Stormwater Pollution Prevention Plan:

135 Andover Street

DPW Garage and Materials Storage Facility

Operator(s):

Wilmington Department of Public Works
Highway Division

SWPPP Contact:

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SWPPP Preparation Date:

April 2020

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Appendices

1.0 Pollution Prevention Team

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2.0 Description of Facility and Potential Pollution Sources

2.1 Description of Facility:

The Wilmington DPW is located at 115/135 Andover Street in Wilmington, MA on map R1 parcel 3, which is a 105 acre parcel located in a Zone II wellhead protection zone. The site is bordered to the north, east, and south by private property and to the west by Andover Street.

The current use of this 105 acre town owned parcel is for a wide range of DPW operations such as Brown's Crossing Wellfield, Public Works Administration Building (115 Andover Street), Public Works Garage (135 Andover Street), Fueling Station, and Construction Materials Storage. The site also consists of vast wetland resource areas, protected 100-year floodplain, and Well Protection areas (Zone 1 and Zone 2).

The focus of this SWPPP is on the portion of the parcel known as 135 Andover Street which

consists of the Public Works garage, fueling station, and construction materials storage yard.

These uses encompass approximately 7 acres of land area. Refer to Figure 1 in Appendix A.

2.2 Potential Pollution Sources:

The site contains two (2) 10,000 gallon above ground storage tanks (ASTs), the eastern most tank containing diesel fuel and the westernmost tank containing gasoline. The products are used to fuel town-owned vehicles and equipment for the Department of Public Works, the Wilmington Police Department, the Wilmington Fire Department, mini-vans for the Wilmington School Department, and Town Administration vehicles. In January of 2020, the previous underground storage tanks (USTs) in this location were decommissioned and removed and replaced with new ASTs. The fueling station sits approximately thirty (30) feet to the south and consists of a canopy-covered fuel island with two single pump dual dispensers, one for gasoline and one for diesel.

The parking lot adjacent to the tanks is paved with asphalt. The current practice for filling the tank is for the delivery truck to pull adjacent to the tanks and the attendant attaches the hose to the fill port. The tanks and fill ports are clearly marked for either "gasoline" or "diesel". The dispensers for both gasoline and diesel are located on a covered fueling island approximately 30 feet to the south of the tanks. There is no permanent containment device located within this area to contain a spill, although the double wall tank system offers 110% secondary containment (10% volume in double wall area, plus 100% volume from inner tank). A release from the tank would flow evenly in all directions onto the surrounding pervious areas, and ultimately in the south-easterly direction toward the bordering vegetated wetland. A release from the delivery vehicle would flow down gradient, south east, approximately 400 feet over asphalt to the property border. **A spill prevention and control plan is provided in Appendix C.**

There also exists a 500-gallon used motor oil transfer tank in the rear of the building. This tank temporarily stores used motor oil from the maintenance garage operation and Wilmington residents until such time that it is pumped out by a third party oil recycler. The oil tank is located outdoors, behind the maintenance garage. Used oil generated from maintenance activities and residential drop-off is hand filled into the tank. The tank is equipped with a visual sight gauge. A used oil removal vacuum truck cleans out the tank. The pickup area, just west of the tank, is a paved asphalt surface. Currently a release from the tank would flow in the same direction as a release from the vacuum truck and would flow easterly approximately 280 feet over the paved surface to the wetland border.

The facility is also used for construction materials storage. Construction material examples include pavement millings (for roadway repair), bank run gravel (utility trench work), mulch, common borrow, processed loam, various pipe reaches/diameters (ductile iron, HDPE, RCP), manhole structures, and heavy equipment storage. **Note this facility does not include salt storage** – which is stored in an enclosed building adjacent to Wildwood Cemetery. Sources of pollution are those generally associated with transport of sediment and erosion (from stockpiles, loading and unloading operations). The construction materials storage area is on an upland

portion of the property but is surrounded by a forested upland fringe to bordering vegetated wetland areas tributary to Martin's Brook.

3.0 Identification of Stormwater Controls

3.1 Minimize or Prevent Exposure:

The DPW Garage contains an internal tight tank designed to accept pumped wash water from DPW truck washing operations conducted inside the garage. Runoff enters the system through floor drains and is pumped to the tight tank unit until such time that the tank fills and DPW personnel contact a third party septic hauler to pump the tight tank.

Outdoor washing operations are limited to the rinsing of grass material from mowers, or other materials which would easily clog the tight tank pump system. In these cases, the washout area is swept daily with a mechanical sweeper as part of the sweeper operator's daily duties. This material is kept in the sweeper until the next day when the sweeper is emptied at the temporary street sweeping storage yard on Main Street.

The majority of the town's regularly sized vehicles are washed at a third party car wash with the use of pre-purchased car wash tickets. This includes all police and fire cruisers and sedans, and town administration vehicles.

Guidelines referencing proper vehicle maintenance storage procedures are presented in the DPW's "Draft Comprehensive Employee Safety Guidelines", which have been approved by the Assistant Town Manager / Director of Human Resources and Town Counsel and are dated February 12, 2020. This document has been prepared by DPW management in conjunction with the worker's union safety sub-committee and the Town of Wilmington Safety Committee. The guidelines are currently awaiting final approval by the Town Manager and have been delayed due to COVID-19 related obligations.

The guidelines contain provisions for the storage of municipal vehicles in need of repair:

From "Comprehensive Employee Safety Guidelines", section 10.13:

Vehicles that are awaiting repair may be stored outside as long as exposure to the elements will not cause an unsafe condition or allow chemicals, fuel, or other liquids to washout into yard uncontained. Any leaking vehicles shall be stored inside with proper spill pads in place, or if must be stored outside, will contain safeguards to absorb leaking materials and prevent runoff from infiltrating the ground or migrating over impervious surfaces.

3.2 Best Management Practices and Erosion/Sedimentation Control:

Raw construction materials storage is located in an uncovered upland area that spans approximately 5 acres. Mulch berms are used to filter runoff prior to discharging sediment to the adjoining upland fringe to wetland resource areas. A sediment basin is proposed along the easterly edge of the storage area which would collect the majority of runoff from this subcatchment.

The sediment basin will be designed using the following equation:

V=1815A

Where, V = volume of basin in CF
A= drainage area in Acres
1815 = volume (in cubic feet) of 0.5 inches of runoff per acre.

As such, the minimum calculated volume for the system is 7,300 CF of storage.

Refer to Figure 1 for potential location of this BMP.

4.0 Inspections

The inspection shall include but not be limited to the following areas:

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants discharging to the surrounding wetland resource areas. The mulch berm shall be observed to ensure it is operating correctly. Areas immediately down gradient of the mulch berm will be investigated for traces of sediment transport and accumulation. Should the inspection reveal same, the inspector will report directly to the Town Engineer to evaluate additional erosion/sedimentation controls and any necessary action items.

Based on the results of the inspection, the potential sources and pollution prevention measures identified in the Plan shall be revised as appropriate and as soon as practicable after such inspection.

A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Stormwater Pollution Control Plan, and actions taken shall be made and retained as part of the Plan.

5.0 Recordkeeping

Records will be kept on-site and will be available for inspection upon request. Records will include but are not limited to:

- Inspection reports
- Corrective Action reports
- SWPPP modifications and revisions

Appendix A – Figures

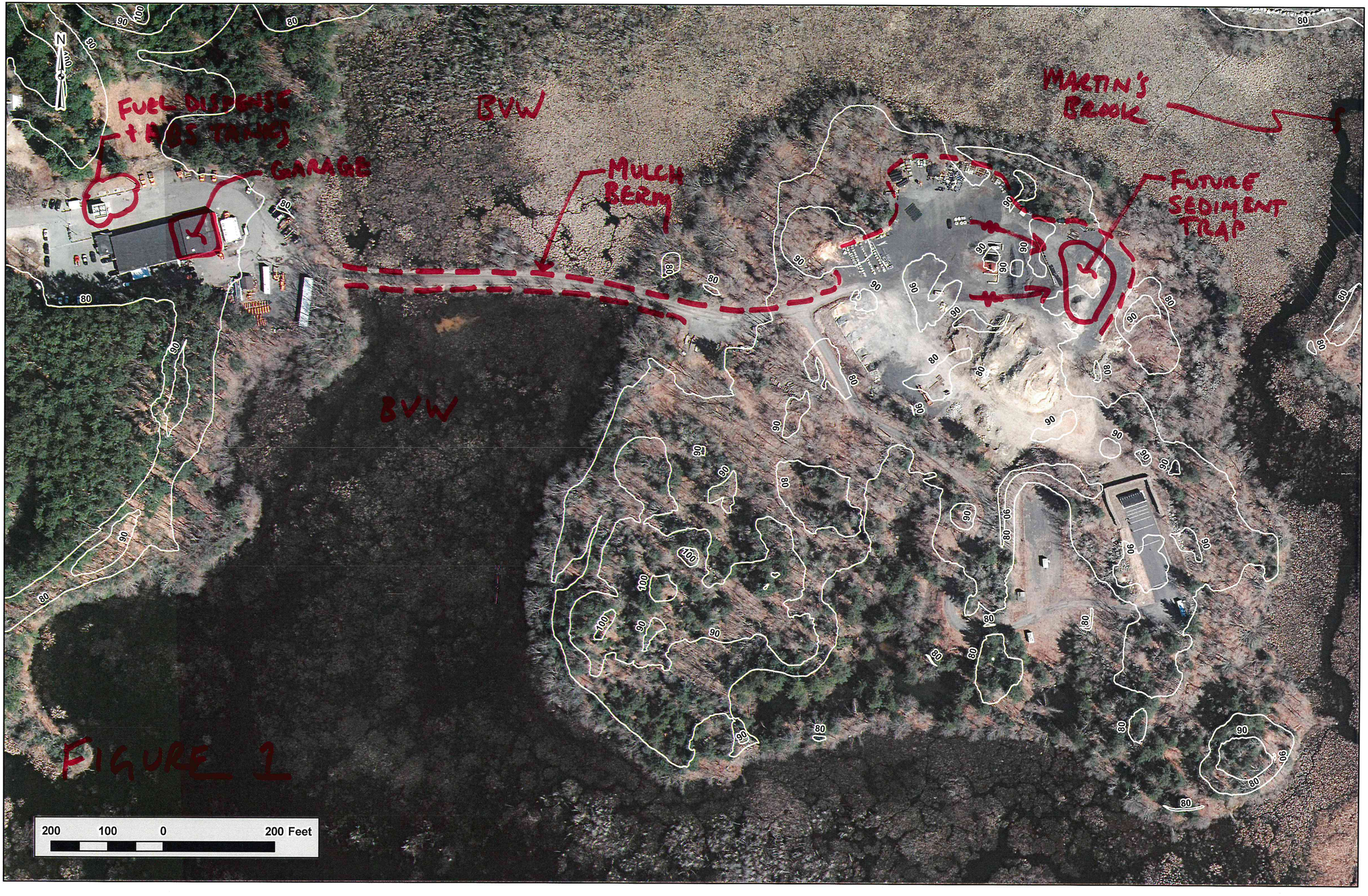
N
FUEL DISPENSE + PROPANE TANKS
GARAGE
BVW
MULCH BERM
MARTIN'S BROOK
FUTURE SEDIMENT TRAP
BVW
200 100 0 200 Feet

FIGURE 1

Appendix B - Inspection and Maintenance Report Form

To be completed at least once each calendar quarter

Facility Address: 135 Andover Street

Inspector: _____ **Date: _____**
Days since last rainfall:_____ **Amount of last rainfall: _____inches**

Current Site Status:

Site Area	*Current Activities*	*Current Condition*

Control Measures: (If you answer no to any of the following questions, corrective actions may be required)

☐Yes ☐No ☐NA	Siltation barriers in good condition?
☐Yes ☐No ☐NA	Drainage diverted away from disturbed areas?
☐Yes ☐No ☐NA	Temporary stabilization in place where appropriate/required?
☐Yes ☐No ☐NA	No reportable quantity releases (spills) since last inspection?
☐Yes ☐No ☐NA	Catch basins/detention facilities without excess accumulated solids?
☐Yes ☐No ☐NA	Infiltration facilities functioning properly?
☐Yes ☐No ☐NA	Velocity/erosion control measures at outfalls operating properly?
☐Yes ☐No ☐NA	Minimal sediment tracked onto road?

Other Observations:

_____

_____

_____

Corrective Actions Required:

_____

_____

_____

Appendix C – Spill Prevention and Control Plan

SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN

FOR THE

TOWN OF WILMINGTON
DEPARTMENT OF PUBLIC WORKS
FUELING STATION

135 ANDOVER STREET

Requirements referenced to 40 CFR 112.

PROFESSIONAL ENGINEER'S REVIEW

The undersigned Registered Professional Engineer is familiar with the requirements of Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112) and has supervised examination of the facility. The undersigned Registered Professional Engineer attests that this Oil Spill Prevention Control and Countermeasures Plan has been prepared in accordance with good engineering practices including applicable industry standards, and in accordance with the requirements of Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112); that procedures have been established for required inspections and testing; and that the Plan is adequate for the facility. Although not required by 40 CFR 112, it is preferred that the plan be reviewed and certified by a Professional Engineer that is registered in the state that the facility is located in.

Signature _____

Name Jamie M. Magaldi, PE

Title Operations Manager

Company Wilmington Department of Public Works

Date January 29, 2020

P.E. Registration Number 47070

State of License Massachusetts

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Spill Prevention Control and Countermeasure (SPCC) plan is to prevent fuel spills from occurring, and to perform safe, efficient and timely response in the event of a spill or leak (both referred to as "spills" herein). In accordance with United States Environmental Protection Agency (EPA) oil pollution prevention regulations (40 CFR 112), the Wilmington Department of Public Works (Wilmington DPW) must prepare and implement an SPCC plan for non-transportation related facilities that discharge oil into or upon navigable waters or adjoining shorelines; and, meet one of the following conditions:

- ♦ Above-ground oil storage capacity exceeds 1,320 gallons; or
- ♦ Underground oil storage capacity exceeds 42,000 gallons, unless the underground tanks are subject to all of the technical requirements of 40 CFR 280 or a state program approved under 40 CFR 281.

As defined by 40 CFR Part 112, oil includes all grades of motor oil, hydraulic oil, lube oil, fuel oil, **gasoline and diesel**, automatic transmission fluid (ATF), used oil, and transformer mineral oil. The definition of oil also includes non-petroleum oils such as animal or vegetable oils and synthetic oils.

1.1.1 Using the Plan

In addition to satisfying a regulatory requirement, this SPCC plan should be a working document at the facility. The plan should be used frequently in the following ways:

- ♦ As a reference for oil storage and containment system information.
- ♦ As a tool for informing new employees and refreshing current employees on practices for preventing and responding to spills.
- ♦ As a guide to periodic training programs for employees.
- ♦ As a guide to facility inspections.
- ♦ As a resource during an emergency response.
- ♦ As a tool to address the facility's operation and maintenance procedures

1.1.2 SPCC Plan Revisions

Wilmington DPW must review and recertify the SPCC Plan every five (5) years. Wilmington DPW must also revise this SPCC plan following any change in the facility design, construction, operation or maintenance that would affect the facility's potential for discharging oil. Revisions must occur as soon as possible, but no later than six months following the change. Facility information related to the SPCC plan must be submitted to the United States Environmental Protection Agency (EPA) Regional Administrator whenever the facility discharges more than 1,000 gallons in a single event, or discharges more than 42 gallons of oil in each of two spill events within a 12-month period.

If the facility has Self Certified any plan amendments and experiences a reportable spill, the EPA Regional Administrator will determine if the facility must rescind their eligibility and have the plan certified by a Professional Engineer.

1.2 Facility Description

1.2.1 Location & Use

The Wilmington DPW is located at 135 Andover Street in Wilmington, MA on map R1 parcel 3, which is a 105 acre parcel located in a Zone II wellhead protection zone. The site is bordered to the north, east, and south by private property and to the west by Andover Street. The location currently houses the operations garage for the Department of Public Works.

The site contains two (2) 10,000 gallon above ground storage tanks (ASTs), the eastern most tank containing diesel fuel and the westernmost tank containing gasoline. The products are used to fuel town-owned vehicles and equipment for the Department of Public Works, the Wlimington Police Department, the Wilmington Fire Department, mini-vans for the Wilmington School Department, and town administration vehicles. In January of 2020, the previous underground storage tanks (USTs) in this location were decommissioned and removed and replaced with new ASTs. The fueling station sits approximately thirty (30) feet to the south and consists of a canopy-covered fuel island with two single pump dual dispensers, one for gasoline and one for diesel.

There also exists a 500-gallon used motor oil transfer tank in the rear of the building. This tank temporarily stores used motor oil from the maintenance garage operation and Wilmington residents until such time that it is pumped out by a third party oil recycler.

A Site Location map has been included in the Appendices.

1.2.2 Waterways

The property contains a wetland approximately 500 feet to the southeast which eventually drains easterly toward the town of North Reading. Wilmington's "Brown's Crossing" water pumping station exists approximately 1,170 feet to the south.

1.2.3 Site Drainage

Stormwater from the Wilmington DPW generally flows easterly towards the wetland mentioned above. There is potential that major spills from the gasoline and diesel delivery areas, as well as the used oil transfer area, will flow toward the downstream wetland area. All stormwater flow from the gasoline, diesel and used oil storage areas flow in the same general directions. Approximately 400 feet of asphalt separate the gasoline and diesel AST locations from the down gradient border of the property and 280 feet of asphalt separate the oil transfer tank location from the down gradient border of the property.

2.0 POTENTIAL SPILL SOURCES AND SPCC FEATURES

2.1 SPCC Compliance

A description of all applicable oil storage tanks and vessels has been included in Section 2.2 of this document. The following descriptions detail the size and location of all petroleum product

storage including above ground storage tanks (AST) at the DPW, including all associated loading and unloading operations:

- **10,000 Gallon Gasoline and 10,000 Gallon Diesel UL 2085 Fire Guarded Double Walled Steel Above Ground Tanks (ASTs) with Dispensers** These tanks located on the north side of the property approximately 17.5 feet from the northern property line (through an approved variance with the Board of Appeals) and approximately 340 feet from Andover Street sit on a reinforced concrete pad with bollards and steel guardrail protecting them from the west, south, and east sides. The tanks both have interstitial alarms for leak detection and are further protected by an inner 4-inch thick concrete wall. The tanks are equipped with spill buckets and fill ports on the tops of the tanks. Underground double walled suction piping running from the tanks to the dispensers are connected to partially submerged transition sumps which contain leak detection. The dispensers themselves also contain sumps underneath each unit which also contain leak detection. Leak detection is monitored electronically by a Veeder Root monitoring system. This system is monitored remotely by the Town's Building Security Contractor 24-hours a day. High level alarms and an emergency shut off switch are located on the administration building within visible and audible distance from the delivery area. There is a spill kit staged on the fueling island.

The parking lot adjacent to the tanks is paved with asphalt. The current practice for filling the tank is for the delivery truck to pull adjacent to the tanks and the attendant attaches the hose to the fill port. The tanks and fill ports are clearly marked for either "gasoline" or "diesel". The dispensers for both gasoline and diesel are located on a covered fueling island approximately 30 feet to the south of the tanks. There is no permanent containment device located within this area to contain a spill, although the double wall tank system offers 110% secondary containment (10% volume in double wall area, plus 100% volume from inner tank).

Currently a release from the tank would flow evenly in all directions onto the surrounding pervious areas, and ultimately in the south-easterly direction toward the bordering vegetated wetland. A release from the delivery vehicle would flow down gradient, south east, approximately 400 feet over asphalt to the property border.

- **500 Gallon Used Oil Tank** – The used oil tank is located outdoors, behind the maintenance garage. Used oil generated from maintenance activities and residential drop-off is hand filled into the tank. The tank is equipped with a visual sight gauge. A used oil removal vacuum truck cleans out the tank. The pickup area, just west of the tank, is a paved asphalt surface.

  Currently a release from the tank would flow in the same direction as a release from the vacuum truck and would flow easterly approximately 280 feet over the paved surface to the wetland border.

- **330 Gallon Motor Oil Tank** – The DPW maintenance garage has a 330 residential style oil tank which accepts bulk deliveries of motor oil for use in engine maintenance operations. The tank is secured behind a metal rack system and is visually inspected daily as it's in the main maintenance area.

- **55 Gallon Drums** – The DPW stores varying amounts of 55-gallon drums of hydraulic oils in the maintenance garage located in the northern corner of the property. The drums are staged on plastic spill trays. A release from the drums located closest to the rear entrance of the maintenance garage could run down gradient across concrete and asphalt surfaces and reach the property border.

2.2 TABLES

ABOVEGROUND STORAGE TANKS

Since Wilmington DPW does not have a history of spills during fuel delivery, the below calculations will be used for spill prevention and planning purposes. The estimated spill volume from the fuel delivery vehicle detailed below has been calculated using data obtained from commercial fuel vendors, and is based upon the most likely type of spill to occur from a product delivery hose rupture or disconnect.

A maximum fuel rate of 220 gallons per minute and a hose diameter of 3 inches have been used, which depicts the highest possible fuel transport rate from a tanker and maximum hose diameter that is used at the site. The fueling rate could be less at times due to fuel delivery by a smaller truck and small diameter hose, and may even be less for heavier weight fuels.

The estimated spill volume also includes the amount of fuel that could be stored in a 3 inch diameter product line with a maximum length of 150 feet. This represents the maximum length of product hose that would be used at the site. A maximum spill response time of 3 minutes has been used to reflect the time required for the vehicle operator to shut down the fuel delivery vehicle upon identification of a leak. An additional 10 percent of the estimated spill volume has been added as a safety factor to account for conditions such as rain events during product delivery.

Maximum Hose Diameter = 0.25 feet
Maximum Hose Length = 150 feet
Maximum Flow (Pumping) Rate = 220 gallons/minute
Estimate Response Time = 3 minutes
1 Cubic Foot = 7.48 gallons

Hose Volume = ¶/4 (Hose Diameter)^2 (Hose Length)
= 0.785 (0.0625) (150)
= 7.36 cubic feet = 55.1 gallons

Estimated Spill Volume from Fuel Delivery
= ((Flow Rate) (Response Time) + (Hose Volume)) 10% Safety Factor
= ((220) (3) + (55.1)) 1.10
= 786.61 or **787 gallons**

Estimated Spill Volume from Used Oil Removal and Motor Oil Fill
= (Hose Volume) 10% Safety Factor
= (55.1)) 1.10
= 60.61 or **61 gallons**

ABOVEGROUND STORAGE TANKS					
CAPACITY (gallons)	**PRODUCT**	**HI-LEVEL ALARM**	**LEAK DETECTION**	**ESTIMATED SPILL DIRECTION AND ANTICIPATED VOLUME**	**EXISTING CONTAINMENT & SPILL CONTROL FEATURES**
20,000	**Gasoline & Diesel** (10,000 gallons each)	Audible and Visual Alarms	Electronic Interstitial Monitoring, Electronic Transition Sump Monitoring, Electronic Dispenser Sump Monitoring	Estimated spill volume from fuel delivery vehicle = 787 gallons Spill from dispenser and delivery truck will flow 400 feet southeast across asphalt surface to property border. Piping/dispenser leak rate = gradual to 45 gallons per minute (maximum loss = 2,000 gallons) Spill from piping & dispenser will flow across asphalt surface to 400 feet to southeast. Tank leak rate = gradual to 20,000 gallons Spill from tank failure will flow evenly in all directions on pervious grass areas surrounding tank and eventually flow in general southeast direction toward wetland border 400 feet away.	Double-walled tank on elevated concrete pad. Refueling area is on concrete pad. Pre-deployed containment device not present for bulk delivery vehicle.
500	**Used Oil** (Rear of DPW building)	Not Applicable (Hand filled)	Visual Inspection	Estimated spill volume from used oil vehicle = 61 gallons. Spill from used oil bulk transfer vehicle would flow easterly approximately 280 feet over asphalt to wetland area. Tank leak rate = gradual to 500 gallons Spill from tank failure would discharge to asphalt surface and run 280 feet to adjacent wetland area.	Tank is manually filled. Pre-deployed containment device not present for bulk delivery vehicle.
330	**Motor Oil** (inside maintenance garage)	Not Applicable (Hand filled)	Visual Inspection	Estimated spill volume from oil vehicle = 61 gallons. Spill from used oil bulk transfer vehicle would flow easterly approximately 280 feet over asphalt to wetland area. Tank leak rate = gradual to 330 gallons Spill from tank failure would discharge to concrete garage floor and be contained inside the building.	Tank is visually inspected daily and protected from collision behind metal rack. Spill kit material on hand. Pre-deployed containment device not present for bulk delivery vehicle.

55 GALLON DRUM STORAGE					
BLDG. or LOCATION	**Volume of DRUMS**	**PRODUCT**	**NEAREST DRAIN**	**ESTIMATED SPILL DIRECTION AND RATE**	**CONTAINMENT & SPILL CONTROL FEATURES**
Mechanics Garage	55 gal	**Hydraulic Oils**	No drains inside room, bay door approx. 30 feet away	Drum leak rate = gradual to 55 gallons Spill from drum failures would spill onto impervious concrete floor of mechanics garage. No floor drains are present in this portion of the garage. Spill from drum closest to bay door has potential to reach property wetland border 280 feet south-east of drums	Impervious concrete floor of mechanics garage. Drip Trays on all drums.

3.0 SPILL PREVENTION AND RESPONSE

3.1 Discharge Prevention

3.1.1 SPCC Features and Operating Procedures

Wimington DPW employees shall implement spill prevention practices for work with and around oil sources. Wilmington DPW personnel shall use common sense and rely on spill prevention practices at all times to minimize the potential for a release of oil.

For example, the following “common sense” practices are recommended:

- ♦ keep container lids securely fastened at all times;
- ♦ do not leave portable sources unattended (outside);
- ♦ return portable sources to their storage location after use;
- ♦ use pads, drip pans, and funnels when transferring petroleum products from a portable container;
- ♦ protect oil sources from damage by moving equipment;
- ♦ do not store oil sources near catch basins or floor drains; and
- ♦ loading and unloading of petroleum products shall be attended at all times.

Spill prevention during oil deliveries (offloading) is primarily the responsibility of the supplier until the product is safely in the tank or vessel. However, the Town of Wilmington is responsible for all activities performed within their properties and will verify the implementation of spill prevention activities by the fuel suppliers, and will also implement spill prevention measures for vehicle filling and truck unloading operations.

3.1.1.1 Supplier Approval

The Supplier Approval process ensures that the vendor meets the minimum requirements and regulations for tank truck unloading as established by the United States Department of Transportation. These supplier procedures also ensure that the vendor understands the site layout, knows the protocols for entering the site and unloading product, and has the necessary spill equipment on board to respond to a spill from the vehicle or fuel delivery hose. The supplier is selected by a consortium bid process managed by the Town of Andover and the above requirements are understood as part of the contract.

3.1.1.2 Observation of Deliveries

The Operations Manager or his designee and the delivery contractor will supervise deliveries from all oil suppliers and used oil removal contractors. Delivery actions and observations include:

1. Verify delivery truck contains type and quantity of oil ordered.

2. Transfer of product should take place during daylight hours in non-rain events when practical.

3. Determine level and volume of fuel in tank to ensure tank can accept volume ordered.

4. Tank truck to be accompanied by trained operator prior to unloading to ensure the correct fill port on tank is accessed (they are all clearly labeled) and verify that spill response materials (absorbent pads, booms and absorbent material) are in adequate supply.

5. Nearby ignition sources within 50 feet of transfer area must be eliminated.

6. Tank truck brakes shall be set and the driver shall remain with the vehicle during the entire unloading period.

7. Inspect hose connections for dripping/leakage. Spill pads should be used to capture product.

8. Ensure that the tank is vented.

9. Prior to filling (and again prior to departure of tank truck), the lowermost drain and all outlets of the tank truck shall be examined for leakage and, if necessary, tightened, adjusted, or replaced to prevent leakage during fuel transfer or while the vehicle is in transit.

10. Place collection bucket below tank truck unloading valve to ensure that any incipient leaks are captured.

11. When transfer is complete, examine hoses before disconnecting. The employee observing fuel transfer shall visually inspect the fuel transfer area for any releases and document the inspection. If a spill occurs during the fuel transfer process, the process shall immediately cease and Wilimington DPW spill reporting procedures shall be followed.

12. Gravity drain all hoses into the tank.

3.1.1.3 Vehicle and Equipment Fueling Practices

Wilmington personnel (all town vehicle operators) authorized to dispense fuel should comply with the following procedures to assist in the safe transfer of petroleum product into equipment or vehicles:

1. Verify container or vehicle is compatible to the fuel to be dispensed.

2. Vehicle or container to be positioned as close as possible to fuel pump.

3. Remove all ignition sources. Turn off engine while fueling!

4. Fuel dispenser nozzle is to be placed as far as possible inside the vehicle or container fill port.

5. Inspect all nozzles, connections, hoses for leakage or damage.

6. Attend dispenser at all times during product transfer.

7. Remove nozzle, hold upright, inspect for leaks, and return to dispenser.

8. In the event of an overflow, contain/remove spill immediately and notify a DPW employee and the Operations Manager.

3.1.2 Tests and Inspections

The personnel at the facility shall perform testing, inspection, and maintenance of all petroleum equipment to keep it performing in an efficient and environmentally sound manner. The tests and inspections shall be performed as discussed in the following subsections:

3.1.2.1 Inspecting Above Ground Storage Tanks (ASTs)

Facility personnel must visually inspect all ASTs (tanks and aboveground piping systems) monthly during operating hours. The ASTs shall be monitored monthly for leaks through manually gauging of the leak detection port for the used oil tank and inspection of the leak detection system on the gasoline/diesel split tank. The results of all inspections and monthly leak detection monitoring shall be recorded on the *AST Inspection Report*, as included in the appendices. The report shall be kept for at least three (3) years in a file maintained onsite.

Monthly inspections include observations of the exterior of the tank for signs of deterioration or spills (leaks), observations of the tank foundation and supports for signs of instability, and observations of the vent, fill and product pipes for signs of poor connection or failure, that could cause a spill.

In addition to these inspections, the facility will verify the integrity of each tank system every ten (10) years, or more often as deemed necessary by the inspection results. Integrity testing will be conducted in accordance with an industry standard procedure such as STI – SP001-00 or API 653. The results of the integrity inspections shall be maintained on-site for the life of the system.

3.1.2.2 Tank Maintenance

All petroleum tank and piping problems shall be immediately reported to the Operations Manager**.** Visible oil spills (leaks) that cause a loss of oil from tank walls, piping or other components shall be repaired or replaced as soon as possible to prevent the potential for a major spill from the source. This is especially important for sources located outside or near drains or catch basins that discharge to the environment.

3.1.2.3 Containment Area Inspections

The bulk storage secondary containment areas shall be inspected monthly for the accumulation of oil and rainwater (if applicable). The inspection should include whether the containment is full of rainwater, oil, or an oil/water mixture (the latter is determined if there is a sheen floating on the water).

If the contained liquid is water with no visible sheen, it can be discharged into the storm water collection system. However, if there is oil, or an oil/water mixture (i.e. sheen or other indicator), the cause of the oil spill must be determined and the oil or mixture needs to be removed and disposed of as waste.

Note: There are currently no areas of outdoor secondary containment exposed to precipitation. If future facility improvements or changes to existing tanks expose these areas to precipitation, this section should be utilized for all secondary containment inspections.

3.1.3 Training

The Town of Wilmington shall provide SPCC spill training for personnel involved with handling petroleum products. Training shall include the following training topics:

- ♦ rules and regulations pertaining to the use and storage of petroleum products;
- ♦ inspection, operation and maintenance of spill equipment, and petroleum storage and dispensing equipment;
- ♦ spill response and cleanup;
- ♦ facility requirements relative to bulk product deliveries and removals;
- ♦ procedures for product transfer to vehicles, equipment and portable containers (fueling)
- ♦ discussions on spill events or equipment failure and updates made to the SPCC Plan to address future spills;
- ♦ spill notification and record keeping; and

- ♦ spill prevention practices.

Records of attendance at training and topics covered shall be maintained by the Wilmington DPW.

Documentation for Training

The SPCC training shall be documented to include the instructor's name, course outline, date, and attendant's names and signatures.

3.1.4 Security

Wilmington DPW normally operates 8 hours per day, five days per week. Fueling of emergency response vehicles (police, fire, DPW overtime vehicles) will also occur outside normal operating hours. There is a vehicle security gate at the entrance to the facility which remains closed outside normal operating hours. Access beyond the gate even when it is open is posted for authorized vehicles only. All tanks are located outdoors and behind the gate while the drums are located inside the maintenance garage. Nighttime lighting is present near the gas and diesel storage tanks. The following are current measures for access to the storage areas:

The fill ports and transition sumps on the gasoline/diesel split tank are locked during non-working hours. The fill port on the used oil tank is also locked during non-working hours. The fuel dispensers are accessed by a key and code system restricting access to authorized users only. The drums are located in the maintenance garage, which is also locked during non-working hours.

3.2 Emergency Response

This section describes the cleanup response and protocols to follow in the event of an oil spill. The uncontrolled discharge of oil to groundwater, surface water or soil is prohibited by State or Federal laws. It is imperative that action be taken to respond to a spill once it has occurred. In the event of an oil spill, depending on the volume and characteristics of the material released, The DPW has defined spill response as either a "Minor Spill Response" or "Major Spill Response" ("Spill Emergency").

A list of Emergency Contacts is included in the Appendices.

3.2.1 Minor Spill Response

A "Minor Spill Response" is defined as one that poses no significant harm to human health or the environment. These spills involve generally less than 10 gallons and can usually be cleaned up by Wilmington DPW personnel, perhaps with assistance from the Fire Department. Other characteristics of a minor spill include the following:

- ♦ the spilled material is easily stopped or controlled at the time of the spill;
- ♦ the spill is localized;

- ♦ the spilled material is not likely to reach surface water or groundwater;
- ♦ there is little danger to human health; and
- ♦ there is little danger of fire or explosion.

(Minor drips from dispenser pumps onto the concrete fueling apron do not qualify as spills)

In the event of a minor spill the following guidelines shall apply:

- ♦ Immediately notify the senior on-site person (i.e., Operations Manager, Operations Supervisor, Foremen, or Office Staff).
- ♦ Call the Wilmington Fire Department if necessary at 978-658-3346, or 911.
- ♦ Under the direction of a senior on-site person or the Fire Department, contain the spill with spill response materials and equipment.
- ♦ Place spill debris in properly labeled waste containers.
- ♦ Complete the *Spill Notification Form* (Appendix D) and send to the Environmental Compliance Officer.

3.2.2 Major Spill Response (Spill Emergency)

A "Spill Emergency" is defined as one involving a spill that cannot be safely controlled or cleaned up. Characteristics include the following:

- ♦ the spill is large enough to spread beyond the immediate spill area, or is more than 10 gallons.
- ♦ the spilled material enters surface water or groundwater (regardless of spill size);
- ♦ the spill requires special training and equipment to cleanup;
- ♦ the spilled material is dangerous to human health; and
- ♦ there is a danger of fire or explosion.

In the event of a spill emergency, the following guidelines shall apply:

- ♦ Call the Wilmington Fire Department if necessary at **978-658-3346, or 911.**
- ♦ Under the direction of a senior employee, attempt to prevent spill from reaching downstream concern points (wetland) by berming or by placing booms.
- ♦ If spill is unable to be contained, all workers shall immediately evacuate the spill site and move to a safe distance away from the spill.
- ♦ A senior on-site person or any staff member if senior staff member not available shall call for medical assistance if workers are injured.

♦ A senior on-site person shall immediately contact the MassDEP Spill Response Line at **1-888-304-1133.** Document the telephone calls on the *Spill Notification Form* in Appendix D.

♦ Notify the Water Treatment Office or DPW Administration Office of the spill potentially affecting the Brown's Crossing Wells to determine if wells should be shut down.

♦ The Fire Department will coordinate cleanup with MassDEP and seek assistance from a cleanup contractor as necessary.

If a senior on-site person is not available at the time of the spill, then the next highest Wilmington DPW employee in command shall assume responsibility.

3.2.3 Waste Disposal

Wastes resulting from a minor spill response will be contained in impervious bags, drums or other sealed containers. The waste will be removed from the site by a licensed waste hauler to a permitted facility. The timeframes and procedures for on-site storage shall comply with the MassDEP Solid and Hazardous Waste Regulations. Non hazardous waste shall be stored in covered and labeled containers, or covering with and on top of plastic sheeting. Non hazardous waste shall not be staged on-site for more than 6 months from the date of generation.

Wastes resulting from a major spill response will be removed and disposed of by a cleanup contractor.

3.2.4 Notification and Reporting

In the event of a minor spill, the facility supervisor or designee should complete a written *Spill Notification Form*. This form details the time, material, and quantity of oil released.

If a major spill occurs at this facility the Public Works Director or designee shall, **in addition to the notification procedures above,** provide written information to MassDEP and shall comply with their Spill Command as necessary.

3.2.4.1 Spill Notification Forms

After making the appropriate communications with Regulatory Agencies and subsequent to the containment of the spill, a *Spill Notification Form*, included in Appendix D, shall be completed and kept onsite with this plan. The *Spill Notification Form* includes a checklist to document the proper notification of Federal, State, and Local Agencies. The form shall be filed by facility name and maintained as long as Wilmington DPW owns and/or operates this facility. When completed, the Town of Wilmington shall keep the *Spill Notification Form* on file for a period of at least three (3) years for future MassDEP and USEPA inspections.

3.2.5 Area Plans

The United States Environmental Protection Agency (USEPA) administer inland Area Plans for spill contingency response by Region throughout the United States. In a major spill event, contacting the National Response Center hotline at **(800) 424-8802** will trigger assistance from the appropriate agency, if needed.

4.0 EXISTING CONTAINMENT AND SPILL CONTROL FEATURES

CAPACITY (gallons)	PRODUCT	EXISTING CONTAINMENT & SPILL CONTROL FEATURES
20,000	Gasoline & Diesel (10,000 gallons each)	1. Double-walled AST tank on concrete pad, installed January 2020. 2. Fuel delivery area contains concrete pad and impervious asphalt. 3. Interstitial electronic leak detection 4. Electronic transition sump leak detection (for piping) 5. Electronic dispenser sump leak detection (for pumps) 6. High Level Alarms 7. Spill Kit
500	Used Oil (outside garage)	1. Double walled tank on concrete pad 2. Visual sight gauge for volume of tank 3. Visual sight gauge for interstitial space 4. Spill Kit
330	Motor Oil (inside maintenance garage)	1. Tank is visually inspected daily 2. Spill kit material on hand. 3. Tank is secured from collision behind metal rack 4. Indoor storage location on concrete floor.
55-gallon Drums	Hydraulic Oils	1. Drip Pans 2. Indoor storage location on concrete floor

APPENDIX A

Facility Plans

Appendix B: MONTHLY SPCC INSPECTION CHECKLIST – INSP. BY: **S= satisfactory, U=unsatisfactory**									**DATE:**
Tank Contents, Size & Location	**10,000 Gallon Gas/Diesel**		**500 Gallon Used Oil**		**330-Gallon Motor Oil Tank**		**55-Gallon Drums**		
ITEM	**SYMBOL**		**SYMBOL**		**SYMBOL**		**SYMBOL**		
I. Exterior Visual Check for Deterioration									
Condition of tank exterior	S	U	S	U	S	U	S	U	
Condition of aboveground piping	S	U	S	U	S	U	S	U	
Condition of foundations and supports	S	U	S	U	S	U	S	U	
Condition of containment structures	S	U	S	U	S	U	S	U	
II. Ancillary Equipment Inspection (IF N/A – leave blank)									
Overfill prevention device functioning properly (if installed)	Y	N	Y	N	Y	N	Y	N	
Valves functioning properly	Y	N	Y	N	Y	N	Y	N	
Vents clear of restrictions	Y	N	Y	N	Y	N	Y	N	
Gauge or monitoring device functioning properly (if installed)	Y	N	Y	N	Y	N	Y	N	
III. Spill and Safety Precautions									
Spill kit present and seal intact (or contents full)	Y	N	Y	N	Y	N	Y	N	
Fire extinguishers in place	Y	N	Y	N	Y	N	Y	N	
Tank system secured to prevent vandalism and unauthorized use	Y	N	Y	N	Y	N	Y	N	
IV. Leak Detection System (IF N/A – leave blank)									
Leak detection system monitored	Y	N	Y	N	Y	N	Y	N	
Regulated Substance in containment area	Y	N	Y	N	Y	N	Y	N	
Evidence of release from tank	Y	N	Y	N	Y	N	Y	N	
Evidence of release from ancillary equipment including piping	Y	N	Y	N	Y	N	Y	N	
Discharge of water required from secondary containment area. If yes, indicate estimated volume in comments.	Y	N	Y	N	Y	N	Y	N	
Evidence of release from ancillary equipment including piping	Y	N	Y	N	Y	N	Y	N	
Notes									

APPENDIX C : SPCC Emergency Contacts

Spill Reporting Hotlines

Agency	Telephone #
Massachusetts Environmental Protection Spill Response	1-888-304-1133
National Response Center USEPA	1-800-424-8802

Local Emergency Agencies

Agency	Telephone #
Wilmington Fire Department	911 / 978-658-3346
Wilmington Police Department	911 / 978-658-5071

Tank System Assistance Contractor

Company/Location	Telephone #
Petroleum Management Services, Reading, MA Attn: Bob Wass or Robert Douglas	781-718-4911 774-406-1673 781-718-5498
Dependable Services, Plymouth, MA Frank Turner, Original Install Contractor	617-794-9030

Owner Operator (Town of Wilmington, MA)

Name/Title	Telephone #
Jamie M. Magaldi	978-375-9758

Appendix D: Wilmington DPW SPCC Spill Notification Form

Part A: Basic Spill Data	
Type of Spilled Substance:	**Notification Person:**
Quantity Released:	**Spill Date and Time:**
Location of Spill:	**Discovery Date and Time:**
	SPILL DURATION:
Facility Name & Location: Wilmington DPW 135 Andover Street Wilmington, MA 01887	**Release to**: [ ]air [ ] surface water [ ] groundwater [ ] well [ ] soil [ ] stormwater collection system [ ] sanitary sewer [ ] containment [ ]other_____
Owner / Company Name: Town of Wilmington 121 Glen Road Wilmington, MA 01887	**Telephone:** Facility: _____ 24 hr.: _____
Nature of spill and any environmental or health effects: [ ]Injuries [ ]Fatalities	

Part B: Notification Checklist		
Spill Type	**Notification Date and Time**	**Name of Person that Received Call**
Spill is any amount of petroleum product impacting soils or surface water bodies:		
Massachusetts Environmental Protection 1-888-304-1133		
National Response Center 1-800-424-8802		

This form shall be filed by facility name and maintained as long as Wilmington Department of Public Works owns and/or operates the facility.

Appendix E: Wilmington Department of Public Works Vehicle and Equipment Fueling Practices

Town of Wilmington Employees authorized to dispense fuel shall comply with the following procedures to assist in the safe transfer of petroleum product into equipment or vehicles:

1. Verify container or vehicle is compatible to the fuel to be dispensed.
2. Vehicle or container to be positioned as close as possible to fuel pump.
3. Remove all ignition sources. Turn engine off while fueling! No Smoking.
4. Fuel dispenser nozzle is to be placed as far as possible inside the vehicle or container fill port.
5. Inspect all nozzles, connections, and hoses for leakage or damage.
6. Attend dispenser at all times during product transfer.
7. Remove nozzle, hold upright, inspect for leaks, and return to dispenser.
8. In the event of an overflow, contain/remove spill immediately and notify the Operations Manager or senior DPW staff.
9. Report broken hoses or disconnected nozzles to the DPW Staff or Wilmington Public Safety when the DPW is closed so that the proper personnel can be notified.
10. Report spills to the Wilmington Fire Department: 911 or 978- 658-3346.

Received by

Signature: _____ **Date:** _____

Print Name: _____

Department: _____

APPENDIX F: WILMINGTON DEPARTMENT OF PUBLIC WORKS
Required Practices for all Oil Deliveries and Used Oil Removals

The Operations Manager or his designee will supervise deliveries from all oil suppliers and used oil removal contractors. Delivery actions and observations include:

1. Verify delivery truck contains type and quantity of oil ordered.

2. Transfer of product should take place during daylight hours in non-rain events if practical. Unlock fill port during on-hour deliveries.

3. Determine level and volume of fuel in tank to ensure tank can accept volume ordered.

4. Tank truck to be accompanied by trained operator and Wilmington DPW employee prior to unloading. Personnel shall verify correct fill port on tank is accessed and verify that spill response materials (absorbent pads, booms and absorbent material) are in adequate supply.

5. Fuel transfer containment device (where applicable) must be deployed and inspected to ensure it is in proper working condition.

6. Nearby ignition sources within 50 feet of transfer area must be eliminated. No smoking is allowed in the vicinity of the tank or bulk delivery vehicle during the bulk transfer process

7. Tank truck brakes shall be set and the driver shall remain with the vehicle during the entire unloading period.

8. Inspect hose connections for drips/leakage. Spill pads should be used to capture product.

9. Ensure that the tank vent line is open and unobstructed.

10. Prior to filling (and again prior to departure of tank truck), the lowermost drain and all outlets of the tank truck shall be examined for leakage and, if necessary, tightened, adjusted, or replaced to prevent leakage during fuel transfer or while the vehicle is in transit.

11. Place collection bucket below tank truck unloading valve to ensure that any incipient leaks are captured.

12. When transfer is complete, examine hoses before disconnecting. The designated employee observing fuel transfer shall visually inspect the fuel transfer area for any releases and document the inspection. If ***any*** spill occurs during the fuel transfer process, the process shall immediately cease and spill reporting procedures shall be followed.

13. Gravity drain all hoses into the tank.

14. Inspect and clean (where applicable) containment system.