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VINEYARD WIND

Draft Construction and Operations Plan

Volume I

Vineyard Wind Project

September 30, 2020

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Submitted to
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Wood Thilsted Partners Ltd
WSP

September 30, 2020

Appendix I-B

Draft Safety Management System

VINEYARD WIND SAFETY MANAGEMENT SYSTEM

Vineyard Wind LLC

Document Title:	**VINEYARD WIND SAFETY MANAGEMENT SYSTEM**
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TABLE OF CONTENTS

1 INTRODUCTION

This document provides an overall description of the key elements to be included in the Safety Management System for the Vineyard Wind Offshore Wind Farm. It describes, in general, the policies of Vineyard Wind with response to the safety requirements set forth in the Guidelines for Information Requirements for a Renewable Energy Construction and Operations Plan (COP).

The Safety Management System (SMS) is a dynamic document and is expected to be further developed as the project develops. However, the core principals of the SMS will remain the same. Specifically, the SMS will describe and in compliance with:

APPLICABLE REGULATIONS AND GUIDANCE depending on specific work and location

- 30 CFR 585.810 gives BOEM the authority to regulate all renewable energy development activities on the Outer Continental Shelf (OCS).

- 30 CFR 585.627(d) requires safety management system description in the COP that describes:
  - How Vineyard Wind will ensure the safety of personnel or anyone on or near its offshore and onshore wind facilities; Vineyard Winds worksites will be continually analysed for existing and potential hazards
  - Remote monitoring, control, and shutdown capabilities;
  - Emergency response procedures;
  - Fire suppression equipment,
  - How and when the Safety Management System will be established and verified; and
  - How to ensure that personnel are properly trained
- 30 CFR 585.811 The Safety Management System to be fully functional when Vineyard Wind begins activities described in the approved COP. Vineyard Wind will conduct all activities described in approved COP in accordance with the Safety Management System as described, as required by §585.810.
- OSHA regulations apply for construction activities (29 CFR 1926) on land and up to 3nm offshore.
- OSHA regulations apply for general industry activities such as operations and maintenance (29 CFR 1910) on land and up to 3nm offshore apply.
- OSHA regulations apply for shipyard, marine terminals and longshoring activities (29 CFR 1915, 1916 and 1917).
- United States Coast Guard regulations 33 CFR Subchapter N and 46 CFR apply for inspected vessels:

(i) Workplace Safety and Health – 33 CFR Part 142;

(ii) Design and Equipment – 33 CFR Part 143;

(iii) Lifesaving Appliances – 33 CFR 144.10;

(iv) Firefighting Equipment – 33 CFR Part 145; and

(v) Operations – 33 CFR Part 146.

2 ABBREVIATIONS AND ACRONYMS

BOEM	Bureau of Ocean Energy Management
BSEE	Bureau of Safety and Environmental Enforcement
COP	Construction Operations Plan
EHS	Environment, Health, and Safety
JSA	Job Safety Analysis
LOTO	Lock Out/Tag Out
MOC	Management of Change
OCS	Outer Continental Shelf
OSHA	United States Occupational, Health, and Safety Administration
PIC	Person in Charge
SMS	Safety Management System
USCG	United States Coast Guard

3 MANAGEMENT COMMITMENT

The commitment of Vineyard Wind's Leadership and Management is paramount to the implementation of a Safety Management System by creating a culture of "Zero Injury" with the goal of eliminating safety related incidents. Vineyard Wind Management will take the approach of leadership by example, will set clear policy, allocate necessary resources and designate parties to provide subject matter expertise.

To achieve the objective of Zero Injury, Vineyard Wind will:

- Ensure a systematic approach to the management of EHS, and implement a safety management system designed to ensure compliance with regulations as a minimum and to achieve continuous performance improvement

- Take responsibility and provide clear leadership
- Be a leader in promoting best practice in the offshore wind energy industry
- Set targets for EHS audits, improvement metrics and reporting of performance
- Require all Contractors to manage EHS in line with Vineyard Wind policy
- Ensure that EHS compliance is the responsibility of all managers, teams and individuals
- Empower everyone to stop any work, or prevent work from starting, where adequate controls of EHS risks are not found to be in place without retribution
- Include EHS performance in the appraisal of all staff
- Encourage and promote involvement by all employees regardless of job title

Vineyard Wind is committed to the safety of all employees, contractors, visitors and vendors at all Vineyard Wind facilities. To guide Vineyard Wind in executing their commitment to safety, and building on lessons learned from the offshore wind, oil & gas, and other industries, a combination of regulatory sources has been assessed to support the development of the strongest possible safety management program. The Safety Management System outlined in this document draws on regulations from 33 CFR 140 - 145 and incorporates information based on certain elements of 30 CFR 250, Subpart S, Safety and Environmental Management Systems (SEMS). In addition, OSHA regulations have been consulted to identify any additional safety standards and practices that could be incorporated into the Vineyard Wind SMS.

3.1 Roles

The following table defines the roles that are tasked with fostering and implementing a Safety Management System:

Role	
Executive Leadership	Those leaders who set the tone and provide support at the highest levels of leadership for the implementation of a Safety Management System.
Steering Committee	Senior Leaders comprised of representatives from functional areas that are positioned to support and drive SMS success.
Management	All other levels of Management outside of Executive Leadership and the Steering Committee.
Employee	All employees not previously categorized.

3.2 Training Requirements

Individuals who have duties that fall within the scope of Leadership and Management Commitment, will receive training in the form of reviewing this document and the SMS report

materials. Directors, managers and supervisors shall have an acute awareness of US construction, USCG, OSHA and maritime health, safety and environmental legislation in order to successfully lead on EHS matters

Management will have the required training to insure:

- Provide overall leadership to the project team
- Responsibility for the safe management of all works associated with the project
- Ensure that the project is fully and competently staffed for managing EHS and that objectives are clearly defined
- Ensure that all levels of staff receive adequate and appropriate training
- Ensure that disciplinary procedures are adequate to act against those who breach EHS practices

  Set a personal example

4 EMPLOYEE INVOLVEMENT

It is of great importance to Vineyard Wind that all employees are engaged in the safety program. Employee involvement in the Safety Management program will be maximized through initial safety orientation, continuous safety awareness training, and management programs that include:

- Safety Meetings
- Safety Committee Membership
- Safety Training Program
- Safety Recognition Program
- Safety Incentive Program

Vineyard Wind will establish a disciplinary policy that clearly defines the expectations of all employees. The policy encourages employees to use good judgement when undertaking work and follow established safety policies and procedures. The disciplinary policy clearly defines consequences and disciplinary actions when safety policies are violated.

5 SAFETY POLICIES

Specific safety policies and associated training will be developed in accordance with 29 CFR 1910 – Occupational Safety and Health Standards, 29 CFR 1926 – Safety and Health Regulations for Construction, and 30 CFR 585 – Renewable Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf.

Vineyard Wind Safety Policies will be adhered to through training, regular safety meetings, documentation and audits. The follow safety topics comprise the Vineyard Wind Safety Program.

- Smoking Policy

- Drug and Alcohol Policy
- Following Manufacturer's Transportation, Installation, Operations and Maintenance Manuals
- Bypassing of Safety Systems
- Policy of working in Teams for Safety
- Policy related to critical equipment
- Fitness for Duty
- Stop Work Authority
- Policy related to Emergencies
- Lockout and Tagout
- Marine survival training
- CPR and First Aid
- Vessel or site specific induction
- Emergency escape training / confined space rescue training
- Knowledge of the H&S conditions at site
- Wind Turbine rescue from height training (if job includes WTG access)
- Turbine tower lift rescue / recovery training
- Electrical awareness including a basic understanding of electrical safety and the electrical safety rules in place on the project
- Fire safety awareness

5.1 Organizational Reporting Structure

Vineyard Wind will develop an organizational structure that ensures responsibilities are delineated and accountability is described for all levels of the organization. This section includes the minimum organizational structure that will be in place prior to project implementation. As needed, positions and duties will be added to the structure, consistent with the safety needs of the project and in coordination with project contractors.

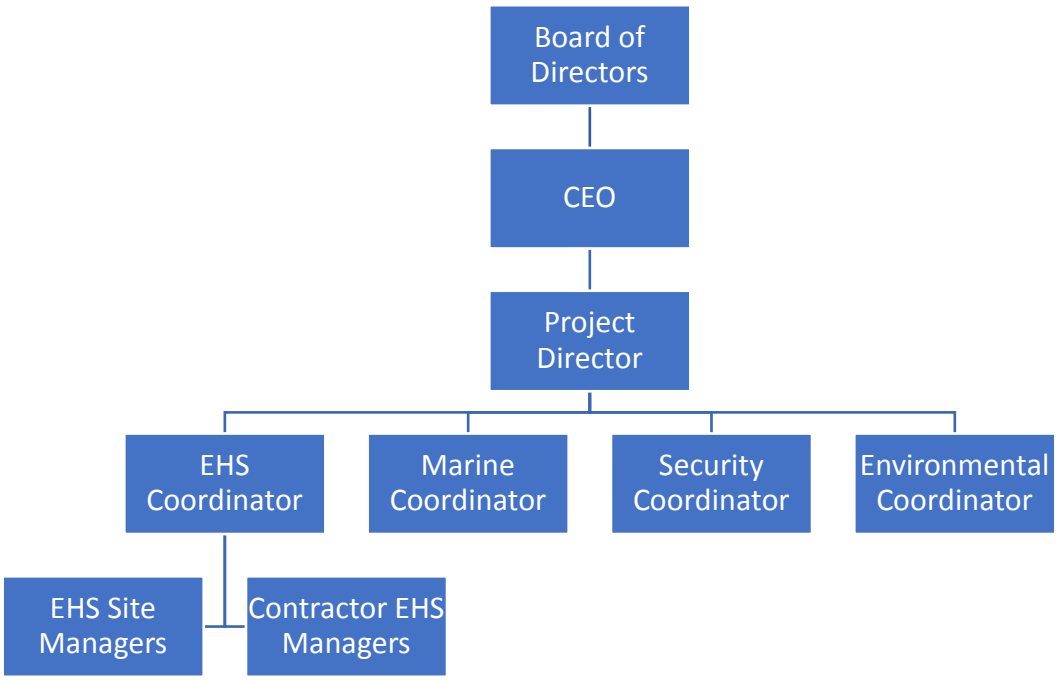

Figure 5-1 Vineyard Wind Safety Organization

5.2 Key Roles and Description of Responsibilities

This section lists the responsibilities of project personnel with respect to administering the SMS. Other duties may be required of these individuals that are not included in this document.

5.2.1 Project Director

The Project Director will lead the project and will work to ensure that the project is constructed safely, in accordance with the environmental permits, and to proper quality standards. The Project Director will be Vineyard Wind's authorized representative during the engineering and construction period for all matters related to the SMS including coordination with government authorities, first-responder emergency agencies, and coordination between contractors.

5.2.2 Health and Safety Coordinator

The Health and Safety Coordinator will report to the Project Director and will be responsible for monitoring compliance with the approved Construction and Operations Plan, the SMS, all safety-related regulatory requirements, and overall health and safety conditions for the project. The Health and Safety Coordinator will review all contractor's safety management plans for compliance with the COP SMS, regulatory, and contract requirements. The Health and Safety Coordinator will establish a "safety first" working mentality at the project sites and on vessels involved in transport and construction.

5.2.3 Environmental Coordinator

The Environmental Coordinator will report to the Project Director and will ensure that all local, state and federal permit requirements and laws relating to environmental protection and reporting are adhered to. The Environmental Coordinator will monitor contractors for compliance with project specific environmental requirements and shall be responsible for

verifying compliance with environmental protection programs and protocols for environmental incident response. The Environmental Coordinator will coordinate deployment of certified marine mammal observers and other environmental resource observers on the vessels as required by the conditions of the project permits and approvals. The Environmental Coordinator will ensure contractors have compliant oil spill response plans, hazardous waste plans, and waste management plans in place.

5.2.4 Marine Coordinator

The Marine Coordinator will report to the Project Director and will ensure compliance with permit requirements and applicable laws relating to the project vessel activities (including installation vessels, transport vessels, service vessels, tugs, rescue boats, etc.). The Marine Coordinator will be kept informed of all planned vessel deployment each day. The Marine Coordinator will be the primary liaison with the USCG, port authorities, state and local law enforcement, marine patrol, and commercial operators (including ferry, tourist, and fishing boat operators). The Marine Coordinator will be responsible for all marine updates such as coordination with USCG regarding any required Notice to Mariners.

It will be the Marine Coordinator's responsibility to be knowledgeable of weather forecasts and have a communications plan in place with all contractors and vessels involved in the project.

The Marine Coordinator will be kept informed of all diving and dredging activities. The Marine Coordinator will coordinate with the USCG and local law enforcement authorities for planning in the event of trespassing vessels within any safety zone established for the offshore project construction activity.

The Marine Coordinator will conduct regular meetings with contractors to discuss vessel operation and deployments as appropriate for the level of marine activities scheduled.

5.2.5 Security Coordinator

The Security Coordinator will report to the Project Director. The Security Coordinator will liaise with all contractors and subcontractors on the project to address security provisions. In addition to the physical security of the onshore project staging area and port areas, the Security Coordinator is expected to work closely with the Health and Safety Coordinator and the Marine Coordinator to ensure that appropriate agency notification plans are in place with federal, state, and local government first responders.

The Security Coordinator will become responsible for security of the offshore WTGs and ESP once these are commissioned.

5.3 Safety Committee

To ensure continuous adherence to safety standards and regulations, and to maintain the strong safety culture of Vineyard Wind, a Safety Committee will be established comprised of key members of the management team and representatives across all work disciplines

To maintain the goal of continuous improvement the Safety Committee will perform reviews of safety practices and ensure alignment between the COP, SMS, safety regulations, personnel training, and working conditions. The Safety Committee will be responsible for addressing any safety issues that arise with Vineyard Wind employees, contractors, vendors, visitors, etc. and for establishing, approving and maintaining company safety standards, including the COP and SMS.

The safety committee will review daily and weekly safety meetings findings and suggestions.

6 CONTRACTOR MANAGEMENT

Third party contractors and support services will be integrated into the safety management system. Specific requirements will be developed for contracting, including:

- Minimum requirements for bridging documents
- Contractor safety audits
- Minimum contractor safety training
- Contractor roles in an emergency

Contractors are required to follow the same policies and procedures that Vineyard Wind employees follow for maintaining safety. Vineyard Wind will manage all contractors to ensure safety policies and practices are adhered to. Contractors EHS representative should be well versed in the projects SMS and be responsible for;

- Day-to-day site EHS supervision (onshore/offshore)
- EHS monitoring, inspection and auditing
- Support the EHS Director in establishing and fulfilling project training needs
- Participate in planning and coordination of all marine operations relating to the project
- Assist with preparation and maintenance of all EHS documentation;
- Management of PPE inventory, inspection and testing
- Participation in EHS meetings, risk reviews and workshop
- Set a personal example.

Contractor operations should not expose Vineyard Wind employees or the public to hazards in violation of governmental regulations and Vineyard Wind policy. Contractors will submit proof of training and copies of certificates to the Site EHS Manager before the start of any work activity. The competencies and training records of all employees will be requested and examined by the Site EHS Manager before commencing work activities.

6.1.1 Audits

Safety programs for all contractors will be subject audit by Vineyard Wind. Audits may include review of safety policies, procedures, training records, etc. and may be performed prior to contracting and during the course of the contract.

6.1.2 Training

All contractors will be fully qualified to perform the roles for which they are contracted, including any prescribed safety standards and training. Vineyard Wind will provide safety orientation to familiarize contractors with any site-specific safety issues. Contractors may be required to demonstrate, through documentation or practical application, their knowledge and understanding of safety requirements for offshore wind farm construction.

7 MANAGEMENT OF CHANGE

Vineyard Wind will maintain a procedure for Management of Change (MOC), which helps to identify the potential risks associated with the change and receive any required approvals prior to the introduction of such changes.

The MOC process provides a coherent, systematic, and simple mechanism for identifying and controlling hazards through the change process with emphasis on the transition phase. When well implemented, MOC ensures that the safety of wind farm and its personnel is safeguarded by the evaluation of hazards, threats, and other potential undesired events related to a significant change, and the intended benefits of the change are fully realized as planned.

7.1 Roles and Responsibilities

The Project Director will be responsible for the implementation of the Management of Change program. All MOC documentation will be maintained by the Health and Safety Coordinator.

7.2 MOC Review and Audit Requirements

Any Company employee can initiate the MOC process. The following table depicts the required frequency of recurring actions defined in the MOC program:

Action	Frequency
Audit	Every 3 years
Document Review	Annually
Management Review	Annually
Training	Initial and as needed refresher

7.3 Management of Change Process

The Management of Change policy shall be utilized for at least the following changes whether they are temporary or permanent:

- Physical Changes, including work site changes such as changes in construction vessels, working platforms, access and egress locations, etc.
- Organizational Changes, including changes in personnel, individual responsibilities, contractor or sub-contractor changes, etc.

- Technological Changes, including changes in equipment, equipment design, software controls or the technology used on the work site, etc.
- Procedural Changes, including changes to processes (i.e., work schedules, materials, equipment unavailability, new equipment, or operating conditions.

Vineyard Wind will develop a form to facilitate the processing of changes. The change form will, at a minimum, include a description and the purpose of the change, the technical basis for the change, safety and health considerations, documentation of changes for the operating procedures, maintenance procedures, inspection and testing, P&IDs, electrical classification, training and communications, pre-startup inspection, duration (if a temporary change), approvals, and authorization.

For a more complex or significant design change, a hazard and risk evaluation procedure will be used, such as a Hazard Identification (HAZID) workshop (The HAZID is further described in Section 11). Risk assessments should demonstrate that the risks with controls are 'As Low as Reasonably Practical.' Contractors also have a responsibility to carry out risk assessments based on the risks associated with their scope of work.

Documentation of changes will be kept in an accessible location to ensure that design changes are available to any member of Vineyard Wind who may require them.

7.4 Management of Change Communication

The communication of changes to appropriate personnel is essential to safety and preventing incidents. The following table lists activities that fulfil those requirements:

Action	Frequency
MOC Committee Meeting	As Needed; for any Organizational, Procedural, or Technological change
MOC Email Notification	For each implemented change

7.5 Training Requirements

All individuals will receive initial training on the MOC program and will also receive annual refresher training.

7.6 Management Review

On an annual basis, management will review progress on the MOC process and advise improvements or areas to refocus. Ensure that the MOC policy has been properly implemented and all elements have been completed and documented.

7.7 Audits and Assessments

Audits of the MOC program shall validate that the exercise of the MOC policy includes the following:

- Reason for change
- Authority for approving changes
- Analysis of implications
- Acquisition of required work permits
- Documentation of change process
- Communication of change to affected parts of the organization
- Time limitations
- Qualification and training of personnel affected by the change (including contractors)

7.8 Continuous Improvement

Management of Change metrics and risk assessments are an input into the Management Review and Risk Management elements. This element shall be reviewed annually for updating and audited every 3 years.

8 UNSAFE WORKING CONDITIONS

All employees, contractors, and subcontractors have the personal responsibility and work-place authority to report any unsafe work practice or to immediately stop any unsafe work practice during operations.

Unsafe work conditions may be reported anonymously. Emergent safety issues shall be addressed immediately.

8.1 Reports of Unsafe Work Conditions

All employees, contractors, and subcontractors shall report any violation of any Company safety regulation or any other hazardous or unsafe working condition on any Company owned or leased property, facility, structure, or equipment.

All employees, contractors, subcontractors, visitors or guests to any Vineyard Wind property, have the right to report any possible violation of applicable safety regulations or unsafe condition to the US Coast Guard. The identity of the reporting person shall not be known to the Company without consent of the person making the report.

8.2 Stop Work Authority

All employees and contractors have the responsibility and authority to stop any unsafe task or operation where the risk to people, the environment, or equipment cannot be managed in accordance with company's established safety policies, procedures or safe work practices.

No employee or contractor will be retaliated against for stopping work that is based on a good faith belief that it is unsafe.

9 SAFETY TRAINING AND COMPETENCE

As part of the company safety culture, safety training is on ongoing function of the Vineyard Wind safety program. Safety training and awareness will include the following topics, as well as any emergent safety issues that may arise. The training topics listed in this section are the minimum required training for all contractors and designated employees.

Orientation Training

Visitors

- Site safety rules for moving around on the site
- Safety equipment for moving around on the site
- Restricted areas
- Emergencies and rally points

Site workers

- Site safety rules for moving around on the site
- Safety equipment for moving on site
- Restricted areas
- Emergencies & associated procedures
- Driving rules (on site and off site)
- Hazardous substances
- Waste, dust emission and noise on site
- Permit systems
- Welfare arrangements
- PPE requirements
- The importance of conformance with the H&S procedures
- Employee's role and responsibility in general
- Incident reporting procedure
- Security arrangements

Example of Minimum EHS training requirements depending on job function

- Working from heights

- Electrical safety
- Sea survival
- Confined space
- First aid and CPR
- Fire fighting

Example of Specialized and Task Specific Training

- Use of specialized equipment
- Scaffolding and personnel platform equipment
- Diving operations
- High Voltage and switching

Medical Audits and Fitness for Duty

Pre-employment screening completed by an occupational doctor may consist of the following:

- Medical history
- Occupational history
- Physical Examination
- Determination of fitness to work wearing PPE
- Baseline monitoring for specific exposures.

Periodic Medical Examination completed by an occupational doctor may include:

- Yearly update of medical and occupational history
- Yearly physical examination
- More frequent testing based on specific exposures

9.1 Workplace Safety and Health - 33 CFR 142

The Company will maintain compliance with applicable workplace safety and health regulations and will frequently review processes to identify/recognize hazards, propose and implement changes to maintain the workplace safety and/or free from recognized hazards Recognized

Hazard in this context is that defined by 33 CFR 150.60(c)(1) as "generally known among persons in the affected industry as causing or likely to cause death or serious physical harm to persons exposed to those conditions; and routinely controlled in the affected industry."

9.1.1 Personal Protective Equipment

All Vineyard Wind personnel and contractors will receive training, or should be able to demonstrate that they have received training on Personal Protective Equipment (PPE) and its requirements for use, maintenance, and care for all specific safety related equipment, as appropriate.

At a minimum, the following PPE will be included:

- Eye and face protection
- Head protection
- Foot protection
- Hearing protection
- Protective clothing
- Respiratory protection
- Safety belts and lifelines
- Personal flotation devices
- Eyewash equipment

In addition to care and maintenance of PPE, training will also address:

- Housekeeping
- Guarding of deck openings

9.2 Design and Equipment - 33 CFR 143

9.2.1 Lights and warning devices

Appropriate lights and warning signals will be deployed during construction and when the wind farm is operational. Requirements for lights, markings, and warning devices for structures are codified in 30 CFR 67. Vessels associated with contraction and operation of the wind farm will adhere to lights and warning devices requirements under the International Regulations for Preventing Collisions at Sea 1972 (COLREGS) and any local rules, if applicable.

9.2.2 Means of Escape

All workers who require access to the offshore structures will receive training and participate in drills to test the means of escape from the structures. Training will include a description of a primary escape means, as appropriate for unmanned structures and in accordance with the requirements of 30 CFR 143.101.

9.2.3 Personnel Landings

Although personnel landings are not required for unmanned structures, during construction, it is anticipated that personnel landings may be used.

9.2.4 Guards and Rails

All required guards and rails will be installed, and appropriate training will be provided on the requirements for guards and rails for the unprotected perimeter of all floor or deck areas and openings, catwalks and stairways. Training will ensure all workers are aware of the requirements and have sufficient knowledge to report any deficiencies.

9.3 Lifesaving Equipment - 33 CFR 144.10

Training will be provided on the use and care of lifesaving equipment that will be available in accordance with applicable regulations, particularly the type and number of personal flotation devices and ring life buoys. It will also include the required markings, any affixed apparatus, and how they will be made accessible to personnel.

9.4 Firefighting Equipment - 33 CFR 145

Training will be provided on fire hazards associated with offshore wind farms and the appropriate firefighting equipment. It will also include a list of the rating and type of fire extinguishers for each structure and a description of the maintenance program for firefighting equipment as well as the fire detection systems.

Firefighting equipment and techniques will be consistent with the following standards, at a minimum:

- 29 CFR 1926 Subpart F (Fire Protection and Prevention)
- 29 CFR 1910 Subpart L (Fire Protection)
- 33 CFR Part 145 Firefighting Equipment
- Applicable NFPA standards

9.5 Operations - 33 CFR 146

9.5.1 Person in charge

Vineyard Wind will designate a Person in Charge of the wind farm. Designation will include contact information, title, and order of succession.

9.5.2 Maintenance of Emergency Equipment

Each piece of emergency equipment will be part of the Vineyard Wind maintenance program. All emergency equipment in use will be listed and include a description of the maintenance requirements or technical references for maintaining each piece of equipment.

9.5.3 Work vests

All workers who require transport and access to the wind farm will be required to wear an appropriate work vest. Vineyard Wind will provide awareness training on the type(s) of approved work vests and their uses, stowage, care, and inspection, including additional requirements for hybrid work vests, if used.

9.5.4 Notice of casualties

Vineyard Wind will notify the Coast Guard and/or BOEM of causalities. At a minimum, casualty reporting will be mandatory for:

- Death
- Injury to 5 or more persons in a single incident,
- Damage affecting the usefulness of primary lifesaving or firefighting equipment
- Injury causing any person to be incapacitated for more than 72 hours
- Damage to the facility exceeding $25,000 resulting from a collision by a vessel with the facility

Vineyard Wind will provide a written report of casualty in accordance with 33 CFR 146.30.

9.5.5 Diving casualties

There are specific reporting requirements for diving casualties. Vineyard Wind will adhere to requirements of reporting diving casualties in accordance with 46 CFR 197.484 and 197.486. Diving casualty reports are required under the follow circumstances:

- Loss of life.
- Diving-related injury to any person causing incapacitation for more than 72 hours.
- Diving-related injury to any person requiring hospitalization for more than 24 hours.

The notice will contain the following:

- Name and official number (if applicable) of the vessel or facility.
- Name of the owner or agent of the vessel or facility.
- Name of the person-in-charge.
- Name of the diving supervisor.
- Description of the casualty including presumed cause.
- Nature and extent of the injury to persons.

9.5.6 Pollution Incidents

Pollution incidents will be reported in accordance with 33 CFR 146.45. The approved Vineyard Wind Oil Spill Response Plan will be followed for specific pollution response actions.

9.5.7 Other Safety Procedures

In addition to the procedures for safe operations defined in this section, Vineyard Wind will develop and incorporate safety practices and procedures to reduce risks of casualties throughout its operations. Specific practices include:

- Drills and Exercises to test procedures
- Training Standards - This may include a list of training requirements for workers (listed in Section 6), previous certification, documentation, etc.
- Job Hazard Analysis, Job Safety Analysis, tool box talks before start of each job
- Work Permits
- Hot Work Procedures
- Routine Access/Egress Procedures (including safe use of ladders)
- Confined Space Entry
- Right to Know
- Material Handling (lifting operations)
- High Voltage and Medium Voltage Electricity, ARC Flash training (NFPA 70E)
- Working from Heights, including crane lift procedures, fall arresters, full-body harness, shock absorbers, lanyards, etc.
- Rescue from Heights
- First Aid
- Stop Work Authority
- Hearing Conservation
- Heat Stress
- Cold Weather
- Respiratory Protection

10 EMERGENCY RESPONSE

The SMS is primarily focused on preventing incidents. However, it is also important to be prepared if emergencies do occur. For this reason, Emergency Preparedness and Response plans are essential for responding effectively to an incident. Proper planning, training and drilling will ensure that any impact of an incident will be kept to a minimum for the public and the environment.

Emergency response plans will be developed for a range of emergency situations. Plan development will include procedures for testing emergency plans through drills and exercises. Plans will be developed, at a minimum, for the following scenarios:

- Collision between service vessel and structure
- Fire on structure and/or service vessel
- Evacuation
- Pollution Incidents
- Adverse weather
- Emergency Response and Search & Rescue
- Remote monitoring, Control and Shut Down procedures

10.1 Training Requirements for Emergency Response

Any individuals who will lead emergency responses, as well as those who will participate as emergency response team members, will receive initial training prior to their first involvement in an emergency response. These individuals shall also receive refresher training on an annual basis.

Learnings from past drill and actual events shall be incorporated into training. Learning from external events not related to Vineyard Wind shall also be incorporated.

11 HAZARD IDENTIFICATION AND RISK MANAGEMENT

Vineyard Wind will implement a systematic hazard identification and risk management program for existing and potential hazards. The goal will always be to reduce the hazard to a level as low as reasonably practicable.

Risk assessment methods will be used to decide on priorities and to set objectives for eliminating hazards and reducing risks. Wherever possible, risks are eliminated through selection and design of facilities, equipment and processes. If risks cannot be eliminated, they are minimized using physical controls, or as a last resort, through operating procedures and personal protective equipment.

Vineyard Wind will incorporate the use of Hazard Identification (HAZID) Workshops to help identify and manage risks. HAZID workshops are usually performed during initial facility planning and engineering, when considerable modifications, upgrades or re-design of existing facilities are carried out, or may be driven by events such as accidents, critical situations or near misses.

The purpose of a HAZID is to identify main hazards, review the effectiveness of selected safety measures and, where required, to expand the safety measures to achieve a risk as low as reasonably practicable.

The HAZID provides documentation that Vineyard Wind installations are operated in a manner that major hazards are identified, mitigated or eliminated. Vineyard Wind management will be kept up-to-date on the potential hazards and their possible effects.

Key elements of HAZID

- Identification of hazards and their potential effects

- Assessment of the related risks
- Develop a Risk Assessment Matrix and record in a risk register
- Implementation of controls to eliminate or reduce those risks to a level as low as reasonably practical
- Elimination of hazard with engineering and/or administrative controls and/or PPE
- Implementation of recovery measures to minimize the consequences of an incident
- Documentation of the decision-making process