Spill Prevention, Control, and Countermeasures Plan

Lempster Wind Energy Project
Lempster, NH

Prepared for
Lempster Wind, LLC.

November 2008

Prepared by
CH2M HILL
Oil Spill Response Flowchart

Stop the spill source

Contain the spill (absorbents, berm)

Prevent from entering a waterway (streams, storm drains are waterways)

Isolate the spill area

Always report and clean up all spills

Report

Clean Up

Report to Plant Manager or Senior Plant Technician and document in plant log

Call Lempster Wind, LLC EHS 616 283 2226 for documentation purposes and to determine if spill is reportable to regulatory agency

In NH, reportable spills include any amount of oil to ground or surface water or oil spills to land unless they are cleaned up immediately and less than 25 gallons. Immediately report the spill or threatened spill to NHDES Emergency Response at (603) 271-3899 (8am-4pm, Mon-Fri) or contact NHDES via the NH State Police at (800) 346-4009.

Manager or Senior Plant Technician must fill out spill report form from the Lempster Wind EHS Accident/Incident SOP

Note: Reporting information:
- Time
- Date
- Location
- Source
- Amount spilled
- Surfaces involved
- Clean up

SMALL LOCALIZED SPILLS (less than 5 gallons for example)

Remove all visible traces of contaminated soil and debris, plus 1 lateral foot

Clean all solid surfaces

Containerize debris and mark barrel lid with:
- DRUM CONTESTS (e.g. spill debris)
- SPILL SOURCE (e.g. transformer ###)
- SPILL DATE

Arrange with a hazardous waste disposal company to transport spill soils and spill debris to approved disposal facility

LARGE SPILLS (failed padmount or substation transformers) will require the use of heavy equipment, certified clean-up and disposal contractors, and consultants to perform soil sampling to ensure clean-up meets state requirements with bills-of-lading/manifests completed for disposal at approved disposal facilities
Facility Information Page

Facility Name: Lempster Wind, LLC
Lempster Wind Project

Facility Location: Sullivan County

Facility Mailing Address:
106 Bean Mountain Road
(PO Box 231)
Lempster, NH 03605

Facility Contact Phone Numbers:
Brian Goodwin: (616) 283-2226
Operations and Maintenance Manager

SPCC Program Coordinator: Brian Goodwin

Corporate Office: 1125 NW Couch, Suite 600
Portland, OR 97209

Owner/Operator Name: Lempster Wind LLC.
Owner/Operator Address:
106 Bean Mountain Road
(PO Box 231)
Lempster, NH 03605

Type of Facility: Wind Power Facility

Latitude/Longitude:
43° 13’ 37.5” N 72° 9’ 6.3” W

River Drainage Basin: Sugar River

Nearest Surface Water Body: See Site Map

Distance: See Site Map
Management Approval

This Spill Prevention, Control, and Countermeasure Plan for Iberdrola USA’s Lempster Wind Project is fully supported by the management of Iberdrola USA. Lempster Wind, LLC will implement this Plan and amend it as needed as a result of expansions, modifications, and improvements at the Lempster Wind, LLC facility. In addition, the management Lempster Wind, LLC commits the manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful and to respond to a discharge within an appropriate response time.

Name: Eric Lattom
Project Manager, Lempster Wind, LLC
Signature: ____________________________
Date: 7 Nov 2003

Engineer Certification

Through this certification, I hereby attest that (1) I am familiar with the requirements of 40 CFR 112; (2) my agent has visited and examined the facility; (3) the SPCC Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, and with the requirements of the SPCC rule; (4) procedures for required inspections and testing have been established; and (5) the Plan is adequate for the facility.

Certifying Engineer: William Shively
State: NH
Registration Number: 8970
Certification Date: 11-7-08
Plan Review and Revision

Changes to Facility or Operations

This SPCC Plan is to be amended whenever there is a change in facility design, construction, operation, or maintenance procedure that materially affects the potential for an oil spill. Examples of the types of changes that may require amendment of the Plan include the following:

- Commissioning or decommissioning tanks
- Replacement, reconstruction, or installation of oil containers
- Construction or demolition that might alter secondary containment structures
- Revision of standard operating or maintenance procedures

Amendments to the plan because of these types of changes are called technical amendments, and must be certified by a Professional Engineer (PE).

Other changes are called nontechnical amendments and do not need to be certified by a PE. Nontechnical amendments include the following:

- Change in name or contact information (e.g., telephone numbers) for individuals responsible for this SPCC Plan

Both technical and nontechnical amendments must be documented in the attached SPCC Review Plan Log. All amendments to this SPCC Plan will be signed and certified by the owner/operator.

This SPCC Plan is to be amended within 6 months of a change, and implemented within 6 months following preparation of the amendment.

Routine Reviews

In any case, this SPCC Plan will be reviewed and evaluated once every 5 years by the Spill Prevention Coordinator. The review will be documented and noted on the attached SPCC Review Plan Log. If required, the SPCC Plan will be amended within 6 months of the review as described above, and any changes will be implemented within 6 months of the amendment.
<table>
<thead>
<tr>
<th>Date</th>
<th>Certification (per 40 CFR 112.5[b])</th>
<th>Reviewer</th>
<th>Signature</th>
<th>Revisions</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>I have completed review and evaluation of the SPCC Plan for Lempster Wind, LLC facility on ________ and will/will not amend the Plan as a result.</td>
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<tr>
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</table>
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SECTION 1
Introduction

1.1 Objectives and Scope of Plan

This plan outlines the procedures, methods, and equipment used at the Lempster Wind, LLC (facility) to comply with the U.S. Environmental Protection Agency’s (EPA’s) oil spill prevention, control, and countermeasures standards, and to comply with inspection, reporting, training, and record keeping requirements. Pursuant to 40 Code of Federal Regulations (CFR) 112.1, a facility must prepare and maintain a Spill Prevention Control and Countermeasures (SPCC) Plan if the following conditions occur:

1. The facility has aboveground oil storage capacity of more than 1,320 gallon
2. Oil discharges could potentially reach navigable waters as defined in 40 CFR 112.2

These applicability requirements are met by the facility, and an SPCC Plan must be prepared and maintained.

The hierarchical objectives of the SPCC Plan are as follows:

- PREVENT spill from occurring.
- PREPARE for a potential spill
- RESPOND quickly and appropriately if a spill does occur.

1.2 Plan Content and Format

This Plan does not follow the exact format specified in 40 CFR 112. Table 1-1 presents a cross-reference of 40 CFR provisions and Lempster Wind, LLC Plan sections.

This Plan is designed to be “user friendly,” easily implemented, and easily maintained. This Plan relies on “Container/Equipment Data Sheets” that provide SPCC Plan compliance requirements and activities for each oil facility (tank, container, equipment or operation) at the facility. This approach allows Lempster Wind, LLC personnel to efficiently make Plan updates and to address program requirements for their particular area(s) of responsibility.

Section 2.0 of this Plan provides a description of the regulated oil containers at the facility and the facility’s general drainage characteristics. As required by 40 CFR 112.7(a)(1), Section 3.0 provides a discussion of Lempster Wind, LLC’s conformance with the applicable SPCC regulations. Detailed technical and procedural information is referred to in the appendices. Appendix A contains site maps and facility diagrams. Appendix B contains a sample inspection checklist. Appendix C contains the New Hampshire Department of Environmental Services (NHDES) Spill Response & Complaint Investigation Section, Incident Report Form. Appendix D contains a sample facility spill log. Finally, Appendix E contains container and equipment data sheets.
This Plan has been developed in accordance with the revised SPCC rules issued by EPA on July 17, 2002. The Plan was also developed taking into consideration the SPCC Guidance for Regional Inspectors dated November 28, 2005, and the SPCC rule amendments issued by EPA in the Federal Register on December 26, 2006.

### TABLE 1-1
Cross-Reference of 40 CFR Provisions and Lempster Facility SPCC Plan

<table>
<thead>
<tr>
<th>40 CFR Provision</th>
<th>Provision’s Topic</th>
<th>Plan Section</th>
<th>Plan Page</th>
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<td>Professional Engineer certification</td>
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<td>112.3(e)</td>
<td>Location of SPCC Plan</td>
<td>Section 3.4 Recordkeeping</td>
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<td>Plan amendment</td>
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<td>112.7</td>
<td>Cross reference to rule</td>
<td>Table 1-1, Cross-Reference with SPCC Rule</td>
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<td>112.7(a)(1)</td>
<td>Conformance with rule</td>
<td>Section 3 Plan Requirements and Activities</td>
<td>3-1</td>
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<tr>
<td>112.7(a)(2)</td>
<td>Equivalent environmental protection</td>
<td>Section 3.2 Inspections</td>
<td>3-5</td>
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<tr>
<td>112.7(a)(3)</td>
<td>Facility diagram, facility information, spill response</td>
<td>Facility Information Page</td>
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<td>Section 2 Facility Description</td>
<td>2-1</td>
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<tr>
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<td></td>
<td>Appendix A: Site Maps and Facility Diagrams</td>
<td>Appendix A</td>
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<tr>
<td>112.7(a)(4)</td>
<td>Spill reporting</td>
<td>Section 3.3.2 External Notifications</td>
<td>3-6</td>
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<td></td>
<td>Appendix C – Lempster Wind, LLC Emergency Response and Evacuation Procedures</td>
<td>Appendix C</td>
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<td>Section 3.3 Spill Response</td>
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<td>112.7(b), (c), and (d)</td>
<td>Evaluation of spill potential and secondary containment</td>
<td>Section 3.1 Fault Analysis and Containment Measures</td>
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<td>112.7(d)(2)</td>
<td>Management commitment</td>
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</tr>
<tr>
<td>112.7(e)</td>
<td>Inspections, tests, &amp; records</td>
<td>Section 3.2 Inspections</td>
<td>3-5</td>
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<td>Appendix B – Inspection Checklist</td>
<td>Appendix B</td>
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<td>112.7(f)</td>
<td>Personnel, training, and discharge prevention procedures</td>
<td>Section 3.5 Training</td>
<td>3-8</td>
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<td>112.7(g)</td>
<td>Security</td>
<td>Section 3.6 Security</td>
<td>3-9</td>
</tr>
<tr>
<td>112.7(h)</td>
<td>Tank car and tank truck loading/unloading</td>
<td>No tank car/tank truck loading/unloading of oil occurs at this facility</td>
<td></td>
</tr>
<tr>
<td>112.7(i)</td>
<td>Brittle fracture evaluation</td>
<td>No field-constructed aboveground containers are located at this facility</td>
<td></td>
</tr>
<tr>
<td>112.7(j)</td>
<td>Applicable State and local requirements</td>
<td>Section 3 Plan Requirements and Activities</td>
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<tr>
<td>112.8(b)</td>
<td>Facility drainage</td>
<td>Section 3.1 Fault Analysis and Containment Measures</td>
<td>3-1</td>
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<tr>
<td>112.8(c)</td>
<td>Bulk storage containers</td>
<td>Section 3.1 Fault Analysis and Containment Measures</td>
<td>3-1</td>
</tr>
</tbody>
</table>
Measures

* Only selected excerpts of relevant rule text are provided. For a complete list of SPCC requirements, refer to the full text of 40 CFR 112.
SECTION 2
Facility Description

This section describes the facility, including the project area, wind turbine generators, Lempster Wind, LLC operations and maintenance (O&M) facility and substation, and the oil containers and equipment.

2.1 Project Area

2.1.1 General
The Lempster Wind Project is a planned 24 MW wind power project that will cover an approximate 60 acre area near the town of Lempster, New Hampshire, located on privately owned land in southwestern New Hampshire, approximately 20 miles north of Keene and less than 5 miles south of Mount Sunapee. The Lempster Wind Project consists of twelve turbines and will have the capacity to provide the annual electricity needs of approximately 10,500 New Hampshire homes. In general, the oil containers or oil-filled equipment covered by this SPCC Plan are as follows:

- Gear boxes located inside the wind turbine structures
- Electrical transformers containing dielectric fluid
- 55-gallons drum storage of oil products in the O&M building

The site map provided in Appendix A identifies the location and contents of each oil container. The container areas are described in more detail in the following sections. There are no underground storage tanks (USTs) at the facility.

At the time of initial Plan development and writing, the facility is under construction and is expected to be operational within the near future. The O&M building is complete, and switch yard is complete, however the turbines are currently being assembled, and virgin oil storage for nacelle hydraulic and gear box oil have not arrived at the site..

2.1.2 Topography
The Lempster Wind, LLC facility is located along the ridgeline of Lempster Mountain, which runs from the northeast to the southwest, parallel to New Hampshire Route 10 in southwestern New Hampshire in Sullivan County. The highest point in Lempster is the summit of Bean Mountain, at 2,326 feet (709 m) above sea level. The site lies mostly within the Connecticut River watershed, with the southeastern corner lying in the Ashuelot River watershed. The surface is, in general, uneven and mountainous. The project site is located in moderately to significantly sloping in areas and is dominated by forested upland.

2.1.3 Drainage and Water Bodies
The Lempster Wind site lies mostly within the Connecticut River watershed, with the southeastern corner lying in the Ashuelot River watershed. Flow at the site quickly matriculates into gravel and subsequently to the water table. Any flow that did occur near
the northern portion of the site would primarily flow to the Cold River located approximately 5 miles to the east of the site. Flow from the southern portion of the site would drain to the Sugar River, which is a tributary of the Connecticut River.

2.1.4 Wind Turbine Generators

Two types of oil-filled operational equipment are located at each of the 12 wind turbine generators (WTGs):

- Gear Boxes: Each WTG Meropa 320 gearbox contains 95 gallons of lubricating oil and is located at the top of the 260-foot turbine tower enclosure known as a nacelle.
- Step-up Transformer: These transformers are situated in the tower “nacelle” and are dry transformers with no oil storage capacity or oil in them at all.
- Hydraulic Units: There is also one hydraulic unit situated in each tower “nacelle” which provides secondary containment. The hydraulic unit holds 40 to 50 gallons of hydraulic fluid. These units are exempt from SPCC regulation as is below the 55 gallon threshold.
- The locations of the WTG sites are shown on Figure 1 provided in Appendix A.

2.2 Lempster Wind, LLC O&M Facility and Switchyard

The O&M facility located on at the Lempster facility will house up to 6 55-gallon drums of oil products. Spill pallets are used as passive secondary containment for these drums. The site maintains a switch yard which includes three mounted grounding transformers; each transformer contains approximately 116 gallons of oil. There is no substation onsite. One spare grounding transformer is maintained at the site. The spare transformer contains no oil.

Plan drawings of the Lempster Wind, LLC O&M facility are provided in Appendix A.

2.3 Summary of Oil Containers and Equipment

Table 2-1 summarizes the oil containers and equipment to be used.

<table>
<thead>
<tr>
<th>Container or Equipment ID</th>
<th>Number of Units</th>
<th>Unit Capacity (Gallons)</th>
<th>Total Capacity (Gallons)</th>
<th>Oil Product Stored</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oil-Filled Equipment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grounding Transformers</td>
<td>3</td>
<td>116</td>
<td>348</td>
<td>Mineral Oil</td>
</tr>
<tr>
<td>WTG Gear Boxes</td>
<td>12</td>
<td>95</td>
<td>1,140</td>
<td>Lubricating oils</td>
</tr>
<tr>
<td>Hydraulic Units</td>
<td>12</td>
<td>50</td>
<td>600</td>
<td>Hydraulic fluid</td>
</tr>
<tr>
<td><strong>Oil Storage Containers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55-gallon drum</td>
<td>6</td>
<td>55</td>
<td>330</td>
<td>Misc. oil products</td>
</tr>
<tr>
<td>Container or Equipment ID</td>
<td>Number of Units</td>
<td>Unit Capacity (Gallons)</td>
<td>Total Capacity (Gallons)</td>
<td>Oil Product Stored</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------</td>
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<td>--------------------------</td>
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</tr>
<tr>
<td>storage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total Facility Storage Capacity (gallons)</td>
<td>2,418</td>
</tr>
</tbody>
</table>
SECTION 3
Plan Requirements and Activities

This section describes the following general SPCC Plan requirements:

- Fault Analysis and Containment Measures
- Inspections
- Spill Response
- Recordkeeping
- Training
- Security

This SPCC Plan conforms to SPCC rules with the exception of certain integrity testing requirements on 55-gallon drums for which environmental equivalence is demonstrated in Section 3.2.1. No additional state or local requirements pertaining to oil spill prevention were identified. Specific spill prevention control and countermeasures applicable to individual oil filled equipment or containers are provided in the “Container/Equipment Data Sheets” in Appendix E.

3.1 Fault Analysis and Containment Measures

3.1.1 Overview
The development of this SPCC Plan included analyzing each oil-filled equipment or container for the following:

- A determination of the most likely spill scenario based on good engineering practice
- An evaluation of the appropriateness of passive containment measures provided in the original facility design and construction
- An evaluation of the appropriateness of active containment measures for other equipment not originally provided with passive containment measures

Table 3-1 provides a summary of the secondary containment strategy for oil-filled equipment and containers at the Lempster Wind Project facility. Additional details are provided in the Container/Equipment data sheets in Appendix E. Section 3.1.2 provides a detailed evaluation of active containment measures for the oil filled operating equipment.
### TABLE 3-1
Summary of Secondary Containment Strategy

<table>
<thead>
<tr>
<th>Container/Equipment ID</th>
<th>Maximum Potential Spill (gallons)</th>
<th>Description of Containment Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oil-filled Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grounding Transformers</td>
<td>Up to 116</td>
<td>Active containment measures to control and remove spills from the large flat gravel area surrounding the grounding transformer locations.</td>
</tr>
<tr>
<td>WTG Gear Boxes</td>
<td>Up to 95</td>
<td>Spills inside the turbine tower will be contained by the sealed tower base. Active containment measures are appropriate and will be employed upon discovery for small spills that may occur from the nacelle and drip along the outside of the tower base. Gear boxes are equipped with low level alarms to detect leaks</td>
</tr>
<tr>
<td>WTG Hydraulic Units</td>
<td>Up to 50</td>
<td>Spills inside the turbine tower will be contained by the sealed tower base. Active containment measures are appropriate and will be employed upon discovery for small spills that may occur from the nacelle and drip along the outside of the tower base.</td>
</tr>
<tr>
<td><strong>Oil Storage Containers</strong></td>
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<td></td>
</tr>
<tr>
<td>55 gallon drum</td>
<td>Up to 55</td>
<td>Spill Pallets</td>
</tr>
</tbody>
</table>

#### 3.1.2 Evaluation of Active Containment Measures for Gear Boxes

As described in Section 2, the facility includes gear boxes, step-up transformers and hydraulic units at each of the 12 WTG sites. The step-up transformers are dry units with no oil storage capacity and thus not regulated by SPCC. The gear boxes contain 95 gallons of oil each. The hydraulic units are below 55 gallons and thus exempt from SPCC regulation though secondary containment is provided via the “nacelle” itself in the same way as outlined below for the gear boxes.

The set up for this site is unique in that the step-up transformers and gear boxes are located in the wind turbine nacelle itself. As such, the nacelle itself will serve as secondary containment so secondary containment around the concrete foundations or otherwise is not necessary. In the event of a spill the nacelle would contain most or all of the oil. Any oil spillage from any of the oil filled equipment or reservoirs that did escape from the nacelle would drain within the tower. The wind tower is set on concrete and tightly sealed around the pedestal and tower base with epoxy seal on the flange at the bottom of the tower.

In a worse case scenario there would potentially be an instantaneous release of 95 gallons from the gear box. In this case the spill will be contained within the sealed concrete tower floor base. Spills from nacelle will drip along the tower to the base. A minimal amount of oil, i.e. less than a gallon could potentially make it to the ground in a worst case scenario.
situation. Passive containment is provided by the tower nacelle and tower in combination with active measures to recover small amounts of oil that make it to the ground.

### 3.1.3 Evaluation of Active Containment Measures for Grounding Transformers

The grounding transformers are pole mounted and away from any bodies of water. Active containment measures are used to control and remove any potential spills from the large, flat gravel area surrounding the grounding transformer location. There is a high temperature fault detection system in place which will notify wind farm technicians to investigate.

### 3.2 Inspections

The facility includes bulk oil storage containers (55-gallon drums) and oil-filled operating equipment (electrical transformers and gear boxes). Industry standards for inspections of 55-gallon drums include the Steel Tank Institutes SP001 Standard for Inspection of Aboveground Storage Tanks, Third Edition, issued July 2005. The standard calls for owner-performed inspections conducted at least monthly. Containers will be stored so that all sides are visible (i.e., the container has no contact with the ground). If the container starts to degrade (e.g., begins to rust, or oxidize if a poly drum), the contents of the container will be transferred to a new drum compatible with the material. These controls are expected to provide environmental protection equivalent to integrity testing.

Formal monthly inspections for the transformers and gear boxes (exterior portion of nacelle and tower) have also been deemed appropriate for the facility at this time. Weekly “drive by” inspections will also be performed. A monthly inspection checklist is provided in Appendix B.

### 3.3 Spill Response

#### 3.3.1 Procedures

For quick reference an oil spill response flow chart has been developed and is provided in the front cover of this Plan. The procedures include internal and external notification procedures for initiating a response. For small spills (less than 5 gallons), facility personnel will promptly clean up any visible discharge. For spills greater than 5 gallons, the Lempster Wind Project Emergency Response and Evacuation Procedures must be followed. This procedure will be maintained onsite as part of standard operating procedures. The following actions are recommended to mitigate the release of oil products:

1. **IF AT ALL POSSIBLE, STOP THE SOURCE OF THE SPILL IMMEDIATELY.** Close the valve, shut down pumping, or take whatever actions are possible to stop any release. If conditions are hazardous (for example, fire or potential explosion), do not approach.

   If safety is not an issue, call other nearby employees for assistance in stopping the release.
2. The release should be confined to the smallest area possible.
   − Use booms or sandbags, dig small trenches, or place absorbent pads to stop the spread.
   − Take immediate action to prevent the spill from reaching off-site or surface waters.
   − Place booms or pads, dig a diversion ditch, or use soil to form a berm.
   − If the release reaches water, attempt to place booms to contain the release, or, if necessary, block drainage downstream of spill to prevent further discharge.

A list of emergency equipment and materials, and the locations where they are stored, is provided below.

3. Properly dispose of contaminated soils and/or equipment.

4. Perform the external notifications as outlined in Section 3.3.2.

### 3.3.2 External Notifications

For any amount of oil that causes a sheen on “waters of the state” or that violates and applicable water quality standard, the following must be notified.

**National Response Center (NRC):** (800) 424-8802

**New Hampshire Emergency Response Number** (603) 271-3899

For additional information on spill reporting in New Hampshire, see DES’s Spill Response & Complaint Investigation Section, Incident Report Form provided in Appendix C. Spill events requiring SPCC Plan revision, submittal, and reporting are described below.

Lempster Wind, LLC will submit the SPCC Plan with all amendments to the EPA Regional Administrator within 60 days if one of the following events occurs:

1. A discharge of more than 1,000 gallons of oil into or upon navigable waters or adjoining shorelines in a single spill event.

2. A discharge of oil in harmful quantities (in violation of water quality standards or which have caused a sheen, film or discoloration on the surface of the waters) into or upon navigable waters or adjoining shorelines in two spill events reportable under Section 311(b) (5) of the Federal Water Pollution Control Act (FWPCA), known as the Clean Water Act, occurring within any 12-month period.

If one of the above events occurred, the following information is required to be submitted to EPA and the State:

- Name of the facility
- Name(s) of the owner/operator of the facility
- Location of the facility
• Date and year of initial facility operation
• Maximum storage or handling capacity of the facility and normally daily throughput
• Description of the facility, including maps, flow diagrams, and topographical maps
• A complete copy of the SPCC Plan with all amendments
• The cause(s) of such spill, including a failure analysis of system or subsystem in which the failure occurred
• Material and quantity of such spill
• The corrective actions and/or countermeasures taken, including an adequate description of the equipment, repairs and/or replacements
• Additional preventive measures taken or contemplated to minimize the possibility of recurrence
• Such other information as the EPA Regional Administrator may reasonably require pertinent to the SPCC Plan or spill

3.3.3 Spill Response Equipment

Table 3-2 identifies the recommended spill response equipment to be maintained onsite. Spill response will probably include digging up dirt and placing it in berms around the spill as well as placing absorbent mats into the spilled oil. Manufacturer information indicates the oil absorbency of the listed spill response absorbents to be approximately 114 gallons and should be adequate for initial response to spill incidents.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Quantity</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone-Cellular</td>
<td>2</td>
<td>On person – Brian Goodwin/Technician</td>
</tr>
<tr>
<td>Two-Way Radio</td>
<td>6</td>
<td>O&amp;M Building</td>
</tr>
<tr>
<td>Personal Protective Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protective Coveralls</td>
<td>4</td>
<td>O&amp;M Building</td>
</tr>
<tr>
<td>Hard Hats</td>
<td>6</td>
<td>O&amp;M Building</td>
</tr>
<tr>
<td>Safety Glasses</td>
<td>20</td>
<td>O&amp;M Building</td>
</tr>
<tr>
<td>Spill Response Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95-Gallon Oil-Only Overpak Spill Kit</td>
<td>1</td>
<td>O&amp;M Building – See Appendix A</td>
</tr>
<tr>
<td>Oil Only Pig© Mats (Item 7202)</td>
<td>1</td>
<td>O&amp;M Building – See Appendix A</td>
</tr>
<tr>
<td>Pig© Universal Mat (Item 7230)</td>
<td>1</td>
<td>O&amp;M Building – See Appendix A</td>
</tr>
</tbody>
</table>
Table 3-2
Spill Response Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Quantity</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shovels</td>
<td>4</td>
<td>O&amp;M Building</td>
</tr>
<tr>
<td>Empty Drums</td>
<td>4</td>
<td>O&amp;M Building</td>
</tr>
</tbody>
</table>

NOTE: All emergency equipment will be decontaminated prior to being placed back into routine service.

3.3.4 Spill History
Once active, the facility will record all oil spills over 1 gallon. A template facility spill log is provided in Appendix D.

3.4 Recordkeeping
All records generated with this plan (spill notifications, inspection worksheets, integrity testing results, repair records, and training records) are maintained for a minimum of 3 years. These records are filed in the SPCC records or in the facility operating records. A copy of this SPCC Plan is kept onsite and at the Lempster Wind, LLC office in Lempster, New Hampshire.

3.5 Training
Training is required for oil-handling employees and employees that perform inspections under this plan. These personnel at the facility will be trained in the following areas:

- Laws and regulations regarding spills, releases, and pollution control
- Contents of the SPCC Plan
- Operation and maintenance of equipment to prevent discharges
- General facility operations
- Known discharges or failures and malfunctioning components
- Recently developed precautionary measures

Spill prevention and response training will be conducted at least annually. This training will be documented. In addition, informal briefings will be held periodically through the year to update employees on changes in the regulations, laws, or in-house procedures (e.g., during tailgate safety briefings).

Training records will be maintained for 3 years.

3.6 Security
To prevent a spill or release from being caused by accidental or unknown entry or vandalism, several security measures have been employed, as follow:

- The O&M facility and substation will be locked once completed.
• WTG towers are locked.

• Sufficient lighting and security are provided throughout the O&M facility and substation to allow for spill detection and the prevention and discovery of vandalism.
Spill response equipment and 55-gallon drum storage
Lempster Wind Project – SPCC Plan Monthly Inspection Form

General Inspection Information

<table>
<thead>
<tr>
<th>Inspection Date: _________________</th>
<th>Retain Until Date: ________________ (3 years from inspection date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Inspection Date: __________</td>
<td>Inspectors Name: ___________________________________________</td>
</tr>
</tbody>
</table>

Inspection Guidance and Instructions

- This inspection form applies to the following equipment:
  - Switchyard Grounding Transformers (4 total)
  - All WTG Gear Boxes (visual inspection of Nacelle exterior only – 12 total)
  - 55-gallon Drum Storage at O&M Building

- Each piece of equipment shall be inspected monthly taking into consideration the following as appropriate:
  - Equipment surfaces free from leakage?
  - Seams are not damaged?
  - Free from rust, corrosion, or pitting?
  - Equipment foundation condition satisfactory?
  - Containment system condition satisfactory?

- Maintain records in the field office for three years to meet SPCC recordkeeping requirements.

- This visual inspection does not require a certified inspector and can be performed by an owner’s inspector who is familiar with the site and can identify and correct developing problems.

For non-conforming equipment complete the table below. Use additional sheets as necessary. If all equipment is in satisfactory condition or corrective actions have been implemented, sign and date the form as indicated below.

<table>
<thead>
<tr>
<th>Equipment Identification</th>
<th>Describe Unsatisfactory Condition</th>
<th>Describe Corrective Action</th>
<th>Date Corrective Action Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

No Unsatisfactory Conditions Identified or Corrective Actions Completed:

Signature_________________________________________________________________ Date: ___/___/____
APPENDIX C

Spill Reporting Form
Date Incident Reported to DES: ________; Time: ________; Rec’d By:

Location of Incident
Site Name: ________________________________
Street Address/Location: ____________________________________________________
Town: ________________________________

Incident Type
[ ] Petroleum Spill to Ground
[ ] Petroleum Spill to Surfacewater
[ ] Hazardous Substance Spill to Ground
[ ] Hazardous Substance Spill to Surfacewater
[ ] Motor Vehicle Accident
[ ] Roadside Dumping
[ ] Air Release
[ ] Release Inside of Building
[ ] Other (Specify: ____________________________________________________)

Party Reporting Incident
Name: ________________________________ Phone No.: ________________
Date of Incident: ________________ Time: ________________
Was Fire Department Notified: [ ] Yes [ ] No
Was Cleanup Contractor Hired: [ ] Yes, name: ____________________ [ ] No
Other Agencies/Officials Responding To Incident: ____________________________

NHDES Responder
Name: ________________________________
Actions Taken:
[ ] No Action Necessary
[ ] Referred to Other Agency/Division:
Agency/Division Name: ____________________; Person: __________; Date: ______; Time:
[ ] Responded (describe what actions were taken:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX D

Facility Spill Log
Summarize any spill over 1 gallon on this log.

<table>
<thead>
<tr>
<th>Date</th>
<th>Material</th>
<th>Spill Amount (Gallons)</th>
<th>Cause</th>
<th>Reportable Y/N *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*See Plan Review and Revision section and Section 3.3.3 for reporting requirement.*
APPENDIX E

Container/Equipment Data Sheets
## CONTAINER/EQUIPMENT ID: Oil Container Storage in O&M Building

<table>
<thead>
<tr>
<th>Location:</th>
<th>O &amp; M Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents:</td>
<td>Various petroleum &amp; waste oil products</td>
</tr>
<tr>
<td>Capacity:</td>
<td>55 Gallons</td>
</tr>
<tr>
<td>Type:</td>
<td>Steel Drums</td>
</tr>
<tr>
<td>Secondary Containment:</td>
<td>Spill Pallets</td>
</tr>
<tr>
<td>Description of Drainage from Secondary Containment:</td>
<td>N/A – Located indoors, no drains in storage area</td>
</tr>
<tr>
<td>Fault Analysis Failure of the primary containment will flow to the spill pallets.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engineering Controls:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosion Protection:</td>
<td>N/A – Container inside building with concrete floor</td>
</tr>
<tr>
<td>Inspections:</td>
<td>Monthly – See Appendix B</td>
</tr>
<tr>
<td>Security:</td>
<td>Located inside a locked building.</td>
</tr>
<tr>
<td>Other Applicable Spill Prevention Measures:</td>
<td>None</td>
</tr>
</tbody>
</table>
CONTAINER/EQUIPMENT ID: Lempster Wind Project Switchyard Grounding Transformers

<table>
<thead>
<tr>
<th>Location:</th>
<th>Switchyard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents:</td>
<td>II Mineral Oil</td>
</tr>
<tr>
<td>Capacity:</td>
<td>116 Gallons</td>
</tr>
<tr>
<td>Type:</td>
<td>Oil Filled Operational Equipment</td>
</tr>
<tr>
<td>Secondary Containment:</td>
<td>Active containment measures to control and remove spills from the large flat gravel area surrounding the grounding transformer locations.</td>
</tr>
<tr>
<td>Description of Drainage from Secondary Containment:</td>
<td>Suspended from Pole away from any bodies of water.</td>
</tr>
<tr>
<td>Fault Analysis</td>
<td>Spill would be contained within the vicinity of the large flat gravel area surrounding the grounding transformer locations. Transformer high temperature fault detection system will notify wind farm technicians to investigate.</td>
</tr>
<tr>
<td>Engineering Controls:</td>
<td>N/A – Oil machinery, not storage</td>
</tr>
<tr>
<td>Corrosion Protection:</td>
<td>N/A</td>
</tr>
<tr>
<td>Integrity Testing:</td>
<td>N/A – Oil machinery, not storage</td>
</tr>
<tr>
<td>Inspections:</td>
<td>Monthly – see Appendix B</td>
</tr>
<tr>
<td>Security:</td>
<td>Locked</td>
</tr>
<tr>
<td>Other Applicable Spill Prevention Measures:</td>
<td>None</td>
</tr>
</tbody>
</table>
CONTAINER/EQUIPMENT ID: All Wind Turbine Generator (WTG) Sites – Gear Boxes

Location: Wind Turbine Towers
Contents: Lubricating Fluid
Capacity: 12 gear boxes @ 95 gallons each
Type: Oil-Filled Operational Equipment
Secondary Containment: Housed within WTG tower or active containment measures
Description of Drainage from Secondary Containment: N/A, located indoors

Fault Analysis
Instantaneous release of 100 gallons. Spill will be contained within the sealed concrete tower floor base. Spills from nacelle will drip along tower to base. Turbine low level and low pressure fault detection system will notify wind farm technicians to investigate.

Engineering Controls: N/A – Oil machinery, not storage
Corrosion Protection: N/A
Integrity Testing: N/A – Oil machinery, not storage
Inspections: Monthly – see Appendix B
Security: WTG towers are locked.

Other Applicable Spill Prevention Measures: Place Oil Only Pig© Mats between tower and tower tie down bolts to collect material dripping along tower base.