

ENF Environmental Notification Form

<i>For Office Use Only</i> <i>Executive Office of Environmental Affairs</i>	
EOEA No.:	<u>13964</u>
MEPA Analyst:	<u>BRIONY ANGUS</u>
Phone: 617-626-	<u>X 1029</u>

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Westover Distribution Center Site Remediation		
Street: 462 Randall Road		
Municipality: Ludlow	Watershed: Stony Brook	
Universal Transverse Mercator Coordinates:	Latitude: 4676283 N Longitude: 18 705968 E	
Estimated commencement date: 7/1/2007	Estimated completion date: 9/1/2007	
Approximate cost: \$800,000	Status of project design: 75	%complete
Proponent: Dyno Nobel, Inc.		
Street: 660 Hopmeadow Street		
Municipality: Simsbury	State: CT	Zip Code: 06070
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Timothy F. Keane, P.E. LSP		
Firm/Agency: Fuss & O'Neill, Inc.	Street: 78 Interstate Drive	
Municipality: West Springfield	State: MA	Zip Code: 01089
Phone: 413-452-0445 x. 4410	Fax: 413-846-0497	E-mail: tkeane@fando.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

Yes No

Has this project been filed with MEPA before?

Yes (EOEA No. _____) No

Has any project on this site been filed with MEPA before?

Yes (EOEA No. _____) No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8)) Yes No

a Special Review Procedure? (see 301CMR 11.09) Yes No

a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No

a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): None

Are you requesting coordinated review with any other federal, state, regional, or local agency?

Yes (Specify _____) No

List Local or Federal Permits and Approvals: Wetlands Protection Act Notice of Intent, MA DEP 401 Water Quality Certification, Army Corps. Programmatic General Permit, EPA Remediation General Permit, EPA Construction Stormwater General Permit, DEP Beneficial Use Determination

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:
Total site acreage	1.74			
New acres of land altered		1.74 (temporary)		
Acres of impervious area	0	No Change	0	
Square feet of new bordering vegetated wetlands alteration		23,820		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		No Change		
STRUCTURES				<input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:
Gross square footage	0	No Change	0	
Number of housing units	0	No Change	0	
Maximum height (in feet)	N/A	No Change	N/A	
TRANSPORTATION				<u>Army Corps. PGP</u> <u>EPA Remediation GP</u> <u>EPA Construction Storm Water GP</u> <u>DEP Beneficial Reuse Determination</u>
Vehicle trips per day		No Permanent Change		
Parking spaces		No Change		
WASTEWATER				<hr/> <hr/> <hr/> <hr/> <hr/>
Gallons/day (GPD) of water use		No Change		
GPD water withdrawal		No Change		
GPD wastewater generation/ treatment		No Change		
Length of water/sewer mains (in miles)		No Change		

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

- Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify: _____) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

Description of the Project Site

The site is located at the northern portion of an explosives storage facility owned and operated by Dyno Nobel, Inc. at 462 Randall Road in Ludlow. The location of the site can be seen on the site locus map presented in Appendix A. The site contains metals contaminated soil that resulted from the destruction of blasting caps and shock tubes approximately 20 to 30 years ago. Following detonation, the debris was buried in-place. These activities have since ceased. The resulting detonation scattered the material on the ground surface in an area surrounding the disposal area. The zone of this scattered material includes areas on an adjacent parcel that is owned by the Town of Ludlow. The area of buried debris is currently a source of groundwater and soils contamination, due to remnants of the blasting caps and tubes.

Under the Massachusetts Contingency Plan, 310 CMR 40.0000 (MCP), remediation must be performed to achieve a "Permanent Solution." A Permanent Solution will be achieved on the Dyno Nobel parcel by removing the contamination source, through excavation, ex-situ stabilization, and transport off-site for reuse. Additional remediation using the same method will be required on the adjacent Town of Ludlow property, since the property is accessible to the public. The project site currently consists of a field and some wooded areas. Portions of the site where remediation is proposed consist of bordering vegetated wetlands (BVW) associated with a drainage ditch that discharges to Stony Brook. The source area itself is depressed, resulting in seasonally ponded water that supports wetland vegetation. These wetlands are connected to the wetlands associated with the drainage ditch. A plan of existing conditions is presented as Appendix B.

Remediation will consist of excavating the source area to an estimated maximum depth of 15 feet, and of excavating the area on the Town property to an approximate depth of 3 feet (contamination is limited to the ground surface). The excavated soil will then be mixed with a binding agent in a pug mill. The material will be managed as a Remediation Waste under the MCP. The material will then be transported to a permitted receiving facility and used (e.g. daily cover) in accordance with applicable permits and regulations. A Remediation Plan is presented in Appendix C.

Description of Alternatives

The following remedial alternatives have been considered for use at the site:

1. Phytoremediation: This alternative includes the establishment in the source area and contaminated area of plant species that are known to be hyper-accumulators of metals. The plants offer enhanced uptake of

metals by roots and accumulation in the shoots and leaves. Excavation of contaminated soils would be required to make the soils accessible to plant roots; the source area would be excavated to a depth of approximately 15 feet and the contaminated area on the Town property would be excavated to a depth of approximately 3 feet. New wetland resource areas with similar characteristics to existing areas would be constructed in the approximate location of the altered resource areas. This alternative is not favored by the project proponent due to anticipated unpredictability in reaching the remediation endpoint; phytoremediation could take more time than is currently anticipated and may not be adequately effective. This alternative is no less damaging to resource areas than the preferred alternative.

2. Stabilization and On-Site Reuse: This alternative is the same remedial approach as the selected Remedial Action Alternative (RAA); however, under this scenario, treated soils are kept on-site and used as road base or structural fill. There is no on-site need for stabilized material. Also, based on 310 CMR 40.0859, RAAs that rely upon on-site disposal, isolation, or containment shall not be selected unless a feasible alternative does not exist. For these and other reasons, the on-site alternative was not favored.

3. Stabilization and Off-Site Reuse – Selected RAA: This alternative includes the stabilization of the soil and reuse or recycling at an approved off-site location (such as a landfill where the material is used for capping and contouring). Contaminated soils are stabilized through the use of binding agents, which prevent mobilization of metals. Future exposure would also be limited by institutional controls, such as an Activity and Use Limitation (AUL). This RAA was the selected action based on the Phase III Remedial Action Plan. The source area would be excavated to a depth of 15 feet (maximum). The contaminated area on the Town property would be excavated to a depth of approximately 3 feet. New wetland resource areas with similar characteristics to existing areas would be constructed in the approximate location of the altered resource areas.

4. Acid Extraction: This remedial alternative employs an acid (hydrochloric acid) to physically separate metals from soil. Metals are removed to a licensed accepting facility and the treated soils are reused on-site. The technology has been shown to be effective only in bench-scale or pilot-scale tests and does not have a proven track record at full-scale sites. Furthermore, the technical complexity of acid extraction technology is greater than the complexity of stabilization due to the handling and use of acids compared with the handling and use of typical binding agents in the stabilization alternative. This alternative requires excavation of the contaminated soils as in the other alternatives. The acid extraction alternative was not selected due to technical complexity and unproven use on full-scale projects.

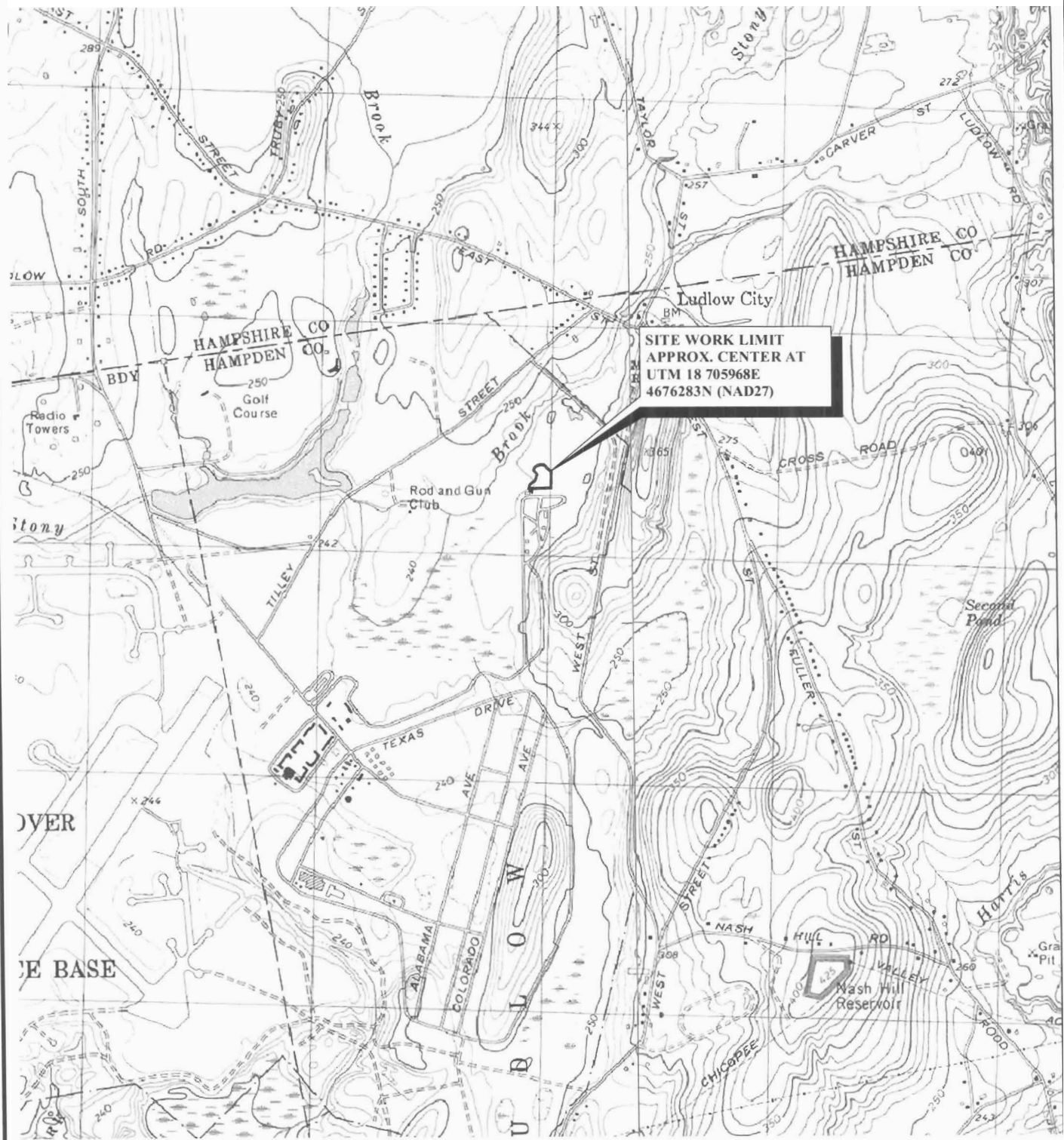
5. No Project Alternative: The “No Project” alternative is not consistent with the MCP based on the characteristics and location of the contamination; thus, this alternative is not practicable.

Discussion of Alternatives

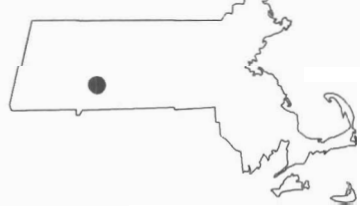
Of the alternatives considered, only one (the No Project Alternative) does not include the excavation of soils at the disposal site that are located within a wetland area. However, this alternative will not reduce contamination to an acceptable level of risk. Each other alternative requires similar excavations of affected soil and thus cannot be differentiated based on impacts to wetland areas or the environment. The preferred alternative will reduce risk of exposure as required by the MCP, avoid long-term monitoring costs, and reduce risk of future migration of material.

Potential Mitigation Measures

Proposed mitigation includes restoration of wetland areas to pre-existing conditions, resulting in no net loss in wetland area. A preliminary wetland mitigation plan is included as Appendix G. A final wetland mitigation plan will be developed during the local Conservation Commission permitting process. Following remediation, the excavation areas will be filled and a finish grade established similar to pre-remediation conditions. Native plant species will be established according to the wetland mitigation plan. Erosion and sediment controls, including silt fence, a construction entrance, swamp mats, and a dewatering basin (if necessary) will be implemented to minimize impacts to wetland areas.



SITE WORK LIMIT
 APPROX. CENTER AT
 UTM 18 705968E
 4676283N (NAD27)



MAP REFERENCE
 THIS MAP WAS PREPARED FROM THE FOLLOWING
 7.5' SERIES USGS MAPS:
 Ludlow 1969 1983;
 Springfield North 1972 PHOTOREVISED 1979.

UCS: WORLD
 MS VIEW: 2000
 LMAN: PLOT
 CTB: F&O Standard

SCALE:	
HORZ: 1"=2000'	
VERT: N/A	
DATUM:	
HORZ: N/A	
VERT: N/A	
GRAPHIC SCALE	

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DYNOL NOBEL INC.
SITE LOCUS MAP
 ENVIRONMENTAL NOTIFICATION FORM
 LUDLOW MASSACHUSETTS

PROJ. No.: 2002855.A45
 DATE: JANUARY 2006

APP. A