills inside or on the platform. In addition, Atlantic Shores will maintain stockpiles of PPE such as goggles or safety glasses, face shields, gloves, and disposable chemical and oil resistant suits (e.g., Tyvek suits).

A9.3 Oil Spill Removal Organization

Atlantic Shores will retain a third-party oil spill removal organization (OSRO). The selected spill contractor will be responsible for the inspection and maintenance of their equipment. The equipment will be inspected on at least a monthly basis. Atlantic Shores will ensure that the OSRO has a maintenance program established for its equipment. A copy of the program would be requested and kept on file.

Atlantic Shores understands that a list of OSROs that are available to respond to a worst-case discharge (WCD) of oil from our offshore facilities and their contact information is required for the complete OSRP. While this information cannot be provided now during the early stages of permitting, Atlantic Shores is committed to submitting this list of OSROs and contact information for the finalized OSRP which will be provided prior to construction.

A9.4 Inspections (30 CFR 254.43)

Response equipment will be inspected at least monthly and maintained to ensure optimal performance. Records of inspections of response equipment must be maintained for at least two years and made available to authorized BSEE representatives upon request.

Inspection of the sorbent boom will involve complete removal of booms from storage and the laying-out of the booms in an area that would not cause damage to the fabric of the booms. The inspector will examine each length of boom closely, making note of any fabric damages or wear, broken or frayed cable, missing weights and damaged connectors. The inspector will also verify the quantity of boom that is in storage to ensure there is sufficient supply. Any damages will be repaired, if possible. If the length of boom cannot be economically repaired, the inspector will request replacement.

A9.5 Operability Check

This activity is intended to periodically ensure the operability of certain items of equipment in the Atlantic Shores emergency equipment inventory, so that it is in a constant state of readiness for deployment. The designated inspector will check the operability of equipment. Any equipment that is electronic, electrical, or mechanical will be tested under actual load or use conditions.

During the operability check, the inspector will also perform routine maintenance on the equipment, as needed, such as battery replacements, oil and filter changes, and cleaning of boom. The inspector will indicate on the inspection form any problems encountered with the equipment and corrective measures taken or needed.

A9.6 Inventory

The inspector will verify the availability and condition of the variety of supplies, materials, and tools that are maintained in storage. The inspector will work from a list of items that are required to be maintained at all times. Any discrepancies in the list, or item replacement needs, will be noted on the inventory form. Inspection for condition of emergency resources will be checked periodically.

Atlantic Shores understands that map(s) showing equipment storage sites and staging location(s) for the oil spill response equipment that would be deployed by our facility operators or the OSRO(s) listed in the plan in the event of a discharge is required for the complete OSRP. While this information cannot be provided now during the early stages of permitting, Atlantic Shores is committed to submitting these map(s) of equipment storage sites and staging location(s) for the finalized OSRP which will be provided prior to construction.

Annex 10 – Safety Data Sheets (SDS)

Atlantic Shores understands that the safety data sheets (SDS) are required for the complete Oil Spill Response Plan (OSRP). While this information cannot be provided now during the early stages of permitting, Atlantic Shores is committed to submitting the SDS for the finalized OSRP which will be provided prior to construction.

SDS for Project equipment will be provided for review and approval when available.

Annex 11 – Oil Spill Modeling Report

