

**SUBORDINATION AND RECOGNITION AGREEMENT**

**THIS AGREEMENT** is made as of this 26<sup>th</sup> day of March, 2014, by and between the “**Performing Defendants**” as defined in a Consent Decree filed with the United States District Court for the District of Massachusetts on December 9, 2008 in U.S. v. City of Attleboro, Massachusetts et al. (Civil Action No. 1:08-cv-120378) (the “Consent Decree”), which Consent Decree was entered by said Court on January 27, 2009, the Performing Defendants are listed on Exhibit A attached hereto and incorporated herein, and have a mailing address of c/o Michael P. Last, Esquire, Rackemann, Sawyer & Brewster, 160 Federal Street, Boston, Massachusetts 02110; and **New England Power Company**, a Massachusetts corporation having an address of 40 Sylvan Road, Waltham, Massachusetts 02451 (“Easement Holder”).

**WITNESSETH:**

**WHEREAS**, Easement Holder was granted certain easements as follows: (i) from Albert Dumont and Rita I. Dumont dated May 20, 1959 recorded with the Bristol County Northern District Registry of Deeds (the “Registry of Deeds”) at Book 1321, Page 38, which affects the land currently owned by Attleboro Landfill, Inc. described in Exhibit B hereto; (ii) from Isadore Shpack and Lea Shpack dated May 19, 1959 recorded with the Registry of Deeds at Book 1321, Page 37, which affects the land currently owned by the Town of Norton described in Exhibit C hereto; and (iii) from Harold L. Wetherell dated June 3, 1959 recorded with the Registry of Deeds in Book 1321, Page 312, which affects the land currently owned by the Estate of Harold L. Wetherell described in Exhibit D hereto (collectively referred to as the “Easements”).

**WHEREAS**, the U.S. Environmental Protection Agency (“EPA”) and the Performing Defendants have entered into the Consent Decree pursuant to which the Performing Defendants are to perform certain response actions at the Shpack Landfill Superfund Site (the “Site”), which is situated off of Peckham Road in Attleboro, MA and Union Road in Norton, MA and which includes the parcels of land described in Exhibits B, C and D attached hereto and incorporated herein (the “Subject Parcels”); and

**WHEREAS**, pursuant to such Consent Decree, the owners of the Subject Parcels have each granted an Easement, Restriction and Non-Interference Agreement (collectively referred to as the “ERNAs”) to the Performing Defendants, which are recorded, respectively in the

*Locus: Peckham St / Union Rd. (aka Union St) Attleboro / Norton, MA*

Registry of Deeds at Book 19700, Page 190, Book 20080, Page 126 and Book 19821, Page 222 which, among other things, grant certain easements and impose certain restrictions with respect to the Site; and

**WHEREAS**, Easement Holder has agreed to subordinate its Easements to the ERNAs in accordance with the terms and conditions expressed in this Agreement; and

**WHEREAS**, Easement Holder, and Performing Defendants and (each is referred to as a "party" and collectively referred to as the "parties") desire to enter into this Agreement upon the terms, covenants and conditions contained herein.

**NOW THEREFORE**, in consideration of the promises and the agreements of the parties contained herein, the parties agree as follows:

1. **Consent and Subordination.** Easement Holder hereby consents to the ERNAs and agrees that its use of the Easements shall at all times and in all respects (except as provided below in this Section 1) be subordinate to and used in accordance with each of the ERNAs, provided that the Easement Holder retains all rights granted in the Easements and covenants and agrees that such rights shall be exercised in accordance with this Agreement and the practices and procedures set forth in the *Soil Management Plans* prepared by Environmental Resources Management (ERM) and respectively dated May, 2013 and May, 2013, copies of which are recorded herewith (collectively, the "SMPs")

Notwithstanding anything to the contrary in this Agreement or the ERNAs, the restrictions set forth in Section 3, including every subpart thereof, of the ERNAs shall not apply to the Easement Holder's use of and construction and maintenance under its Easements, including, but not limited to, any emergency activities, so long as the Easement Holder exercises all of its rights and conducts all of its activities in the Easements in accordance with practices and procedures set forth in the SMPs.

2. **Reservation of Easement Rights.** Notwithstanding anything to the contrary in this Agreement or the ERNAs, the Easement Holder's consent, acknowledgment and subordination to the ERNAs shall not be deemed or construed as an abandonment or release of the Easements or any of the Easement Holder's rights in the Easements. Performing Defendants covenant and agree that they and their employees, agents, licensees and contractors will not hinder or interfere with any of the Easement Holder's rights and easements during the implementation of the Remedial Action as defined in the Consent Decree, provided the Easement Holder exercises all of its rights and conducts all of its activities in accordance with the SMPs and the Remedial Action Work Plan as approved by EPA. Performing Defendants acknowledge and agree that, except for its obligations to comply with the SMPs and the terms of this Subordination Agreement, the Easement Holder has no responsibility, financial or otherwise, under the ERNAs or the Consent Decree.
3. **Notice.** All notices, requests, demands or other written communications shall be deemed duly given at such time as they are (1) deposited into the United States mail sent by certified or registered mail, return receipt requested; or (2) sent via reputable overnight carrier, addressed to:

In the case of the  
Performing Defendants  
and the Shpack Site Group:

Shpack Site Group  
c/o Michael P. Last, Esquire  
Rackemann, Sawyer & Brewster  
160 Federal Street  
Boston, MA 02110

In the case of the Easement  
Holder:

New England Power Company  
Kim Herman Goslant, Esq.  
40 Sylvan Road  
Waltham, MA 02451

With a copy to:

Hinckley, Allen & Snyder LLP  
50 Kennedy Plaza, Suite 1500  
Providence, RI 02903-2319  
Attention: Robin L. Main, Esquire

A party may change its said address for purposes of notices, requests, demands or other written communication hereunder by notice given in the above manner to the other parties, with a notarized copy of said notice, which shall refer to this Agreement and the Book and Page of its recording, to be recorded with the Registry of Deeds with a marginal reference thereto to be noted on this Agreement.

4. **Subordination to GERES.** Easement Holder acknowledges that the ERNAs may be replaced and superseded by Grants of Environmental Restriction and Easement in substantially the form (with the applicable blanks filled in) which is appended to the Consent Decree as Exhibit K (the "GEREs") and including the substantive provisions substantially taken from the ERNAs and a provision or provisions that specify(ies) that the GEREs may be enforced by EPA and the Commonwealth of Massachusetts (or its agencies, departments or authorities) and their respective successors . Therefore, Easement Holder agrees that the subordination and recognition set forth herein shall automatically apply and be effective as to each of said GEREs at such time as each of said GEREs is recorded with the Registry of Deeds, provided, however, that such subordination and recognition shall be upon and subject to all of the terms set forth herein. Easement Holder covenants and agrees, at the request of Performing Defendants, to execute, acknowledge, deliver and authorize to be recorded with the Registry of Deeds such documents or instruments as may be deemed by the Performing Defendants or by EPA necessary or desirable to confirm the subordination of the Easements to the GEREs upon the terms herein set forth.

Notwithstanding anything to the contrary in this Agreement or the GEREs, the restrictions set forth in the GEREs shall not apply to the Easement Holder's use of and

construction and maintenance under its Easements, including, but not limited to, any emergency activities, so long as the Easement Holder exercises all of its rights and conducts all of its activities in the Easements in accordance with practices and procedures set forth in the SMPs.

5. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts.
6. **No Oral Change.** This Agreement may not be amended, modified, supplemented or terminated unless in writing which is duly executed by the party against whom the same is sought to be asserted, and it constitutes the entire agreement between the parties with respect to the subject matter hereof.
7. **Successors and Assigns; Termination.** This Agreement shall bind and inure to the benefit of, and be enforceable by, the parties hereto and their respective successors, assigns, heirs and personal representatives. Upon the termination of a GERE as to a particular one of the Subject Parcels, this Agreement shall become null and void and be of no further force and effect with respect to that particular Subject Parcel, and that upon the termination of GERES as to all three of the Subject Parcels, this Agreement shall become null and void and be of no further force and effect.
8. **Partial Invalidity.** Each of the provisions hereof shall be enforceable against the parties to the fullest extent now or hereafter not prohibited by applicable law. The invalidity or unenforceability of any provision hereof shall not limit the validity or enforceability of each other provision hereof.
9. **Counterparts.** This Agreement may be executed in several counterparts, each of which when executed and delivered is an original, but all of which together shall constitute one instrument. In making proof of this Agreement, it shall not be necessary to produce or account for more than one such counterpart which is executed by the party against whom enforcement of such Agreement is sought.

[SIGNATURE PAGE AND ACKNOWLEDGEMENT PAGE FOLLOW]

IN WITNESS WHEREOF, the parties hereto have duly executed this Subordination and Recognition Agreement as of the day and year first above-written.

**PERFORMING DEFENDANTS:**

SHPACK SITE GROUP, an  
Unincorporated Association of the  
Performing Defendants:

By: Michael P. Hart  
Name: Michael P. Hart  
Its: Common Counsel

**EASEMENT HOLDER:**

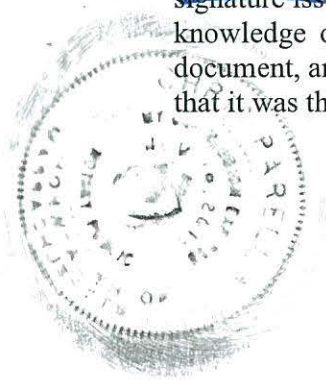
NEW ENGLAND POWER COMPANY

By: Shannon Larson KHG  
Name: Shannon Larson  
Its: Authorized Representative

COMMONWEALTH OF MASSACHUSETTS

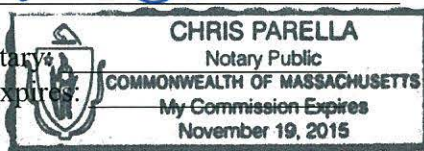
County of Middlesex

On this 26 day of March, 2014, before me, the undersigned notary public, personally appeared Shannon Larson, proved to me through satisfactory evidence of identification, which was ~~FORMCHECKBOX~~ photographic identification with signature issued by a federal or state governmental agency, or ~~FORMCHECKBOX~~ personal knowledge of the undersigned, to be the person whose name is signed on the preceding document, and acknowledged to me that he/she signed it voluntarily for its stated purpose and that it was the free act and deed of Shpack Site Group.



Chris Parella

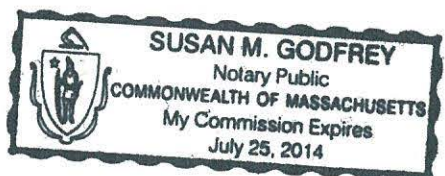
Notary Public  
Print Name of Notary:  
My commission expires:



COMMONWEALTH OF MASSACHUSETTS

County of Suffolk

On this 12th day of May, 2014, before me, the undersigned notary public, personally appeared Michael P. Cost, proved to me through satisfactory evidence of identification, which was ~~FORMCHECKBOX~~ photographic identification with signature issued by a federal or state governmental agency, or ~~FORMCHECKBOX~~ personal knowledge of the undersigned, to be the person whose name is signed on the preceding document, and acknowledged to me that he/she signed it voluntarily for its stated purpose and that it was the free act and deed of New England Power Company.



Susan M. Godfrey

Notary Public  
Print Name of Notary: Susan M. Godfrey  
My commission expires: 07-25-14

## EXHIBIT A

Avnet, Inc.

Bank of America, N.A., Trustee u/w of Lloyd G. Balfour

BASF Catalysts LLC (f/k/a Englehard Corporation)

Chevron Environmental Management Company, for itself and on behalf of Kewanee Industries,  
Inc.

City of Attleboro, Massachusetts

ConocoPhillips Company

Handy & Harman

International Paper Company

KIK Custom Products, Inc. (f/k/a CCL Custom Manufacturing, Inc.)

Swank, Inc.

Teknor Apex Co.

Texas Instruments Incorporated

Waste Management of Massachusetts, Inc.

## EXHIBIT B

### DESCRIPTION OF SITE LAND OWNED BY ATTLEBORO LANDFILL, INC.

The Land consists of the following:

The land in Attleboro, Bristol County, Massachusetts situated on the southerly side of Union Road (or Peckham Street) bounded and described as follows:

First Parcel: Beginning at the heap of stones, on the Norton and Attleboro line; thence running south  $23^{\circ}$  west, thirteen rods, thence north  $2\text{-}3/4^{\circ}$  east,  $12\text{-}1/2$  rods; thence north  $70^{\circ}$  west 6 rods; thence south  $72^{\circ}$  west  $6\text{-}1/2$  rods, to a hornpine stump; thence south  $54^{\circ}$  west, 13 rods to a maple; thence north  $64^{\circ}$  west 8 rods, to an old stump; thence north  $19^{\circ}$  west,  $8\text{-}1/4$  rods to a hornpine; thence north  $63\text{-}1/4^{\circ}$  east, 32 rods 10 links to said Norton line; thence by Norton line to first mentioned corner.

Second Parcel: Beginning at a stone in the southerly line of Union Road at the line between Attleboro and Norton; thence South  $22\text{-}1/2^{\circ}$  east, to a corner in line of the land formerly William Lane; thence in line of land now or formerly of David Cummings to a corner in line of the Shelly land; thence south  $22\text{-}1/2^{\circ}$  east 151 rods, by Attleboro and Norton line, to a stone in town line; thence north  $87\text{-}1.2^{\circ}$  west, 33 rods 18 links to a corner; thence south  $25^{\circ}$  west,  $10\text{-}1/2$  rods; thence south  $38\text{-}1/2^{\circ}$  west 11 rods; thence north  $85\text{-}1/2^{\circ}$  west, 28 rods; thence north,  $36\text{-}1/2^{\circ}$  west 11 rods 15 links; thence north  $36\text{-}1/2^{\circ}$  east 24 rods; thence north,  $36\text{-}1/2^{\circ}$  west 11 rods 15 links; thence north  $36\text{-}1/2^{\circ}$  east 24 rods; thence north  $53^{\circ}$  east, 4 rods, 22 links; thence north  $37\text{-}1/2^{\circ}$  east  $16\text{-}1/2$  rods to a corner; thence north  $23\text{-}3/4^{\circ}$  west, 64 rods; thence north  $36\text{-}1/2^{\circ}$  west  $22\text{-}1/2$  rods; thence north  $60^{\circ}$  west, 34 rods and 10 links, to a stone in a bank of Chartley Brook; thence north  $6^{\circ}$  west 10 rods to the road; thence by the line of the road to the point of beginning.

Subject to an easement to the New England Power Company, dated June 19, 1958, recorded in the Bristol Country Northern District Registry of Deeds in Book 1321 on Page 38.

Being the same premises described in deed of Beatrice H. Carney (conveying an undivided two-thirds interest) dated March 3, 1975 recorded with the Bristol Country Northern District Registry of Deeds in Book 1675, Page 723 and deed of Albert Dumont and Rita I. Dumont (conveying an undivided one-third interest) dated March 3, 1975 recorded with said Deeds in Book 1675, Page 725.



## EXHIBIT C

### DESCRIPTION OF THE LAND OF TOWN OF NORTON

The Land consists of the following:

The land in Norton, Bristol County, Massachusetts, situated on the southerly side of Union Road and as is shown as Lot 1 and Lot 3 on, "Plan of Land on Union Road in Norton Massachusetts Prepared For: Lea Shpack Scale: 1" = 50' Date: March 16, 1981 Freeman Engineering Company Professional Engineers and Land Surveyors 175 North Main Street, Attleboro, Ma. A Division of Schofield Brothers, Inc.", which plan was recorded with the Bristol County Northern District Registry of Deeds at Book 192, Page 44.

Being a portion of the premises conveyed to Isadore Shpack and Lea Shpack by Alonzo Haskell and Bertha V. Haskell, by deed dated November 20, 1947 and recorded with the Bristol County Northern District Registry of Deeds in Book 935, Page 40, and being the same premises conveyed to the Owner by deed of Lea Shpack dated June 1, 1991 recorded with said deeds at Book 2106, Page 246. Isadore Shpack died on February 1, 1979.

## EXHIBIT D

### DESCRIPTION OF LAND OF ESTATE OF HAROLD L. WETHERELL

The "Land" consists of the following:

The land in Norton, Bristol County, Massachusetts situated on the southerly side of Union Road as shown on plan entitled "Plan of Land, Union Road, Norton, Massachusetts prepared for ERM", as prepared by WSP-Sells and dated August 18, 2011, recorded with the Bristol County Northern District Registry of Deeds in Plan Book 483, Page 53:

Northwesterly	by land marked "Now of Formerly Town of Norton" on said Plan, 467.11 feet;
Easterly	by land marked "Now or Formerly Harold L. Wetherell" on said Plan, 470.92 feet;
Northeasterly	by the said "Wetherell Land", 238.92 feet;
Southeasterly	by land marked "Now or Formerly Land Preservation Society", 271.60 feet;
Southwesterly	by land marked "Now or Formerly Attleboro Landfill", 576.87 feet.

Containing approximately 178,486 square feet of land according to said Plan.

Being a portion of the same premises described in deed of Winford A. Kilburn (joined in by Mae Kilburn) dated May 15, 1944 recorded with the Bristol Country Northern District Registry of Deeds in Book 885, Page 485.

**SOIL MANAGEMENT PLAN**

Appendix to Subordination and Recognition Agreement Dated as of March 26, 2014

National Grid

Soil Management Plan for Transmission Line  
Long-Term Access, Inspection and Maintenance  
*Shpack Landfill Superfund Site*  
*Norton/Attleboro, Massachusetts*

May 2013

WO. 0107020.92

**Environmental Resources Management**  
One Beacon Street, FL 5  
Boston, Massachusetts 02108  
617-646-7800

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LANDFILL SUPERFUND SITE***

This Soil Management Plan (SMP) was prepared solely for use by National Grid and its contractors for work within the boundaries of the Shpack Landfill Superfund Site (the "Site"). The Site is located within the municipalities of Attleboro and Norton, Massachusetts (Figure 1). This SMP is strictly intended as guidance for National Grid during its access, inspection, construction, and maintenance activities on those portions of the Site where National Grid has easement rights for its multiple transmission lines (as they may be relocated (including, without limitation, to underground) or constructed from time to time) (Figure 2).

The Site is subject to that certain Consent Decree filed with the United States District Court for the District of Massachusetts on 9 December 2008 in U.S. v. City of Attleboro, Massachusetts et al (Civil Action No. 1:08-CV-120378) (the "Consent Decree") and entered by the Court on 27 January 2009. A copy of the Consent Decree can be obtained by contacting the National Grid Legal Department or the Consent Decree Library, P.O. Box 7611, U.S. Department of Justice, Washington, DC 20044-7611. The Consent Decree can be examined at the Office of the United States Attorney, 1 Courthouse Way, John Joseph Moakley Courthouse, Suite 9200, Boston, MA 02210 or U.S. EPA Region 1, One Congress St., Suite 1100, Boston, MA 02114.

While National Grid's activities are governed by that certain Subordination and Recognition Agreement and this SMP, in general Appendix B of the Consent Decree, Section V.C of the Scope of Work, sets forth the following minimum activity restrictions for other parties within the Site:

1. Prohibit residential, agricultural or other uses of the Site that may present an unacceptable risk to human health.
2. Prohibit construction of any habitable structures at the Site, unless a study is conducted to determine if vapor intrusion screening criteria are met and, as appropriate, unless construction is designed to prevent vapor intrusion.
3. Prohibit extraction of groundwater at the Site and at Union Road House 1 and 2 for consumption or any other purpose, except groundwater monitoring.

4. Prohibit excavation at the Site and at Union Road House 1 and 2 below the seasonally-high water table.
5. Otherwise impose such restrictions necessary to protect human health and the environment and maintain the integrity of the remedy.

To incorporate and comply with the Consent Decree's requirements, three Easement, Restriction and Non-Interference Agreements were recorded for the Site, respectively, in the Bristol County Northern District Registry of Deeds at Book 19700, Page 190; Book 20080, Page 126; and Book 19821, Page 222 ("Easement Restrictions"). National Grid possesses right-of-way agreements/easements that are superior to the Easement Restrictions. National Grid's agreements/easements provide it the right to use, operate, renew, repair, replace, construct, reconstruct, alter, relocate (including, but not limited to, underground relocation), access, inspect, and maintain their utility lines within the Site and add additional lines or other structures (as set forth further in the agreements/easements) as necessary on the Site. To establish compliance with the Easement Restriction, National Grid has agreed to subordinate its right-of-way agreements/easements in accordance with that certain Subordination and Recognition Agreement by and between the "Performing Defendants", as defined in the Consent Decree, and New England Power Company. This SMP is an exhibit to that Subordination and Recognition Agreement. The purpose of this SMP is to outline acceptable means and methods for National Grid to utilize its rights within the right-of-way agreements/easements on the Site, including, but not limited to, conducting necessary access, inspection, maintenance and construction work within the Site.

This SMP is appropriate for utility line inspection, maintenance, construction and related activities by National Grid within the Site. In addition to the procedures used herein, construction related activities shall also be coordinated with relevant local, state and federal agencies. This SMP is not applicable or relevant for any and all work beyond the Site boundary.

## 1.1 *SITE SETTING*

The Site consists of a former domestic and industrial landfill occupying approximately 9.4 acres of land situated on and adjacent to the border of the Town of Norton, Massachusetts and the City of Attleboro, Massachusetts. As displayed on Figures 1 and 2, the Site is bordered by

the following:

- North and Northwest – Peckham Street (City of Attleboro) and Union Road (Town of Norton);
- West and Southwest – An approximately 40-acre municipal and industrial landfill owned by Attleboro Landfill, Inc. (ALI); and
- Southeast, East, and Northeast – A wetland area known as Chartley Swamp.

The Site received domestic and industrial wastes beginning in approximately 1946. The landfill continued to operate into the 1970s. The filled areas where the wastes were dumped have been enclosed by a chain link fence. Traversing the Site is the utility Right-of-Way containing multiple overhead transmission lines operated by National Grid.

As shown on Figure 2, portions of the Site are currently referred to by certain titles or descriptors in project documents. These include:

**On-Site Seasonal Wetlands or Shpack Landfill Interior** – Indicates the central portion of the Site formerly containing seasonal wetlands which were largely destroyed during the Formerly Utilized Sites Remedial Action Program (FUSRAP) excavation activities. There are two portions of the Shpack Landfill Interior which have been the focus of additional investigation:

**ALI Landfill Debris Area** – A portion of the Shpack Landfill Interior immediately adjacent to the ALI property that is the location of a reported slope failure from the ALI Landfill. The material in this area consists of ALI municipal landfill debris underlain by industrial landfill debris associated with the Shpack landfill. Based on the results of a test pit program, the USACE reported that there are no radiological impacts to this material.

**Landfill Interior Hot Spots** – Refers to 11 locations in the greater Shpack Landfill Interior that were identified as “Hot Spots” in the 100% Design Report. Based on analysis of the FUSRAP sampling data, these locations met the definition of a Hot Spot as defined in



the Massachusetts Contingency Plan (310 CMR 40.0000), an Applicable or Relevant and Appropriate Requirement (ARAR).

**Tongue Area** – Describes the elevated area extending southeastward of the Shpack Landfill Interior toward the Inner Rung. Waste and debris from a fire at an industrial plastics manufacturing facility were reportedly disposed of in the Tongue Area. The Tongue Area lies entirely beneath National Grid’s electrical transmission lines.

**Inner Rung** – Contains the portion of Chartley Swamp located adjacent to the Tongue Area that lies within parcels owned by the Town of Norton and the Estate of Harold L. Wetherell.

## 1.2

### *APPLICABILITY*

These SMP guidelines apply to all “non-emergency” construction and maintenance activities that disturb soils and/or waste below the seasonally-high water table and any dewatering within the Site. The seasonally-high water table is defined as an elevation of 104 feet above mean sea level (amsl) (see Figure 2).

- These SMP guidelines do not apply to activities deemed by National Grid to be emergency activities. For emergency activities, National Grid shall endeavor to conduct emergency work activities in general conformance with provisions of this SMP. National Grid also shall, to the extent possible, perform the emergency work activities in accordance with other applicable environmental, health and safety plans, policies, and requirements. Emergency activities may include actual or potential electrical power outages, equipment failures, natural or manmade disasters or adverse conditions, public service emergencies, or other circumstances that impact or threaten the reliability or safety of the public and the electrical grid. National Grid retains the right and responsibility to determine what is considered an emergency.

## 1.3

### *EXPECTED POST-REMEDY SITE CONDITIONS*

Site conditions will be modified as a result of the remedial work. The following is a discussion of the anticipated changes to the main Site features. Note that the descriptions are considered tentative as the Remedial Action has yet to be implemented. It is recommended that National Grid confirm the actual Site conditions prior to the commencement of transmission line related activities within the Site.

Referring to Figure 2:

- Overall - most physical access barriers, such as chain link fence, may remain, thus restricting access to the Site. National Grid should install locking devices independent of the Site owners to ensure they maintain adequate access as needed. To the maximum extent possible, National Grid should use available travel surfaces for access, parking, and staging to avoid potential erosion of vegetated areas.
- Soils and Sediments - Impacted soil and sediment at the Site will be addressed through Site clean-up activities as required by the Site's Record of Decision (ROD) (see Appendix A for required constituent concentration clean-up levels). The clean-up levels established by the ROD are considered to be greater than background levels for some constituents (i.e. chromium, lead and nickel). Additionally, as the groundwater contains concentrations of metals including, but not limited to arsenic, chromium, lead, nickel and zinc, an increase of these metals in soils below the seasonally high water table is anticipated over time.

For the purpose of this SMP, any soil or sediment within the Site that was not removed under the site remedies (USACE and Shpack Site Group-led) is to be assumed to contain constituent concentrations up to the established clean-up levels (see Figure 2 for planned extent of remedial activities). Any soil or sediment below the seasonally high water table is to be assumed, unless otherwise indicated by analytical testing, to contain constituent concentrations that are deemed above background. Note that the seasonally high water table is defined for the Site as an elevation of 104 feet amsl.

- On-Site Seasonal Wetlands - wetland restoration will occur over most of this area, except where National Grid structures are located, as well as access to those structures. A buffer of approximately 50 feet is proposed between the limit of wetlands and the transmission structures to allow for access and maintenance work without disturbance of wetlands.
- Tongue Area - this area will be restored to an approximately level grade and will be established with grass vegetation. The National

Grid transmission structure located within this area will be easily accessible.

- Inner Rung – this area will be restored as wetlands. No transmission structures are located within this area.
- ALI Landfill Debris Area – this area will be restored to a level grade and will be established with grass vegetation. No transmission structures are located within this area.

#### 1.4

#### *SITE WORK ACTIVITY LIMITATIONS*

This SMP is established assuming the selected remedy is complete, with the exception of long-term monitoring and inspections of the wetlands. The limitations on National Grid and its contractors' work will depend on the anticipated scope of National Grid's work.

##### Non-Intrusive Work

Non-intrusive work is defined as the absence of soil disturbance and includes, but is not limited to, above-grade inspections, pole repair, installation of above-grade pole bracing, and installation, replacement or other maintenance of above-grade electrical equipment.

In accordance with the Site risk assessment, post-remedy conditions will present no unacceptable risk to workers performing non-intrusive work, such as National Grid and its contractors. The risk assessment assumes that only surface soils at or below clean-up standards (see Appendix A) will remain onsite and, as such, they will not pose a risk to human health or the environment. The risk assessment also assumes that subsurface soils and groundwater will not be contacted during non-intrusive work activities. The risk assessment incorporates the assumption that workers are limited in the total time spent on the Site over the course of one year. There are no other environmental limitations associated with the performance of non-intrusive maintenance work.

##### Intrusive Work

Intrusive work is defined as activities that have the potential for disturbing soils. Activities considered intrusive would include, but are not limited to, installing pole anchors or grounding wires, subsurface inspections, installation of underground utility lines, and installation/removal of transmission structures.

Intrusive work to be conducted by National Grid is to be performed in accordance with the following limitations:

- Groundwater - Groundwater remains impacted and will not be addressed by the selected remedy. National Grid and its contractors will perform dewatering in strict accordance with Section 4.0. The work authorization provided by this SMP extends only to National Grid and its direct contractors for purposes of the activities covered by this SMP.
- Soil and Sediment - As indicated in Section 1.3, soil and sediment remaining following remedial work and below the seasonally high water table are assumed to be impacted. This SMP provides a limited exemption to the restrictions imposed on the Site, provided that there is strict adherence to the practices and procedures set forth in Sections 2.0 and 3.0. Health and safety limitations to the excavation of soil/sediment are as follows:
  - a. For excavation of soil and sediment above the seasonally high water table that was either added to the Site during remedial activities or remained following remedial activities: In accordance with OSHA regulations, this work can be conducted as a standard maintenance or construction operation without limitation.
  - b. Except for emergency work, which shall be conducted as previously outlined in Section 1.2, for excavation of soil below the seasonally high water table: Workers are to be provided adequate personal protective equipment and methods should be employed to minimize direct contact with subsurface soils. Additionally, workers will be at a minimum 24-hour HAZWOPER trained.

Non-maintenance activities including reorientation of existing transmission line layouts to other portions of the Site, as well as the installation of additional transmission structures or ancillary facilities (i.e. control structures) have the potential to result in elevated risk scenarios that may require additional limitations on work activities. National Grid shall prepare project-specific plans, and evaluate work limitations and other requirements in accordance with relevant federal, state and local laws, codes, ordinances, rules and regulations prior to commencement of such non-maintenance work activities at the Site.

1.5

*POINTS OF CONTACT*

Conditions at the Site will vary over time. As wetlands will be established over a portion of the Site, including adjacent to existing National Grid structures, any maintenance work that may disturb wetlands will be subject to the restrictions/requirements of any and all applicable federal, state and local laws, codes, ordinances, rules and regulations. National Grid will coordinate with its Environmental Department or designee to confirm all regulatory requirements.

See the table below for relevant contact information.

Concern	Contact	Department
Wetland Disturbance	National Grid	Environmental Department
Construction Limitations	National Grid	Construction Department

1.6

*STANDARD PROCEDURES FOR INTRUSIVE, NON-EMERGENCY WORK*

The following environmental procedures will be used in this SMP for non-emergency activities:

- Before preparing for any planned activities involving the disturbance of subsurface materials, this SMP will be reviewed by a Qualified Environmental Professional designed by National Grid. Work specific plans will then be prepared in consideration of the nature of the planned activities and the subsurface conditions at the Site, from which an exposure/hazard assessment can be developed.
- Based on the findings from the exposure/hazard assessment, National Grid will prepare or cause to be prepared a project-specific Health and Safety Plan (HASP). The HASP shall be prepared by a Qualified Environmental Professional to address applicable requirements of OSHA (29 CFR) as well as those specified by National Grid. The HASP will be prepared prior to commencement of the work.
- Prior to the initiation of soil excavation, National Grid’s selected contractor or any other personnel performing subsurface work at the Site will contact DIGSAFE® and other appropriate utility

companies to identify and mark the location of below grade utilities.

- Prior to performing the proposed work, National Grid's selected contractor and/or another party as designated by National Grid will obtain all applicable federal, state and local permits and approvals.

## 1.7 *PLAN DISTRIBUTION*

Controlled copies of this SMP will be distributed to the following categories of individuals:

1. National Grid Senior Environmental Scientist – Licensing and Permitting Lead
2. National Grid Lead Project Manager
3. National Grid Construction Supervision Personnel

Any updates or changes to this SMP will be maintained within each controlled copy. Additional plans may be distributed as the Site is turned over to the City of Attleboro for purposes of the long-term O&M activities to be conducted pursuant to the Consent Decree.

## 2.0 *TRANSMISSION LINE WORK REQUIREMENTS*

This section establishes the requirements for transmission line work of an invasive nature, specifically excavation and backfill of soil. The objective of any soil movement is to return soil back to its point of origin. Therefore, soil will be segregated at the point of excavation based on depth and material type. Visual inspection is not considered an effective criterion for segregation of soil as historically impacts have not been visual in nature. Details of the excavation and segregation criteria are described below.

This SMP focuses only on the requirements for movement and handling of subsurface materials, and does not address other worker safety requirements. As previously discussed, a HASP or equivalent must be prepared and implemented as needed to address applicable regulatory requirements (e.g., shoring of excavations, electrical safety).

Additionally, National Grid and its contractors will provide dust control measures, where needed, to minimize the creation of airborne dust during their work activities.

### 2.1 *ACCESS*

There are no requirements associated with this SMP associated with National Grid's access to the Site. National Grid may access the Site using available designated access ways in a similar manner provided for right-of-way/easement. As physical barriers may remain following the completion of the remedial action, National Grid should continue to install independent locking devices on any physical barrier to provide adequate access as required by National Grid.

### 2.2 *EXCAVATION PROTOCOL*

The amount of soil excavated is to be minimized to the extent practicable to complete the required work activity.

If the excavation occurs in an area of crushed rock, this material is first removed and stockpiled for reuse where applicable. Excavated soil will be separated based on assumed impact, depth and material type. Soil management shall be as follows:

1. Soil below an elevation of 104 feet amsl (assumed seasonally high water depth) shall be stockpiled separately from the soil above an elevation of 104 feet amsl.
2. Distinctly different material types, such as soil and gravel, are to be segregated to the maximum extent practicable.
3. Excavated material that is wet shall be segregated, as necessary, and dried.

## 2.3

### *BACKFILLING*

Backfilling shall be conducted in the following manner:

1. Excavated soil does not need to be sampled prior to its use as backfill.
2. Excavated soil used as backfill shall be placed in the original location it was excavated. If multiple excavations are conducted within the Site, material may not be shared as backfill.
3. The soil stockpile or other material generated from below the seasonally high water table shall be used first as backfill, if deemed acceptable by National Grid, up to an elevation of 104 feet amsl.
4. The soil stockpile generated from above the seasonally high water table shall be used to backfill the remainder of the excavation. The top 12 inches of the backfilled excavation shall be comprised of clean material (see next page for definition). If additional clean fill is needed, than it will be brought onsite by National Grid within a reasonable timeframe.
5. If concrete or other surface structures were located over the excavation area, these material are to be replaced in-kind, unless the concrete or surface structures were specifically associated with National Grid equipment and deemed by National Grid to be no longer needed.

If excavated soils and other materials are insufficient to return the area to the surrounding grade, National Grid shall use clean fill material. All furnished off-site soils must be determined to be "clean" prior to delivery. "Clean" is determined by National Grid and defined as follows:



- The soil materials have no visual or odor indication of impacts (e.g. sheen, discoloration), and meet either of the following;
- Sourced from a clean off-site borrow source (either quarry or virgin source) *OR*
- By the absence of constituents above the concentrations listed in 310 Code of Massachusetts Regulations 40.1600 for soil category S1, used to classify soil with the highest level of exposure. A composite grab sample shall be taken from each source of soil material to be furnished and tested by a Massachusetts certified analytical laboratory for the following analyses:
  - RCRA Metals (EPA Method 6020A)
  - Total Petroleum Hydrocarbons (EPA Method 1664)
  - PCBs (EPA Method 8080)
  - Volatile Organic Compounds (EPA Method 8260)
  - Semi-volatile Organic Compounds (EPA Method 8270).

Backfilled areas are to have a minimum of three (3) passes with a heavy non-tracked piece of equipment to provide sufficient compaction, or be compacted in lifts with machine soil compactors during backfilling.

Any excess soil materials following backfilling shall be managed in accordance with Section 3.0.

## 2.4

### *RESTORATION RESPONSIBILITY*

If concrete was removed to perform the excavation, National Grid must replace the material in-kind and to its original grade upon completion of the project, unless the concrete was specifically associated with National Grid equipment and is deemed by National Grid to be no longer needed. If gravel or topsoil was removed to access the underlying soil, it must be replaced over the area of the excavation to a thickness of six inches. Vegetation shall be re-established following the completion of work where it has been impacted by the conduct of the work.

National Grid will restore any disturbance of wetland areas to their previous condition in accordance with federal, state and local regulatory requirements.

### 3.0 SOIL MANAGEMENT

This section describes soil management requirements for excavated material. Stockpiling shall be conducted in a manner to prevent rain infiltration, erosion of the stockpile, and dust generation.

#### 3.1 GENERAL REQUIREMENTS

Any materials excavated shall be handled and stored as follows. Some material will be backfilled onsite, and some may be managed as excess soil per the following section.

- Soils shall be stockpiled separately from other materials as directed in Section 2.2 within the vicinity of the excavation.
- Clean soils may be stockpiled directly on the ground. All other soils and other materials are to be placed on a manufactured impermeable material of sufficient quality and strength to prevent contact with the ground during stockpiling and subsequent removal.
- Stockpiles are to be covered to minimize infiltration of precipitation, to limit dust, and/or to prevent erosion of the stockpile. Cover materials shall be properly secured at the end of each day and possess the necessary physical strength to resist tearing by the wind.
- As needed during periods of heavy rain, silt fence or hay bales shall be placed immediately around the stockpiles within the 100 foot buffer zone of a wetland resource area to prevent impacts to the surrounding wetlands.
- Excavated material that is wet shall be segregated as necessary and dried in dewatering pits.
- Excavated material may be placed as backfill in the same location from which it was excavated without the need for laboratory analysis. Any excess material will be managed per the following section.

- The top 12 inches of a backfilled excavation will be comprised of clean material. If it is not certain whether the soil from above the seasonally high water table (which is clean material) was used to backfill the top 12 inches of the excavation, then clean fill (see next page) will be brought onsite by National Grid and used for this purpose within a reasonable timeframe.

### 3.2 *EXCESS SOIL MATERIALS*

In the event the volume of excavated soils is greater than the volume required for backfilling, the excess soil shall be managed as follows:

- National Grid will be responsible for the proper handling, management, and disposal of excess soil. National Grid will be responsible for all testing required by applicable laws, codes, ordinances, rules and regulations and by the receiving facility, signing generator manifests, and properly disposing of such excess soil. Samples shall be taken from each source of soil material and shall be furnished to and tested by a certified analytical laboratory for the criteria that are specified by the disposal facility and as determined based on generator status.
- National Grid will maintain off-site disposal records in accordance with applicable laws, codes, ordinances, rules and regulations.

The groundwater table fluctuates in depth below grade between seasons, but is expected to range between 102 and 104 feet amsl within National Grid's easement for the Site. As a result, excavations are likely to encounter groundwater. As indicated in Section 1.3, dewatering may be performed by National Grid and/or its contractors only in accordance with the following guidelines:

- Any dewatering required for the performance of National Grid work is to be minimized to the maximum extent practicable. Dewatering is defined as the mechanical extraction of water using a pump or other equipment. The displacement of water resulting from placement of materials into the subsurface is not restricted by this SMP.
- Should any work to be conducted pursuant to this SMP require dewatering and/or disturbance of impacted groundwater in support of excavation/construction, all applicable federal, state and local laws, codes, ordinances, rules and regulations, and all permits and approvals, related to the removal, handling, treatment and discharge of impacted groundwater, will be identified, complied with, obtained and in-place prior to the initiation of the work. National Grid's plans will, at a minimum, include an evaluation of water quality, the method(s) by which groundwater will be treated, contained and/or discharged/disposed and the necessary regulatory approvals, etc. **Impacted, untreated groundwater will not be discharged directly to the ground surface, collection utilities, wetlands or water bodies.**
- Until the groundwater at the Site is deemed uncontaminated by the USEPA and MassDEP, any wastewater generated from dewatering is considered 'Remedial Wastewater' under the Massachusetts Contingency Plan (310 CMR 40.0000) to the extent that such regulations remain in force and applicable. The said requirements of 310 CMR 40.0040 for management of remedial wastewater, including, but not limited to reporting requirements, are not applicable since National Grid's work is solely for the ongoing operation and maintenance of its infrastructure and not associated with the environmental condition of the Site or any response action thereof.

- Should any project require dewatering, all impacted fluids will either be properly treated for onsite injection, infiltration, onsite surface water discharge, or Publically Owned Treatment Works (POTW) discharge; or shall be containerized for off-site disposal. Any discharges will be performed consistent with all applicable laws, codes, ordinances, rules and regulations. With respect to fluids to be disposed off-site, they will be properly transferred and containerized to prevent discharges or leaks, characterized per the requirements of the receiving facility, and subsequently transported to a fully licensed/permitted treatment/recycling facility. National Grid will be responsible for the proper handling of these materials and the on-site treatment and/or off-site disposal, as appropriate. National Grid will sign as the generator of these materials on all waste profiles and shipping manifests/bills-of-lading. National Grid will maintain off-site disposal records in accordance with applicable laws, codes, ordinances, rules and regulations.

Excavation activities within the Site are unlikely to, but have the potential to, expose unknown subsurface conditions. For example, water could be observed as having obvious signs of contamination (e.g. discoloration, odor). If such conditions are discovered, the work shall stop as quickly as safely possible and appropriate notification made to the National Grid Environmental Department or their designee for further instructions. The National Grid Environmental Department or their designee will notify local, state and federal agencies and other relevant parties, as deemed appropriate.

**SOIL MANAGEMENT PLAN**

Appendix to Subordination and Recognition Agreement Dated as of March 26, 2014

National Grid

Soil Management Plan for Transmission  
Structure #204 and #205 Relocations  
*Shpack Landfill Superfund Site*  
*Norton/Attleboro, Massachusetts*

May 2013

WO. 0107020.92

**Environmental Resources Management**  
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## 1.0

### *INTRODUCTION*

This Soil Management Plan (SMP) was prepared solely for use by National Grid and its contractors for work related to the Shpack Landfill Superfund Site (the "Site") Remedial Action. The Site is located within the municipalities of Attleboro and Norton, Massachusetts (Figure 1). This SMP is strictly intended as guidance for the one-time relocation/replacement of two National Grid transmission structures (#204 and #205) associated with the Remedial Action (Figure 2). These two structures are located on the Brayton Point-Wrentham-Riverside 315 345kV transmission line.

The current location and/or height of these structures prevent the completion of clean-up efforts required by the selected soil remedy in the Site's Record of Decision. For reference, the selected soil remedy is excavation and off-Site disposal of impacted soils. The purpose of this transmission line structure project is to relocate and replace the structures so that site remediation efforts can proceed.

This SMP is only appropriate for the planned construction methods associated with the relocation and replacement of the two structures. In the event the planned project undergoes minor modifications during or prior to field activities, this SMP may be re-evaluated with the Shpack Site Group such that all work activities are performed in accordance with local, state and federal regulations.

National Grid possesses Rights-of-Way agreements to access and maintain this and other transmission lines on and adjacent to the Site. Terms of the Consent Decree regarding the Site require these agreements to be amended to comply with the planned activity use restrictions (AULs) for the Site. A second SMP intended for National Grid's long-term access and maintenance of the transmission lines within the Site boundary was prepared and will be incorporated by reference into the agreements.

## 1.1

### *SITE SETTING*

The Site consists of a former domestic and industrial landfill occupying approximately 9.4 acres of land situated on and adjacent to the border of the Town of Norton, Massachusetts and the City of Attleboro, Massachusetts. As displayed on Figure 1, the Site is bordered by the following:

- North and Northwest - Peckham Street (City of Attleboro) and Union Road (Town of Norton)
- West and Southwest - An approximately 40-acre municipal and industrial landfill owned by Attleboro Landfill, Inc. (ALI)
- Southeast, East, and Northeast - A wetland area known as Chartley Swamp.

The Site received domestic and industrial wastes beginning in approximately 1946. The landfill continued to operate into the 1970s. The filled areas where the wastes were dumped have been enclosed by a chain link fence. Traversing the Site is an electrical utility easement containing multiple overhead transmission lines operated by National Grid (Figure 3).

As shown on Figure 2, portions of the Site are referred to by certain titles or descriptors in the project documents. These include:

**On-Site Seasonal Wetlands or Shpack Landfill Interior** - Indicates the central portion of the Site formerly containing seasonal wetlands which were largely destroyed during the Formerly Utilized Sites Remedial Action Program (FUSRAP) excavation activities. There are two portions of the Shpack Landfill Interior which have been the focus of additional investigation:

**ALI Landfill Debris Area** - A portion of the Shpack Landfill Interior immediately adjacent to the ALI property that is the location of a reported slope failure from the ALI Landfill. The material in this area consists of ALI municipal landfill debris underlain by industrial landfill debris associated with the Shpack landfill. Based on the results of a test pit program, the USACE reported that there are no radiological impacts to this material.

**Landfill Interior Hot Spots** - Refers to 11 locations in the greater Shpack Landfill Interior that were identified as "Hot Spots" in the 100% Design Report. Based on analysis of the FUSRAP sampling data, these locations met the definition of a Hot Spot as defined in the Massachusetts Contingency Plan (310 CMR 40.0000), an Applicable or Relevant and Appropriate Requirement (ARAR).

**Tongue Area** - Describes the elevated area extending southeastward of the Shpack Landfill Interior toward the Inner Rung. Waste and debris

from a fire at an industrial plastics manufacturing facility were reportedly disposed of in the Tongue Area. The Tongue Area lies entirely beneath National Grid's electrical transmission lines.

**Inner Rung** – Contains the portion of Chartley Swamp located adjacent to the Tongue Area that lies within parcels owned by the Town of Norton and the Estate of Harold L. Wetherell.

## 1.2 ***SITE WORK ACTIVITY LIMITATIONS***

This SMP is established assuming the selected remedy is not yet complete. No limitations associated with the Site are placed on work activities for replacement of structure #204 as it is located entirely outside the established Site boundary.

### Non-Intrusive Work – Structure #205

Non-intrusive work is defined as the absence of soil disturbance and includes, but is not limited to, above-grade inspections, installation of above-grade pole bracing, and installation, replacement or other maintenance of above-grade electrical equipment.

Subsurface soils and groundwater will not be contacted during these types of activities. Surface soils are assumed to have environmental impacts, unless noted by the Shpack Site Group otherwise. Non-intrusive work to be conducted by National Grid is to be performed in accordance with the following limitations:

- Surface soil and sediment - soil and sediment are assumed to be impacted. This SMP provides an exemption to the restriction through strict accordance with Sections 2.0 and 3.0. Health and safety limitations to the excavation of soil/sediment are as follows:
  - a. For excavation of soil and sediment above the seasonally high water table that was either added to the Site during remedial activities or remained following remedial activities: In accordance with OSHA regulations, this work can be conducted as a standard maintenance or construction operation without limitation.
  - b. Workers are to be provided adequate personal protective equipment and methods should be employed to minimize

direct contact with surface soil and sediment. Additionally, workers will be at a minimum 24-hour HAZWOPER trained.

### Intrusive Work – Structure #205

Intrusive work is defined as activities that have the potential for disturbing soils. Activities considered intrusive would include, but are not limited to, installing pole anchors or grounding wires, subsurface inspections, installation of underground utility lines, and installation/removal of transmission structures.

Intrusive work to be conducted by National Grid is to be performed in accordance with the following limitations:

- Groundwater - groundwater is impacted and will not be addressed by the selected remedy. On behalf of National Grid, the Shpack Site Group will help to perform dewatering in strict accordance with Section 2.5.

## 1.3

### *POINTS OF CONTACT*

As structure #205 is located within the Site boundaries, access is anticipated to be restricted during the Remedial Action by the Remedial Action contractor (the Shpack Site Group has retained Environmental Resources Management, ERM, to serve in this role). Due to formal security, health and safety protocol that will be developed by the Remedial Action contractor, ERM, for all work within the Site boundary, National Grid is to contact the Remedial Action contractor a minimum of 2 weeks prior to arrival on Site to allow for proper coordination. Additionally, National Grid will attend the weekly coordination meeting (conducted at the Site) the week before commencing work.

Structure #204 is located outside the Site boundary, and will be accessed via existing gravel access roads also outside the Site boundary. As such, there are no anticipated access restrictions for this structure with regard to the Remedial Action. Structure #204 is immediately surrounded by wetlands, thus work will be subject to the restrictions of any and all approved USACE and/or Norton Conservation Committee permits, permit equivalents, or notifications issued to National Grid. The National Grid Environmental Specialist must be contacted to confirm all permit requirements.

The following table contains relevant contact information.

Name	Company/Agency	Responsibility	Contact Information	Reason for Contact
Tim Smith	National Grid	Senior Environmental Scientist	Office 781-907-3641 Cell 781-290-8382	Structure #204 Permit(s) Confirmation
Leon Wetherell	National Grid	Construction Supervisor	Cell 781-907-4409	Construction Limitations
Natasha Deschene	National Grid	Transmission Engineering	Office 781-907-2455	Scheduling
Tim Pac	ERM (Shpack Site Group remedial action contractor)	Project Coordinator	Cell 617-285-4466	Structure #205 Site Access
Michael Last	Rackemann, Sawyer & Brewster (Shpack Site Group counsel)	Group Lead Attorney	Office 617-951-1192 Cell 617-938-9279	Notification of intent to commence work on Site if the Remedial Action contractor cannot be reached

#### 1.4 *STANDARD PROCEDURES FOR INTRUSIVE, NON-EMERGENCY WORK*

These SMP guidelines apply to all “non-emergency” construction and maintenance activities that disturb soils and/or waste below the seasonally-high water table and any dewatering within the Site. The seasonally-high water table is defined as an elevation of 104 feet above mean sea level (amsl).

These SMP guidelines do not apply to activities deemed by National Grid to be emergency activities. For emergency activities, National Grid endeavors to conduct emergency work activities in general conformance with provisions of this SMP. National Grid will, to the extent possible, perform the emergency work activities in accordance with other applicable environmental, health and safety plans, policies, and requirements. Emergency activities may include actual or potential electrical power outages, equipment failures, natural or manmade disasters or adverse conditions, public service emergencies, or other circumstances that impact or threaten the reliability or safety of the public and the electrical grid. National Grid retains the right and responsibility to determine what is considered an emergency.

The following environmental procedures will be used in this SMP for non-emergency activities:

- Before preparing for any planned activities involving the disturbance of subsurface materials, this SMP will be reviewed by a Qualified Environmental Professional. Plans will be prepared in consideration of the nature of the planned activities and the subsurface condition at the Site, from which an exposure/hazard assessment can be developed.
  
- Based on the findings from the exposure/hazard assessment, National Grid will prepare a project-specific Health and Safety Plan (HASP). The HASP should be prepared by a Qualified Environmental Professional to address applicable requirements of OSHA (29 CFR) as well as those specified by National Grid. The Shpack Site Group's HASP was prepared as an appendix to the Revised Project Operations Plan (ERM, 29 March 2013) and was previously submitted to National Grid for reference. Prior to the initiation of soil excavation activities for the pole relocation project, the selected contractor or any other personnel performing subsurface work at the Site will contact DIGSAFE® and other appropriate utility companies to identify and mark the location of below grade utilities.
  
- Prior to performing the proposed work, the selected contractor and/or responsible party will obtain all applicable federal, state and local permits.

**1.5 PLAN DISTRIBUTION**

Controlled copies of this SMP will be distributed to the following individuals:

1. National Grid Senior Environmental Scientist – Licensing and Permitting Lead;
2. National Grid Lead Project Manager;
3. National Grid Construction Supervision Personnel; and
4. Shpack Site Group.

Any updates or changes to this SMP must be maintained within each controlled copy.

## 2.0

## TRANSMISSION STRUCTURE RELOCATION

This section establishes the baseline condition and requirements from which National Grid will perform the transmission structure relocation project.

## 2.1

### SITE CONDITIONS

#### Structure #205

Structure #205 is currently located in an area of known environmentally-impacted soils, referred to as the Tongue Area. To accommodate the needs of National Grid for a clean work area, the final remedial design for the Site incorporates measures to excavate impacted soils where possible and provide a barrier to remaining impacted soils. This design, presented in the Remedial Action Work Plan (ERM, 29 March 2013) includes the following measures:

- Excavate impacted soil within a portion of the Tongue Area to an average depth of approximately 5 to 7 feet below the ground surface. It is anticipated that all impacted soil within the Tongue Area will be excavated, except for an approximate 10-foot buffer around, and an access road to, existing Structure 205.
- The Remedial Action contractor will provide the National Grid Senior Environmental Scientist and Transmission Engineer at least ten (10) working days verbal and written notice before backfill activities occur at the new Structure #205 location.
- The Remedial Action contractor will establish interim grades in the Tongue Area to provide National Grid with a suitable work surface. This grading plan includes the re-establishment of existing grades (roughly 109' ASL) with clean fill and a 6-inch thick layer of dense graded aggregate at grade. Backfill materials shall be clean structural fill that is compacted to at least 95% (and as specified in the Remedial Action Work Plan). The Remedial Action Contractor will provide to National Grid documentation that at least 95% compaction has been achieved. National Grid shall be given the advanced notice of, and may be present during, backfill operations and inspect the final compacted area.



- To maintain the structural stability of the existing structure #205 poles, excavation at any depth will be prohibited within a distance of 10 feet in all directions.
- The Remedial Action contractor will demobilize from the Tongue Area and adjacent areas, as needed, and will provide National Grid and its contractors with a minimum laydown area of approximately 150 feet by 100 feet adjacent to the Tongue Area, as shown in the RAWP drawings (ERM, 29 March 2013).

National Grid shall confirm the actual Site conditions prior to the commencement of work.

#### Structure #204

Structure #204 is located outside the Site boundary and therefore, Site clean-up activities will not occur at this location. Available information has indicated that potential environmental concerns with the soil around structure #204 are not anticipated, as soils in this area do not appear to be impacted by conditions located on the Site. The condition of groundwater in the immediate vicinity is unknown, but could be impacted by the adjacent Attleboro Landfill. Reference Section 2.5 – Water Management – for precautions and information regarding encountered groundwater.

## 2.2

### ACCESS

#### Structure #205

The main Site entrance will be made available by the Remedial Action contractor for use by National Grid and its contractors. Where possible, a direct route from the entrance to the work area (or from the street to the work area) will be cleared, backfilled, and compacted prior to National Grid and its contractors arriving on-Site. Sequencing of work related to the Remedial Action is anticipated to be performed such that there are no conditions for contact with impacted soil along this access route.

In the event that a clean access route is not available at the time National Grid is to commence work, alternative measures such as matting or placement of gravel will be implemented by the Remedial Action contractor to minimize National Grid contact with associated hazards.

### Structure #204

Access to structure #204 is provided by an existing gravel road previously constructed by National Grid. Minor repairs and expansion of the road may be necessary in accordance with National Grid procedures (EP-17). Any placement of swamp mats or repairs/expansion of the access road in wetlands area is to be conducted in accordance with USACE and/or Norton Conservation Commission permits or authorizations. Clarification of the requirements of these permits or authorizations can be provided by the National Grid Environmental Specialist (see Section 1.3).

## 2.3

### ***STRUCTURE RELOCATION/REPLACEMENT MEANS AND METHODS***

To minimize direct contact with impacted materials, the following construction means and methods were approved and designated by National Grid to complete the work:

#### Structures #204 and #205

- Vertical excavation is to be conducted by standard bucket excavator or trench box and clam shell excavator, if needed, due to soil stability concerns.
- The corrugated metal casing to house the foundation for the new structure may be placed or vibrated into position.
- Materials used as backfill within the casing may include sand, gravel and concrete.
- Materials used as backfill outside the casing are limited to the clean material excavated from this same area.
- Dewatering with a pump or other hydraulic machine is anticipated (reference Section 2.4 for handling of excavated saturated soils). Dewatering is defined as the mechanical extraction of water using a pump or other equipment. The displacement of water resulting from placement of materials into the subsurface is not restricted by this SMP. The Remedial Action Contractor will assist National Grid with dewatering in accordance with Section 2.5.
- For structure #205, National Grid is to saw cut the existing structure at grade and is only responsible for removal of the aboveground portion. Removal of the remainder of the structure

(below grade portion) is the responsibility of the Remedial Action contractor. National Grid requests one day notice of the pole butt removal and expects to be onsite during this activity. There is no disposal restriction on any ground material that is discovered during pole butt removal. National Grid will receive a copy of the disposal paperwork for the structure #205 pole butts and any grounding material. For structure #204, National Grid is responsible for any and all existing structure removal and disposal activities it deems necessary.

Any deviation in means and methods from those listed above are to be discussed for evaluation by the Remedial Action contractor prior to proceeding.

## 2.4 *EXCAVATION AND BACKFILLING RESTRICTIONS*

### Structure #205

The design of the Remedial Action provides National Grid and its contractors with a defined, limited area of clean soil for replacement of structure #205, as described in Section 2.1. As a result, National Grid and its contractors are to conduct excavating and backfilling in accordance with the following guidance:

- The horizontal extent of excavation shall not exceed the limit marked by the Remedial Action contractor in the field.
- The vertical extent of excavation shall not exceed 13 feet.
- Clean soil (sandy backfill) excavated by National Grid and not used as backfill outside the structure's casing shall be segregated and managed separately from native materials (peat and/or silty sand). Excess material for both soil types will be turned over to the Remedial Action contractor in the vicinity of the Tongue Area/structure #205. The Remedial Action contractor will then manage the soils through reuse on Site or off-Site disposal.
- Backfilling shall be performed until materials are flush with the surrounding grade.
- Any excess soil materials following backfilling shall be stockpiled in accordance with Section 3.0.

- Clean fill will be placed in maximum lifts of 12 inches with compaction to 90 percent of the maximum dry density per ASTM D-1557. The top 12 inches of the backfilled excavation will be comprised of clean material (see the following bullet for definition of 'clean').
- It is anticipated that backfill will consist solely of soil materials excavated as part of this work. Backfill that consists of soil generated by the excavation or is provided by the Remedial Action contractor does not need to be sampled before the material is used. If additional soil is required from an off-site source, National Grid shall use clean fill material. All furnished off-site soils shall be deemed 'clean' prior to delivery. 'Clean' is defined as follows:
  - The soil materials have no visual or odor indication of impacts (e.g. sheen, discoloration), and meet either of the following;
  - Sourced from a clean off-site borrow source (either quarry or virgin source); *OR*
  - By the absence of constituents above the concentrations listed in 310 Code of Massachusetts Regulations 40.1600 for soil category S1, used to classify soil with the highest level of exposure. A composite grab sample shall be taken from each source of soil material to be furnished and tested by a Massachusetts certified analytical laboratory for the following analyses:
    - RCRA Metals (EPA Method 6020A)
    - Total Petroleum Hydrocarbons (EPA Method 1664)
    - PCBs (EPA Method 8080)
    - Volatile Organic Compounds (EPA Method 8260)
    - Semi-volatile Organic Compounds (EPA Method 8270).

#### Structure #204

As structure #204 is located outside of the Site boundary, there are no specific requirements related to the Remedial Action. National Grid and its contractors are expected to perform the work in accordance with National Grid environmental procedures and guidance.

## Items Related to Both Structures #204 and #205

This SMP focuses only on the requirements for handling Site soil, and does not address other worker safety requirements. A Health and Safety Plan or equivalent must be prepared and implemented separately by each National Grid and the Shpack Site Group (structure #205 only) as needed to address applicable regulatory requirements (e.g., shoring of excavations, electrical safety, etc.).

Additionally, National Grid and its contractors are expected to provide dust control measures to minimize the creation of airborne dust during their work activities in accordance with applicable regulations.

## 2.5 **WATER MANAGEMENT**

### Structure #205

The groundwater table fluctuates seasonally, but is expected to range between 102 and 104 feet ASL in the vicinity of structure #205. Consequently, excavation for the new structure will likely require dewatering.

The Remedial Action contractor will assist National Grid with dewatering in accordance with the following guidelines:

- Any dewatering required by National Grid and/or its contractors is to be minimized to the maximum extent practicable. Dewatering is defined as the mechanical extraction of water using a pump or other equipment. The displacement of water resulting from placement of materials into the subsurface is not restricted by this SMP.
- National Grid will perform dewatering and pump the extracted groundwater from the Tongue Area (i.e., water related to the relocation of structure #205) to an on-Site location specified by the Remedial Action contractor. At that designated location, responsibility for managing, treating, storing, and or disposing of extracted groundwater will transfer from National Grid to the Remedial Action contractor.
- Appropriate erosion and sedimentation controls will already be in place at structure #205 as part of the Remedial Action.

### Structure #204

- Water generated by dewatering activities, if any, related to the structure #204 project will be managed solely by National Grid and will not enter the Shpack Site. Groundwater is not expected to be impacted and will be managed in accordance with National Grid standard procedures. Groundwater exhibiting possible impacts will either be properly treated for onsite injection, onsite surface water discharge, or Publically Owned Treatment Works (POTW) discharge; or shall be containerized for off-site disposal. Any discharges will be performed consistent with all applicable regulations and permits. With respect to fluids to be disposed off-site, they will be properly transferred and containerized to prevent discharges or leaks, characterized per the requirements of the receiving facility, and subsequently transported to a fully licensed/ permitted treatment/ recycling facility.
- All appropriate local, state and federal laws, regulations, orders, permit and approvals, related to the removal, handling, treatment and discharge of impacted groundwater, will be in-place prior to the initiation of the project. Such plans will, at a minimum, include an evaluation of water quality, the method by which groundwater will be treated, contained and/or discharged/ disposed and the necessary regulatory approvals, permits, etc. **Impacted, untreated groundwater will not be discharged directly to the ground surface, collection utilities, wetlands or water bodies.**
- Erosion and sediment controls will be required for work at structure #204 and will be installed by National Grid.

## 2.6

### *RESTORATION RESPONSIBILITY*

#### Structure #205

National Grid is required to remove any and all debris resulting from their work activities associated with structure #205, and return grades to their previous condition to promote positive drainage. All restoration work including removal of any barrier materials (i.e. gravel and/or mats) will be performed by the Remedial Action contractor.

### Structure #204

It is National Grid's responsibility to restore the area surrounding structure #204 in accordance with the requirements of any held USACE and/or Norton Conservation Commission permits or authorizations. Clarification of the requirements of these permits or authorizations can be provided by the National Grid Environmental Specialist (see Section 1.3).

### 3.0 SOIL STORAGE AND STOCKPILING

This section describes storage and stockpiling requirements for excavated soil. Stockpiling shall be conducted in a manner to minimize rain infiltration, erosion, and dust generation.

#### 3.1 GENERAL REQUIREMENTS

##### Structure #205

As noted above, excavation to install structure #205 will result in the generation of two types of excavated soils: clean fill (sand) recently placed by the Remedial Action contractor; and potentially impacted native material (peat and silty sand). These materials will be handled and stored as follows:

- The two soil types will be segregated and maintained in separate stockpiles to limit cross-contamination.
- Clean fill excavated by National Grid may be reused as backfill outside the structure casings.
- Native material will be stockpiled on geotextile or similar material by National Grid. The geotextile will be provided and placed by the Remedial Action contractor (ERM) in the designated work area or lay down area. The stockpiled soil will then be turned over to ERM, at which point ERM will assume responsibility for the proper management and disposal of the excavated soil and the geotextile.

##### Structure #204

The soils excavated at structure #204 are anticipated to be free of environmental impacts and shall be handled and stored as follows:

- Soils shall be stockpiled separately from other construction materials, and in a location in the vicinity of the excavation. The Remedial Contractor does not need to approve the soil stockpile locations.
- Soils may be stockpiled directly on swamp mats provided by National Grid. Geotextile will be used as a barrier between the



swamp mat and the soil stockpile. Soil will be covered to minimize infiltration of precipitation, to limit dust, and/or to prevent erosion of the stockpile. Cover materials shall be properly secured at the end of each day, and soil pile covers shall possess the necessary physical strength to resist tearing by the wind.

- As needed during periods of rain or other precipitation, silt fence or hay bales shall be placed immediately around the stockpiles to prevent erosion of materials in the surrounding wetlands.

### 3.2 *TEMPORARY STORAGE*

During excavation, soil shall be placed in the vicinity of the excavation as noted in Section 3.1. For most excavations it is expected that the material will be returned to the excavation within a few days, if appropriate. In the event that temporary storage of excavated soils (related to structure #205) may extend beyond one week, National Grid or its contractors shall notify the Remedial Action contractor in advance to determine if alternative measures shall be taken.

### 3.3 *EXCESS SOIL MANAGEMENT*

In the event the volume of excavated soils is greater than the volume of material to be backfilled, the excess soil shall be managed as follows:

#### Structure #205

- National Grid will communicate to the Shpack Site Group information including the location where the excess soil originated from, including depth interval and approximate volume.
- The Shpack Site Group will provide guidance on whether to spread the soil on-site or whether the Remedial Action contractor will manage the soil through off-site disposal. If the Shpack Site Group decides that off-site disposal is required, then the Shpack Site Group or appropriate responsible party will be responsible for all testing required by state and federal regulations and the receiving facility. The Shpack Site Group will be responsible for signing generator manifests and properly disposing of such excess soil. National Grid will provide the Shpack Site Group party with all available information needed to ensure the proper off-Site disposal of excess soils. Under no circumstances should any soil leave the Site unless it is destined for a receiving facility approved and

coordinated by the Shpack Site Group. Copies of off-Site disposal records will be provided to National Grid at the completion of the project.

Structure #204

Given there are no known soil impacts at this location, excess soils will be managed in accordance with National Grid's standard practices.