

File Number: 2663-12-01
January 21, 2020

**OPERATION AND MAINTENANCE PLAN and
HAZARDOUS MATERIALS MANAGEMENT PLAN
Proposed North Pole Estates Subdivision
Hadley Street
South Hadley, Massachusetts**

PREPARED FOR:

Chicopee Concrete Service, Inc.
158 New Lombard Road
Chicopee, MA 01020

Attention: Jason Ouellette

PREPARED BY:

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293 Bridge Street – Suite 500
Springfield, Massachusetts 01103



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Chicopee Concrete Service, Inc.
158 New Lombard Road
Chicopee, MA 01020

Attn.: Mr. Jason Ouellette

Re: Operation and Maintenance Plan and
Hazardous Materials Management Plan
Proposed North Pole Estate Subdivision
Hadley Street
South Hadley, Massachusetts

Dear Mr. Ouellette:

This Operation and Maintenance (O&M) Plan and Hazardous Materials Management Plan describes tasks to be completed to limit the potential for releases to the environment at the above-referenced site in order to protect the downgradient municipal supply well.

Should you have any questions regarding this document, please do not hesitate to contact us.

Very truly yours,
O'Reilly, Talbot & Okun Associates, Inc.

A handwritten signature in blue ink that reads "Valerie D. Tillinghast". The signature is written in a cursive style with a large initial 'V'.

Valerie D. Tillinghast, LSP
Associate

TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 BACKGROUND	1
3.0 OPERATIONS	2
3.1 SPILL PREVENTION	2
3.2 REFUELING.....	2
3.3 SERVICING AND REPAIRS	3
4.0 SPILL RESPONSE	3
4.1 SUPPLIES ON HAND	3
4.2 RESPONSE ACTIONS	4
4.2.1 Immediate Response by Operator	4
4.2.2 Notification to External Agencies	4
4.2.3 Cleanup and Disposal	5

APPENDICES

Appendix A	Proposed Subdivision Plans by RLA
Appendix B	MassGIS Resource Mapping
Appendix C	Spill Response Measures List

1.0 INTRODUCTION

This Operation and Maintenance (O&M) Plan and Hazardous Materials Management Plan describes activities that will be conducted to limit the potential for releases to the environment at a site located on Hadley Street in South Hadley, Massachusetts. The site is located on lots identified in assessor's records as map 54, parcels 15 and 20, and map 56, parcels 26, 42 and 43, and is the proposed location of the North Pole Estates subdivision. The proposed subdivision plans are provided in Appendix A this report.

This O&M Plan was prepared by O'Reilly, Talbot & Okun Associates, Inc. (OTO) on behalf of the property operator, Chicopee Concrete Service, Inc. (CCS). Site plans were prepared by R. Levesque & Associates, Inc. (RLA) on behalf of CCS.

2.0 BACKGROUND

The subject site is comprised of five abutting parcels located between Hadley Street and the Connecticut River in South Hadley, Massachusetts. Site topography slopes downward toward the river, dropping from an elevation of approximately 250 feet above mean sea level (msl) to 100 feet msl. A portion of the property has been used as a gravel pit for about 50 years. The area of historic gravel excavation was primarily on Map 56, Parcel 43, as shown on the attached drawing C-2. Wooded areas and open field are present in other portions of the site.

Chicopee Concrete Services, Inc. (CCS), the current site operator, has proposed redeveloping the site with a 9-lot subdivision known as North Pole Estates. The proposed subdivision is depicted on drawing C-2. Redevelopment will involve the removal and regrading of materials at the site.

A municipal supply well is located approximately 2,000 feet northwest of the site. The well location is depicted on the Massachusetts Geographic Information System (MassGIS) mapping attached in Appendix B. The well is identified as 1275001-04G, and is operated by the South Hadley Fire District #2 Board of Water Commissioners. As shown on the mapping, the site is located within the Zone II of the supply well. Zone IIs are well protection areas conservatively designed to reflect the area of an aquifer that contributes to a well under severe pumping and recharge conditions. All five parcels are located within the Zone II.

This O&M Plan has been developed to identify measures that will be taken to limit the potential for releases to the environment, and be protective of groundwater conditions and the supply well.

To assess the likely depth to the water table in this area, we reviewed a Massachusetts Department of Environmental Protection (MassDEP) database of existing wells. Wells along Hadley Street, Sullivan Lane and Titan's Pier Road have private domestic wells.

The depth to water in these wells varies widely, between about 8 feet and 66 feet below grade. Bedrock was encountered at depths of 0 and 215 feet. Many of these wells are topographically lower than the site. There is approximately 150 feet of relief across the subject site. Based on this information, the depth to groundwater at the site is estimated to be about 40 to 100 feet below grade, and may be in bedrock.

3.0 OPERATIONS

The only oil or hazardous materials likely to be in use at the site are those associated with heavy equipment. The most commonly used substances considered potential sources of releases to the environment during redevelopment are diesel fuel, hydraulic oil, and engine oil. Petroleum constituents such as these generally have low to moderate toxicity. When released to the environment, petroleum constituents tend to sorb to soil particles rather than dissolving in the aqueous phase.

Equipment that may be stored on site and used throughout the duration of the excavation includes:

- Front loaders;
- Excavators;
- Bulldozers; and
- Graders.

Existing motorized equipment (such as the screening plant and tracking conveyor) associated with the former sand and gravel mining operation will be removed.

The operation of heavy equipment necessarily includes the use of vehicular fluids. Operation and maintenance will be performed in a manner that limits the potential for spills, and provides for immediate response should a spill occur.

3.1 SPILL PREVENTION

Attendants are on duty at all times during operating hours. All personnel have been instructed in and have rehearsed spill prevention and containment. Additional staff, if hired, will receive similar training. Personnel will be made familiar with the contents of this plan.

During the entire equipment refueling and servicing operation, an attendant will maintain direct visual observation and communication with the operator. The attendant will observe the oil level at the receiving tank. The valve will be inspected to make certain it is in the closed position prior to disconnecting the fill hose from the transfer tank.

3.2 REFUELING

There will be no fuel tanks installed or stored on site.

All mobile equipment will be refueled in the paved parking area located in the northeastern section of the property. Refueling will be done by an outside fuel delivery vendor on a regular basis. The delivery vehicle will have the parking brake set and wheel chocks put in place prior to fuel transfer.

While on the paved area, the vendor will also fill a saddle tank mounted to the Operator's service truck. If required, the fuel delivery vehicle will be parked over a containment structure during refueling operations. The service truck will not be stored on site, but will be mobilized by the Operator as needed to refuel non-mobile equipment.

3.3 SERVICING AND REPAIRS

Equipment will be serviced according to manufacturer's recommendations. Servicing will be performed by company personnel. Mobile equipment will be serviced on the paved area used for refueling. Non-mobile equipment will be serviced at the equipment location.

During oil changes, used oil will be drained from equipment into proper collection pans. The oil will be temporarily held in a container with a spill-proof cap or lid, then transported off-site to an appropriate waste oil storage container.

Equipment repairs will be performed in the paved area to the extent possible. In the event a repair cannot be performed on the paved area, preventative measures will be taken to contain fluids. Plastic sheeting will be placed on the ground surface below the work area. Sorbent pads will be kept proximate to the work area for immediate use if needed.

4.0 SPILL RESPONSE

Accidental releases may occur during the normal operation of heavy equipment. Equipment will be maintained and operated in a manner intended to prevent such releases.

4.1 SUPPLIES ON HAND

The following materials will be kept on site in a well-marked container at the paved refueling/servicing location:

- 55 gallon plastic trash can;
- 5" x 10' booms;
- Oil absorbing pads suitable for use on water or ground surface;
- Poly sheeting (minimum 6 mil thickness, 10' wide, 25' long);
- Trash bags (6 mil thickness) with ties and labels;
- Disposable nitrile gloves; and
- A copy of this plan.

The materials will be replenished if used, to maintain readiness.

4.2 RESPONSE ACTIONS

Response actions may include immediate measures to contain/control a release, emergency notifications to certain agencies, release cleanup, and disposal, as described in the following sections.

4.2.1 Immediate Response by Operator

If a sudden release of oil or hazardous material occurs at the site during redevelopment operations, the following responses will be taken:

- Take measures to stop the release, if ongoing;
- Place portable container (such as oil changing pan) below the release, if ongoing;
- Place sorbent mats and/or booms to capture released material and limit its flow;
- Guard against sources of ignition;
- Notify facility emergency response coordinator (contact numbers provided on form in Appendix C), and communicate the location, estimated volume, and type of material released;
- Use cones, stakes, flagging, and/or other materials to demarcate the area;
- Do not allow foot or vehicle traffic through the area;
- Photograph the release area; and
- Prepare notes documenting the date and time of the release, the volume and type of material released, location, and individuals with knowledge of the event.

These steps are summarized for ready reference on the Spill Response Measures list provided in Appendix C. The names and phone numbers for facility emergency contacts are provided on the form, and will be updated as needed. The emergency response contact will determine the type and level of response required, and whether or not facility operations should be halted, or if the facility should be evacuated prior to cleanup.

4.2.2 Notification to External Agencies

It will be the responsibility of the facility emergency coordinator to determine whether notification thresholds have been exceeded and the release is reportable to the Massachusetts Department of Environmental Protection (MassDEP) and/or other agencies. This may be done with input from a Licensed Site Professional (LSP). Certain types of releases are reportable to MassDEP within two hours, so consulting an LSP immediately is recommended. If the release is reportable to MassDEP, the

local fire department will also be notified. Emergency contact numbers are provided in Appendix C.

The following information should be conveyed during notification:

- The name, address, and telephone number of the person making the notification;
- The name, address, and telephone number of the potentially responsible party;
- The address and specific location of the spill;
- The date and time the release occurred;
- The volume and type of material spilled;
- The circumstances of the release; and
- A brief summary of response measures taken.

In general, if the released material is petroleum, spills of less than 10 gallons are not reportable under the Massachusetts Contingency Plan (MCP). They may become reportable if the spill impacts more than two cubic yards of soil and are not cleaned up to levels below reportable concentrations within 120 days. A cleanup completed to below reportable levels within 120 days is considered a Limited Removal Action, and does not require notice to MassDEP. However, the work must be documented with confirmatory test samples submitted for laboratory analysis and the report kept on file for at least five years.

4.2.3 Cleanup and Disposal

The Operator's emergency response contact will determine if the spill can be managed by company staff. If appropriate based on the nature or size of the release, an emergency response contractor will be retained to perform cleanup.

If facility equipment is used during the cleanup operations, or has been impacted by the spill, the equipment will be decontaminated prior to returning to normal service. Disposable pads and cloths will be used for cleanup, to the extent possible, and will be drummed for proper disposal. If power washing is required, plastic sheeting will be used to contain the wash water rather than letting it infiltrate into the ground surface. Wash water will be contained for subsequent off-site disposal.

The Operator will retain a disposal contractor to dispose of all waste oil, residues, and cleanup materials in accordance with applicable regulations.

Prompt response is important to limit the migration and extent of the release. The type of remedial response required, if any, will depend upon the volume and type of material involved. The most common and effective method of remediation is excavation of the impacted soil, temporary stockpiling on plastic sheeting, and off-site disposal at an appropriate licensed facility.

APPENDIX A

APPENDIX B

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:

OULLETTE GRAVEL PIT
HADLEY ROAD SOUTH HADLEY, MA

NAD83 UTM Meters:

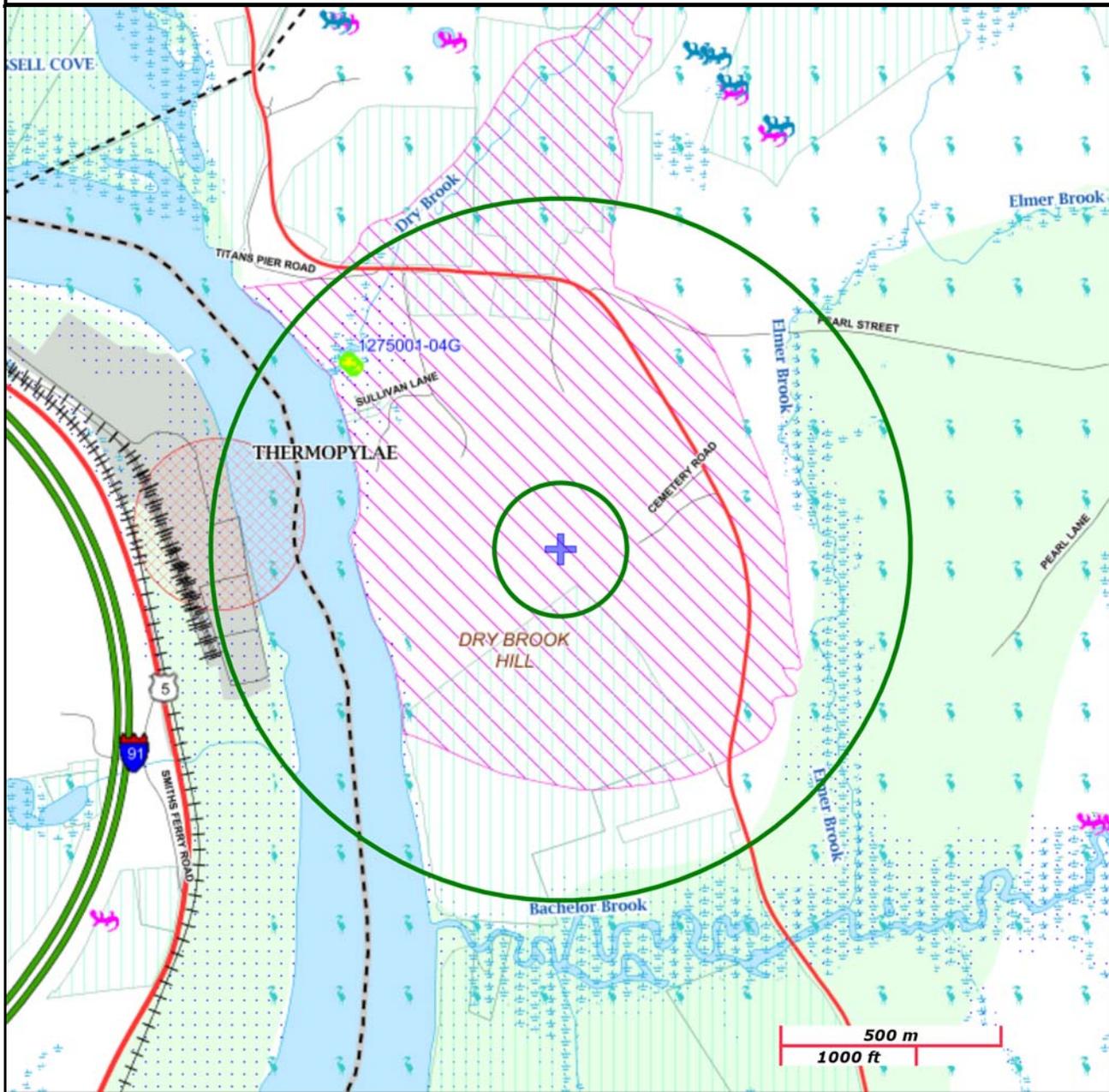
4683472mN , 698440mE (Zone: 18)
November 25, 2018

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: <http://www.mass.gov/mgis/>.



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail	PWS Protection Areas: Zone II, IWPA, Zone A		
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct	Hydrography: Open Water, PWS Reservoir, Tidal Flat		
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam	Wetlands: Freshwater, Saltwater, Cranberry Bog		
Aquifers: Medium Yield, High Yield, EPA Sole Source	FEMA 100yr Floodplain; Protected Open Space; ACEC		
Non Potential Drinking Water Source Area: Medium, High (Yield)	Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential		
	Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.		

APPENDIX C

SPILL RESPONSE MEASURES
North Pole Estates Subdivision
Hadley Street, South Hadley, MA

IF A RELEASE OCCURS AT THE SITE, FOLLOW THESE STEPS:

1. ATTEMPT TO STOP AND CONTAIN THE RELEASE AS FOLLOWS
 - Close valves; plug openings.
 - Place a container such as bucket or oil change pan below any ongoing release.
 - Place booms and sorbent pads to absorb and contain released material.

2. SECURE THE AREA
 - Remove sources of ignition.
 - Mark the perimeter of the release area using cones, stakes, flagging, etc.
 - Do not allow foot or vehicle traffic through the area.

3. CONTACT THE COMPANY EMERGENCY RESPONSE COORDINATOR
PROVIDE THE FOLLOWING INFORMATION:
 - type of material released; estimated volume released; location.

<u>Jason Ouellette</u>	<u>413-531-6771</u>
Name of primary emergency coordinator	Phone number

<u>Dana Kearns</u>	<u>413-888-7337</u>
Name of secondary emergency coordinator	Phone number

4. DOCUMENT THE RELEASE
 - Photograph the release area.
 - Write down notes describing when, how, and where the release occurred, and who was present during the event.

EXTERNAL EMERGENCY CONTACT NUMBERS:

If the release is determined to be reportable under the MCP, contact:
Massachusetts Department of Environmental Protection, Emergency Response
888-304-1133 *and*

South Hadley Fire Department District 2
413-534-5803

If the release reaches the river and enters surface water, contact:
National Response Center
1-800-424-8802