

**RELEASE ABATEMENT MEASURE STATUS REPORT**

**10-50 Main Street  
Ashland, MA  
MassDEP RTN 3-15917**

**Prepared for:  
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Holliston, Massachusetts**

**Prepared by:  
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**June 2025**

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### **LIMITATIONS**

# 1 INTRODUCTION

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## 1.0 INTRODUCTION

Campbell Environmental Incorporated (CEI) prepared this Release Abatement Measure (RAM) Plan status report on behalf of Ashland Properties, LLC (Ashland Properties). No MCP response actions were conducted since the last RAM status report was submitted to the MassDEP in January 2025. Ashland Properties LLC has been working with the Town of Ashland to obtain the necessary permits for construction. Ashland Properties LLC anticipates that permitting for this project may take an additional 6-12 months or longer. Ashland Properties proposes to undertake response actions according to the schedule outlined in Section 3.8 of this report. This plan describes the proposed response actions for the site located at 10-50 Main Street, Ashland, Massachusetts. The plan incorporates comments provided by the Massachusetts Department of Environmental Protection (MassDEP) and the USEPA.

The site is listed under Release Tracking Number (RTN) 3-15917. The site was closed in 2011 via submittal of a Class A3 Response Action Outcome (Permanent Solution Statement with Conditions). An Activity and Use Limitation (AUL) was filed in May 2011 restricting residential, day care and school use at the site.

The site consists of approximately 7.79 acres of land identified on the Town of Ashland Assessors Map as parcel 0140-0128. The site is largely occupied by an interconnected commercial building and paved parking. Historical uses of the property included a textile mill and manufacturing. The site is currently occupied by commercial and warehousing tenants.

Ashland Properties intends to conduct response actions sufficient to allow future residential use at the site. Following the completion of response actions a new AUL will be filed along with a revised Permanent Solution Statement (PSS) and Risk Assessment.

Ashland Properties plans to renovate the existing site property for mixed use commercial and residential development. As part of their redevelopment plan, a ground floor open air parking garage will be constructed. The new building will not include a basement. Residential development will occur above the parking garage. There are currently no plans to utilize the 10 Main Street building for residential development. Note that the building design plans are subject to change due to permitting requirements. The construction of a ground floor/open air garage and the installation of vapor barriers will mitigate the potential for vapor intrusion. A plan for the proposed vapor barrier installation is attached. Construction of approximately 2,540 square feet of service/storage/utility rooms in the open-air garage is also planned. Installation of vapor barriers is proposed in these ground floor garage service/storage/utility rooms and during renovation of the 10 Main Street building. Vapor barriers will be installed in all ground floor enclosed rooms. Following the installation of the vapor barriers, indoor air testing for chlorinated volatile organic compounds (cVOCs) will be conducted. Limited soil excavation is planned to install footings and new utilities. Field screening of soils with a photoionization detector (PID) will occur during excavation. To the extent feasible, if elevated volatile organic compound impacts are detected during excavation (e.g. field

## **SECTION 1 INTRODUCTION**

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screening results above 100 ppmv) then soils will be segregated for proper disposal. The majority of the final site configuration will be paved or covered by parking garage.

This information is provided in accordance with the Massachusetts Contingency Plan (MCP) 310 CMR 40.0444. Figures, including a MassGIS Priority Resource Map and a Locus Map are attached. Detailed Site Plans will be submitted to MassDEP once the final redesign has been completed.

## **2 SITE CHARACTERISTICS**

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### **2.1 Site Contacts**

Persons responsible for the RAM include the following:

Richard Gordon, President  
Ashland Properties LLC  
330 Hopping Brook Road  
Holliston, MA 01746  
Ph. 5088938931

The Licensed Site Professional is:

George E. Campbell  
Campbell Environmental Incorporated  
38 Sunset Drive  
Northboro, MA 01532  
Ph. 5083080402

### **2.2 SITE LOCATION, DESCRIPTION AND OPERATIONS**

The attached MassDEP GIS Priority Resource Map and Site Locus Map identifies the site on the Framingham, Massachusetts 15-minute series topographic quadrangle map published by the United States Geological Survey (USGS).

The site consists of approximately 7.79 acres of land identified on the Town of Ashland Assessors Map as parcel 0140-0128. The site is largely occupied by an interconnected commercial building and paved parking. Historical uses of the property included a textile mill and manufacturing. The site is currently occupied by commercial and warehousing tenants.

The subject site includes groundwater and soils impacted by OHM. As described in the previous PSS, the site is impacted by on site historical releases of Oil and Hazardous Materials (OHM) including cVOCs, metals and PCBs. The site is also impacted by releases of OHM derived from the upgradient Nyanza Superfund Site. A map of the Nyanza site, prepared by the EPA, illustrating the subject site, is attached. Groundwater at the site is impacted by OHM releases derived from the Nyanza site.

### **2.3 SITE HYDROLOGY AND SENSITIVE RECEPTORS**

#### **2.3.1 SURFICIAL GEOLOGY AND SOILS**

Based on data collected during subsurface investigations, soils beneath the site consist of historical fill materials underlain by sand and gravel. The Sudbury River is located immediately northwest of the site. The groundwater flow direction is northwest, towards the Sudbury River.

## SECTION 2 SITE CHARACTERISTICS

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### 2.3.2 SENSITIVE RECEPTORS

The site is currently occupied by commercial and warehousing tenants and is largely covered by pavement and building. The site is located in a mixed use commercial and residential area in Ashland. The Sudbury River is downgradient of the site. Note that a retaining wall, located north of the site, separates the Sudbury River bank from the paved parking area. Residential properties are not downgradient. No potable wells are located within 500 feet of the site. The site is not located within a designated Zone II groundwater recharge area or IWPA, Zone A of a Class A Surface Water or Potential Drinking Water Source Area. In accordance with the MCP, site groundwater is not designated as GW-1 (protective of drinking water). The Sudbury River is north and west of the site. Potential impacts to the Sudbury River have been investigated as part of the assessment at the Nyanza superfund site.

cVOC impacted groundwater is located within 30 feet of the on-site occupied commercial buildings and is less than 15 feet below surface grade. Groundwater at the site is therefore designated as GW-2 and GW-3. Vapor intrusion risk was evaluated during the 2011 Response Action Outcome (RAO/site closure) Statement. Based on the shallow depth to groundwater and the VOCs present in groundwater, a potential exists for exposure to VOCs in the indoor air through the vapor exposure pathway. Response actions including construction of an open-air garage and installation of vapor barriers are proposed to reduce the potential risk to future on site occupants.

## **3 RELEASE ABATEMENT MEASURE**

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### **3.0 RAM**

#### **3.1 RAM OBJECTIVE AND ACTIVITIES**

The objective of the RAM is to conduct additional response actions to allow for commercial and residential use of the property and to properly manage impacted soil and groundwater encountered during excavation. Following the response actions, a new Activity and Use Limitation and revised Permanent Solution Statement and Risk Assessment will be filed with MassDEP. Additional response actions will include the installation of vapor barriers to mitigate potential vapor intrusion. The vapor barriers will be installed in the service/storage/utility rooms in the open-air garage and in the 10 Main Street building. Note that due to permitting, the layout of the buildings may change, however Ashland Properties intends to install vapor barriers in all interior ground floor spaces that are not open-air parking. Following the construction of the parking garage and installation of the vapor barriers, a minimum of two rounds of indoor air sampling will be conducted via summa canisters and the EPA TO-15 Method. In addition, a limited quantity of soil will be excavated when subsurface utilities and footings are installed. Soil quality will be assessed via field screening with a calibrated photo ionization detector (PID) via the jar headspace technique and sampling for VOCs. The RAM is proposed to reduce potential risks to human health, safety, public welfare, and the environment. The proposed RAM activities are further described below. RAM activities are likely expected to commence in 2026.

#### **3.2 CONCEPTUAL SITE MODEL**

As documented under RTN 3-15917, OHM, including tetrachloroethylene, (PCE) and associated daughter products and metals likely were released on site due to historical use of the property. The site groundwater is also impacted by OHM, including VOCs derived from the upgradient Nyanza superfund site. Over time, these VOCs are likely to decline in concentration due to cleanup at the Nyanza site and the natural attenuation of VOCs. Prior indoor air sampling in the current site buildings conducted by both the USEPA and ARCADIS (prior consultant) indicated that VOCs concentrations in indoor air are acceptable for commercial uses. Additional response actions, including the construction of an open-air ground floor parking garage and installation of vapor barriers, will be conducted so that the site may be used for residential purposes. Following construction, the great majority of the site will be covered by garage, building or asphalt paved roadways and parking. With the exception of 10 Main Street, all residential development will occur over the open-air parking garage. No ground floor residential developments are proposed. Following completion of the response actions, a new AUL will be filed. A draft AUL will be provided to the MassDEP prior to recording the AUL. The new AUL will include limitations on ground floor residential development and require LSP oversight during future management of soil at the site. Following the completion of the response actions, a revised PSS, risk assessment and new AUL will be prepared.

## **3 RELEASE ABATEMENT MEASURE**

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### **3.3 SOIL ASSESSMENT AND MANAGEMENT**

Activities that may be conducted under this RAM include field screening of soils, soil excavation, stockpiling of soil, post excavation sampling of soils for laboratory analysis, soil classification sampling and subsequent transportation of the soil to an authorized disposal facility. Excavation for footings, utilities or lighting fixtures likely is not expected to exceed ten feet below surface grade. Prior to and during construction, three monitoring wells, previously installed by the USEPA, will be protected by steel plates and protective concrete barriers. An excavator or backhoe will be used to advance excavations. As needed, haybales and absorbent booms will be installed to prevent migration of sediment and water to storm sewers and surface water. Dewatering of groundwater is not currently planned although a limited quantity of groundwater or rainwater may be recovered for disposal at a licensed facility. If needed, the recovered groundwater or rainwater will be containerized in a fractionation (frac.) tank and sampled prior to offsite disposal. Post excavation bottom and sidewall soil samples will be retained for field screening with a calibrated photoionization detector (PID) and the jar headspace technique. Select samples will be retained for VOC laboratory analysis. When feasible, soils with elevated VOC concentrations (e.g. above 100 ppmv) will be stockpiled on plastic for preclassification sampling and subsequent disposal. The impacted soils will be stockpiled on and covered with plastic. Following post excavation sampling, the excavation will either be backfilled with clean fill and/or native excavated soils. Soils designated for off-site disposal will be sampled for waste classification and transported to an authorized facility under a Massachusetts 21E Bill of Lading (BOL) or uniform hazardous waste manifest. Up to 500 cubic yards of soil may be stockpiled and securely covered with plastic prior to transportation of this soil to an authorized facility.

### **3.4 VAPOR BARRIERS**

Most of the ground floor of the new building will be open-air parking. Residential construction will not occur on the ground floor but will occur above the open-air parking garage. A 40 mil vapor intrusion barrier or equivalent will be installed under the service/storage/utility rooms on the ground floor and at the ground floor at 10 Main Street. The installation will follow manufacturers specifications. A geomembrane will also be installed below the vapor wrap barrier. Smoke testing will be conducted following installation to check for leaks in the barrier. MassDEP and USEPA will be provided with notice prior to the installation of the barriers and smoke testing. Following the smoke testing, a topping concrete slab will be applied to protect the vapor barrier and further reduce the potential for future vapor intrusion. Additional information concerning the vapor barrier and possible sub slab depressurization system will be included in subsequent RAM Status and/or completion reports. Following installation, a minimum of two rounds of indoor air sampling will be conducted for cVOCs via EPA method TO-15.

## **3 RELEASE ABATEMENT MEASURE**

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### **3.5 ENVIRONMENTAL MONITORING**

The following environmental monitoring plan will be implemented during the RAM activities:

#### **3.5.1 INDOOR AIR SAMPLING**

Following the construction of the garage and installation of vapor barriers, two rounds of indoor air sampling for cVOCs will be conducted in central locations inside the building during cold weather/winter months. Sample locations will include the ground floor service/storage/utility rooms, the 10 Main Street building and select locations within the residential development. Consistent with MassDEP guidance, doors and windows will be closed for at least 24 hours prior to sampling. Sampling will occur following the construction/renovation. MassDEP and USEPA will be provided with notice prior to sampling. The air samples will be collected using laboratory supplied summa canisters via the EPA TO-15 Method over a 24-hour time period. RAM response actions will be governed by a site-specific health and safety plan.

#### **3.5.2 EXCAVATION AIR MONITORING**

Ambient air in the vicinity of the excavation area will be periodically monitored with a PID. The detection of elevated VOCs during excavation will require implementation of proper health and safety protocols and may require the temporary cessation of excavation. In addition, soil samples collected during the assessment will be field screened with a PID via the jar headspace screening technique. Screening of soil samples during the assessment will help determine whether the objectives of the RAM have been met. Following screening, select post excavation soil samples will be retained for VOC and metals laboratory analysis.

#### **3.5.3 DUST MONITORING**

Minimal dust is expected due to the limited size of the excavation areas for footings/utilities. However, the excavation area will be visually monitored for dust. Excavation will cease if excessive dust is detected. If needed, spray water will be used to control dust via spray hose. Excavated soils will be securely stockpiled either in a roll off or covered with plastic at the end of each workday.

#### **3.5.4 RUNOFF**

Due to the small size of the proposed excavations, significant runoff during field activities is considered unlikely. As needed, absorbent booms and/or hay bales will be used to prevent site runoff. Stormwater catch basins will be protected by hay bales. Contaminated soils will be stockpiled on impervious surfaces or plastic and securely covered with plastic. Crushed stone will be used as needed to reduce the potential for dust in unpaved areas. Trucks will be inspected prior to leaving the site. If excessive soil is

## **3 RELEASE ABATEMENT MEASURE**

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detected on the tires, the truck tires will be cleaned via scrubbing and/or spray washing with potable water. The wash water will be either contained or allowed to infiltrate into the site ground surface.

### **3.5.5 SECURITY**

Access to the excavation areas will be restricted via temporary fencing and/or safety cones and caution tape. Only authorized personnel will be allowed access to the work areas. All work areas and stockpiles will be secured at the end of the day. Prior to the start of construction or demolition, three previously installed EPA monitoring wells will be protected by steel plates and/or protective concrete barriers. These wells are identified as MW-40Main (located in front of 30 Main Street) and RMW-405A and RMW-405B (located in the northeast corner of the rear parking lot). These monitoring wells are identified on the attached Soil Boring and Monitoring Well Location Plan Map.

### **3.6 PERMITS**

Digsafe will be contacted at least 72-hours prior to the start of the excavation. If needed, an excavation permit will be obtained from the Town of Ashland. Ashland Properties will also obtain any other Town of Ashland permits needed for this project. These permits likely will include a construction permit and notice of intent as needed.

### **3.7 PUBLIC INVOLVEMENT**

Notification letters were forwarded to Town of Ashland officials to inform them of the RAM Plan.

### **3.8 SCHEDULE**

Additional response actions including groundwater sampling are planned in the next six months.

Pending permitting, construction is likely to occur in 2026. Descriptions of field activities will be summarized in RAM Status reports prepared as required by the MCP. Following completion of RAM activities, a RAM Completion report will be prepared.

### **3.9 HEALTH AND SAFETY**

RAM response actions will be governed by a site-specific health and safety plan (HASP). Ashland Properties will develop their health and safety plan for construction activities. All field sampling and LSP oversight will be performed in accordance with a HASP.

## **4 RELEASE ABATEMENT MEASURE**

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### **4.0 SOIL AND GROUNDWATER SAMPLING**

#### **4.1 SOIL SAMPLING/MONITORING WELL INSTALLATION**

Subsurface investigations were conducted in March and April 2022. These investigations included the field screening and sampling of soils and the installation of three monitoring wells and the sampling of site groundwater. The soil investigations were conducted to assess current soil quality in the vicinity where future construction may occur. The groundwater sampling was conducted to determine if chlorinated volatile organic compounds (VOCs) currently exceeds the MassDEP GW-2 Standards.

On March 22, 2022, seven soil borings (C-1 through C-7) were advanced on site via a Geoprobe direct push drilling rig. Prior to drilling the site was premarked for Digsafe and Town of Ashland subsurface utility clearance. Drilling was conducted by a Massachusetts licensed driller, Technical Drilling Services, with oversight provided by a CEI hydrogeologist. Soil samples were collected with two-inch diameter five-foot long plastic sleeves. Note that shallow drill (approximately one to two feet below surface grade) refusal was encountered immediately east of the building at 50 Main Street. This refusal is likely due to the presence of a historic building foundation. Soil samples were continuously screened with a photoionization detector (PID) using the jar head space screening method. All jar headspace field screening results were non detected. Subsurface lithology included approximately up to five feet of historical fill underlain by predominantly fine to coarse sands and gravel. Monitoring wells MW-1, MW-2 and MW-3 were installed at boring locations C-1, C-3 and C-5. The monitoring wells were constructed with two-inch diameter PVC solid riser and well screen. The monitoring wells were completed with a surface mounted steel road box set in concrete. Subsurface lithologic logs and well construction schematics are attached. Three composite soil samples (C-1, C-3 and C-5) from 2-10 feet below grade were retained for analysis of soil preclassification parameters including VOCs, PCBs, RCRA 8 metals and semi-volatile organics. Four composite soil samples (C-2, C-4, C-6 and C-7) from 2-5 feet below grade were retained RCRA 8 metals and PCBs. All soil samples were collected using laboratory supplied glassware and following collection, transported on ice to a Massachusetts certified laboratory for analysis.

The laboratory analytical results indicate that these soil samples did not exceed Massachusetts Contingency Plan (MCP) S-1/GW-2/GW-3 Soil Standards. See the attached tabular results summary. See the attached figure illustrating the soil boring locations.

On July 3, 2024, two additional soil borings were advanced on site via a Geoprobe direct push drilling rig. Prior to drilling, the drill locations were premarked for Digsafe and Town of Ashland subsurface utility clearance. Drilling was conducted by Geosearch, a Massachusetts licensed driller, with oversight provided by a CEI hydrogeologist. Soil samples were collected with two-inch diameter five-foot long plastic sleeves. Soil

## 4 RELEASE ABATEMENT MEASURE

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samples were screened with a calibrated photoionization detector (PID) via the jar headspace screening method. All jar headspace field screening results were non detected. Subsurface lithology included approximately up to five feet of historical fill underlain by predominantly fine to coarse sands and gravel. The borings were completed as monitoring wells MW-4 and MW-5. The monitoring wells were constructed with two-inch diameter PVC solid riser and well screen. The monitoring wells were completed with a surface mounted steel road box set in concrete.

### 4.2 GROUNDWATER SAMPLING

On April 11, 2022 groundwater samples were collected from monitoring wells MW-1, MW-2 and MW-3. Prior to sampling, each well was gauged with an electronic interface probe capable of detecting non aqueous phase liquids (NAPL) and the depth to the water table at an accuracy of 0.01 feet or greater. No NAPL was detected during gauging or sampling. As measured from the top of the well casing, the depth to the water table ranged from 2.56 feet at MW-2 to 7.23 feet at MW-1. Following gauging, using dedicated disposable sampling tubing, all wells were purged of approximately three times the volume of water present in each well. Following purging, groundwater samples were collected using laboratory supplied sample bottles. Following collection, samples were transported on ice to a Massachusetts certified laboratory for VOC analysis.

The April 2022 groundwater analytical data indicates that chlorinated VOCs exceed MCP GW-2 Standards (protective of indoor air quality) at monitoring well MW-1 and MW-2. Specifically, trichloroethene was detected in MW-1 at 14.4 ug/l and cis-1,2 dichloroethene was detected at 29.2 ug/l in MW-1 and 67.5 ug/l at MW-2. These analytical results are generally consistent (but lower) than historical data. See the attached tabular results summary and the laboratory analytical data. See the attached figure illustrating the soil boring/monitoring well locations.

On September 17 2022 and October 20, 2022 groundwater samples were collected from monitoring wells MW-2, and B-5 (September) and MW-1 and MW-3 (October). Note that well B-5 was not installed by CEI but was installed during prior historical site investigations. B-5 is located in close proximity to the building at 10 Main Street. Due to limited access (presence of a vehicle) two visits were needed to sample these monitoring wells. Prior to sampling, each well was gauged with an electronic interface probe capable of detecting non aqueous phase liquids (NAPL) and the depth to the water table at an accuracy of 0.01 feet or greater. NAPL was not detected during gauging or sampling. As measured from the top of the well casing, the depth to the water table ranged from 3.54 feet at MW-2 to 15.02 feet at MW-1. Following gauging, using dedicated disposable sampling tubing, all wells were purged of approximately three times the volume of water present in each well. Following purging, groundwater samples were collected using laboratory supplied sample bottles. Following collection, samples were transported on ice to a Massachusetts certified laboratory for VOC analysis.

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The fall 2022 groundwater analytical data indicates that MCP GW-2 Standards (protective of indoor air quality) were exceeded at monitoring well MW-1 for trichloroethene, and at MW-2 for cis-1,2-dichloroethene. Specifically, trichloroethene was detected in MW-1 at 7.7 ug/l and cis-1,2-dichloroethene was detected at 73.6 ug/l at MW-2. No other VOCs exceeded MassDEP GW-2 groundwater standards. VOCs did not exceed any MassDEP GW-2 Standards at monitoring wells MW-3 and B-5. These analytical results are generally consistent (but generally lower) than historical data. See the attached tabular results summary.

On September 17, 2023 groundwater samples were collected from monitoring wells MW-1, MW-2 and B-5. Note that well B-5 was not installed by CEI but was installed during prior historical site investigations. B-5 is located in close proximity to the building at 10 Main Street. Due to limited access (presence of a vehicle) MW-3 was not sampled during the site visit. Prior to sampling, each well was gauged with an electronic interface probe capable of detecting non aqueous phase liquids (NAPL) and the depth to the water table at an accuracy of 0.01 feet or greater. NAPL was not detected during gauging or sampling. As measured from the top of the well casing, the depth to the water table ranged from 3.54 feet at MW-2 to 15.02 feet at MW-1. Following gauging, using dedicated disposable sampling tubing, all wells were purged of approximately three times the volume of water present in each well. Following purging, groundwater samples were collected using laboratory supplied sample bottles. Following collection, samples were transported on ice to a Massachusetts certified laboratory for VOC analysis.

The fall 2023 groundwater analytical data indicates that MCP GW-2 Standards (protective of indoor air quality) were exceeded at monitoring well MW-1 for trichloroethene, and at MW-1 and MW-2 for cis-1,2-dichloroethene. Specifically, trichloroethene was detected in MW-1 at 13.9 ug/l and cis-1,2-dichloroethene was detected at 21.4 ug/l at MW-1 and 64.1 ug/l in MW-2. No other VOCs exceeded MassDEP GW-2 groundwater standards. VOCs did not exceed any MassDEP GW-2 Standards at monitoring well B-5. These analytical results are generally consistent (but generally lower) than historical data. See the attached tabular results summary.

On July 17 2024 groundwater samples were collected from monitoring wells MW-1, MW-2 and MW-4. Due to vehicles limiting access, MW-3 and MW-5 were sampled on July 19, 2024. Prior to sampling, each well was gauged with an electronic interface probe capable of detecting non aqueous phase liquids (NAPL) and the depth to the water table at an accuracy of 0.01 feet or greater. NAPL was not detected during gauging or sampling. As measured from the top of the well casing, the depth to the water table ranged from 3.69 feet at MW-5 to 12.64 feet at MW-1. Following gauging, using dedicated sampling materials, all wells were purged of approximately three times the volume of water present in each well. Following purging, groundwater samples were collected using laboratory supplied sample bottles. Following collection, samples were transported on ice to a Massachusetts certified laboratory for VOC analysis.

## 4 RELEASE ABATEMENT MEASURE

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The July 2024 groundwater analytical data indicates that MCP GW-2 Standards (protective of indoor air quality) were exceeded at monitoring well MW-1 and MW-5 for trichloroethene, and at MW-1, MW-2 and MW-3 for cis-1,2-dichloroethene and at MW-3 for vinyl chloride. Specifically, trichloroethene was detected in MW-1 at 15.6 ug/l and at MW-5 at 6.5 ug/l; cis-1,2-dichloroethene was detected at 31 ug/l at MW-1, 63 ug/l in MW-2 and 32,7 ug/l in MW-3. In addition, vinyl chloride was detected at 9.8 ug/l in MW-3. No other VOCs exceeded MassDEP GW-2 groundwater standards. These analytical results are generally consistent (but generally lower) than historical data. See the attached tabular results summary.

### 4.3 SOIL GAS MONITORING

On December 12, 2024, three sub-slab soil gas probes were installed through the basement foundation. A 5/8-inch diameter hammer drill was used to advance drilling. The bore hole was advanced to approximately one inch below the concrete foundation, which was approximately eight inches below basement floor grade. A Vapor Pin soil gas point was installed in soil gas points SG-1 and SG-2. Soil gas point SG-3 was completed as a temporary point by installing polyethylene tubing in the borehole to below the slab. All the points were secured in place using hydraulic cement. Each point was completed with a surface cap that may be removed prior to sampling. One apparent existing soil gas point, labeled ESG (likely installed by a prior consultant) also was identified in the basement. See the attached map illustrating the approximate locations. Note that storage and heating systems are located nearby and this area of the site is not occupied on a routine basis.

On December 19, 2024, the soil gas in SG-2 was screened with a Thermoelectron 580B PID, equipped with a 10.6 eV lamp. Prior to PID screening the point was purged of air using a Gilian GilAir Plus pump connected to the point via Teflon tubing. Sub-slab soil gas was purged at a rate of approximately 500 ml/min. After approximately 5 liters of air was purged, soil gas was collected in a Tedlar bag. The PID then was used to screen the Tedlar bag air with a non-detect measurement.

Due to the relatively close proximity of the four soil gas points, two soil gas points were selected for laboratory cVOC sampling. On December 19, 2024, using laboratory supplied canisters and flow regulators, soil gas points SG-1 and SG-3 were sampled for cVOCs via EPA method TO-15. Prior to sampling a water 'dam' test was conducted to verify that the cement seal is sound. The 'dam' test confirmed that the seal was sound. Both SG-1 and SG-3 were also purged using a GilAir Plus pump connected to the point via Teflon tubing. A three-way valve was installed in the tubing to allow for soil gas sampling via a flow regulator and air canister. Immediately following purging, the valve to the air pump was closed and the valve to the flow regulator and canister was opened. The soil gas samples were collected under vacuum over a 15-minute time period. Following collection, the soil gas samples were submitted to Phoenix Analytical Laboratories for cVOCs analysis via EPA Method TO-15. Analytical results indicate

## 4 RELEASE ABATEMENT MEASURE

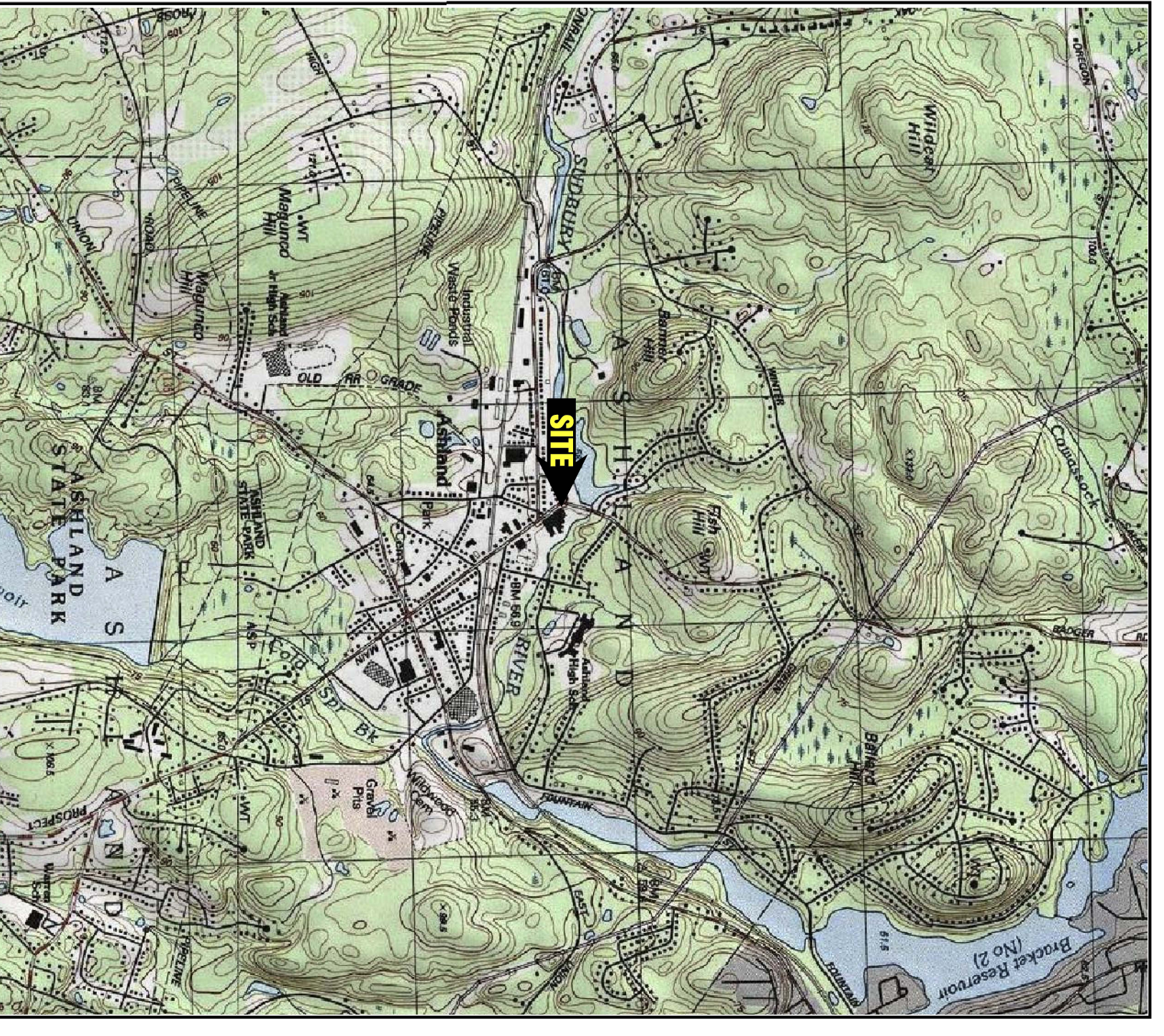
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trichloroethene (TCE) was detected in the SG-1 and SG-3 samples at 19.1 and 46.7 ug/m<sup>3</sup> respectively. Cis 1,2 Dichloroethene was detected in SG-3 at 7.33 ug/m<sup>3</sup>. No other cVOCs were detected in the soil gas. Note that TCE in SG-3 exceeded the MassDEP subslab residential screening values, but both TCE and 1, DCE were below the MassDEP commercial screening values. Confirmatory soil gas testing is recommended.

The existing apparent soil gas point, labeled ESG, includes a one-inch PVC pipe set in a four-inch diameter manhole. This point was not sampled due to the unknown construction specifications. However, the headspace air in this point was monitored with a PID. Immediately after opening, Teflon tubing connected to a PID was lowered into the ESG point. The point headspace air was then monitored with the PID for approximately five minutes with a non-detect measurement.

### 4.4 REPRESENTATIVE EVALUATION/DATA USABILITY ASSESSMENT

Soil and groundwater sampling occurred during the RAM assessment activities. Multiple groundwater sampling events occurred at upgradient and downgradient locations. This sampling provides a representative assessment of current groundwater conditions. The recent groundwater data is generally consistent with, but lower than the prior/historical data. The groundwater and soil samples were collected using dedicated equipment and with bottles provided by the analytical laboratory. The monitoring wells were purged prior to collecting samples. All samples were properly preserved and transported to a certified laboratory for analysis using MassDEP CAM methods. The soil and groundwater laboratory analytical data was reviewed and may be used for MCP decision making with presumptive certainty. The recent soil gas samples were collected using laboratory supplied canisters and flow regulators. Soil gas points were purged prior to sampling. The samples were collected under vacuum over fifteen minutes. Note that a zero vacuum was noted at the laboratory. Although there is no indication that ambient air was collected during soil gas sampling, we recommend resampling of soil gas to provide additional site data. Resampling of groundwater is also recommended to provide further assessment of the current site conditions.



**SITE**

ASHLAND STATE PARK

SUDBURY

Wildcat Hill

Ashland

Fish Hill

Bracket Reservoir (No 2)

Magunac Hill

SISKIYOU RIVER

COURSOCK

ASHLAND STATE PARK

BIRCH

WT

ASHLAND HIGH SCHOOL

WT

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ASHLAND STATE PARK

BIRCH

# MassDEP - Bureau of Waste Site Cleanup

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

### Site Information:

10 MAIN STREET ASHLAND, MA

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



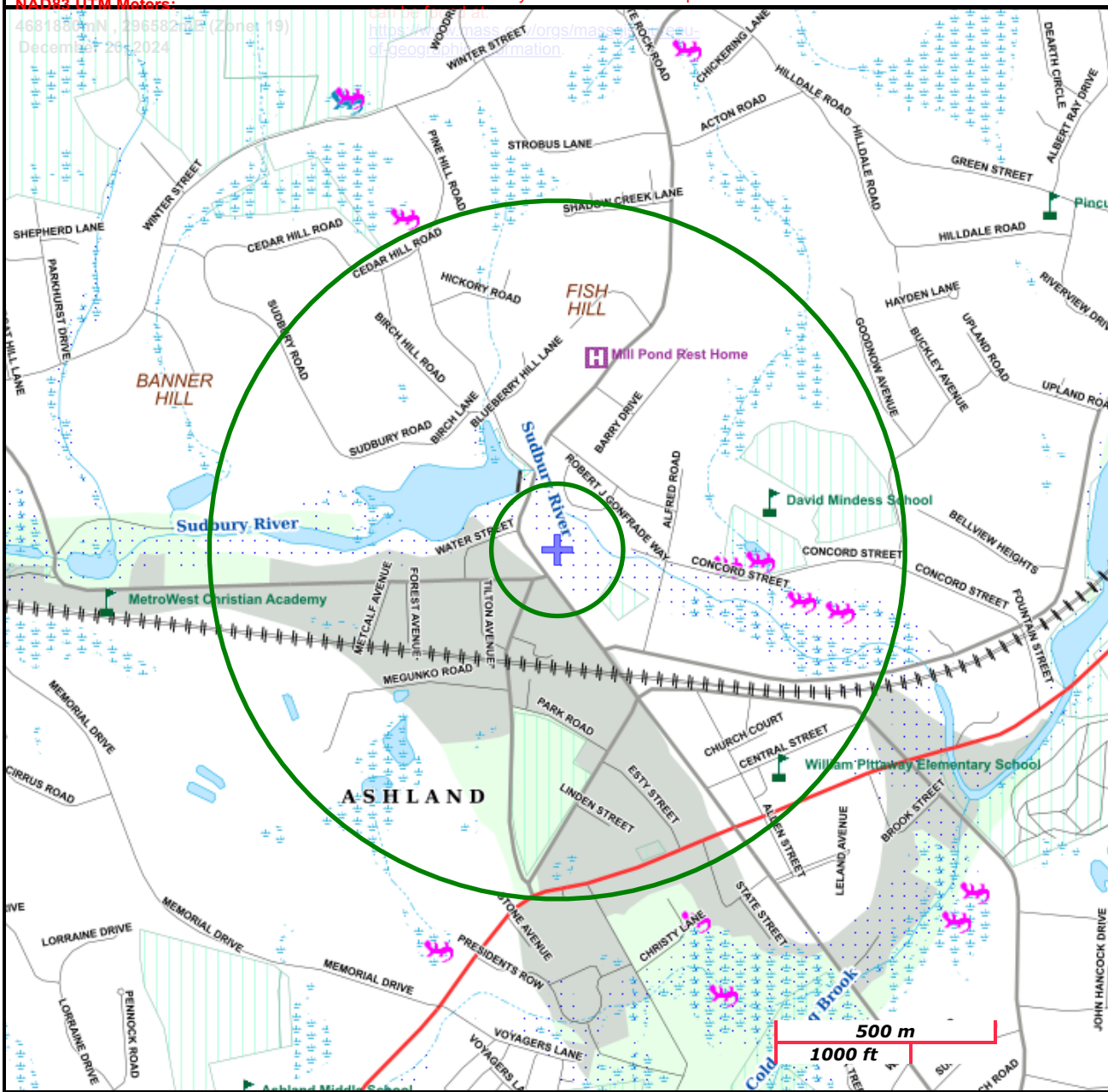
# MassDEP

Commonwealth of Massachusetts  
Department of Environmental Protection

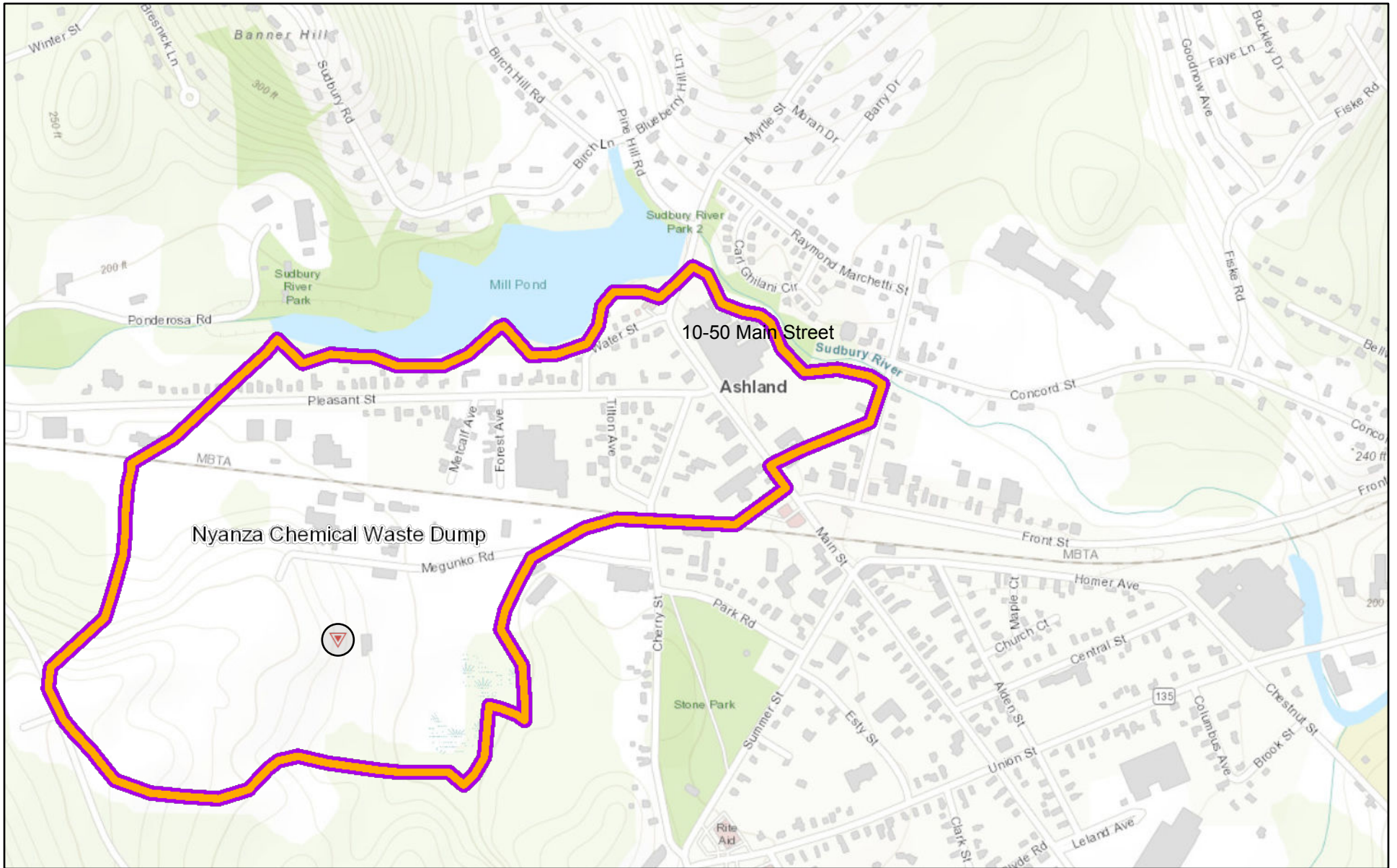
### NAD83 UTM Metrics:

468100m N, 296582m E (Zone 19)  
December 26, 2024



<https://mass.gov/orgs/mass-dep/geog-phi-information>








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)	NHESP Pri-Hab of Rare Species; Vernal Pool: Cert., Potential		
	Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.		

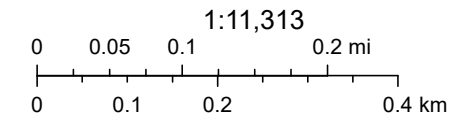


April 28, 2020

-  Override 1
-  State Outlines

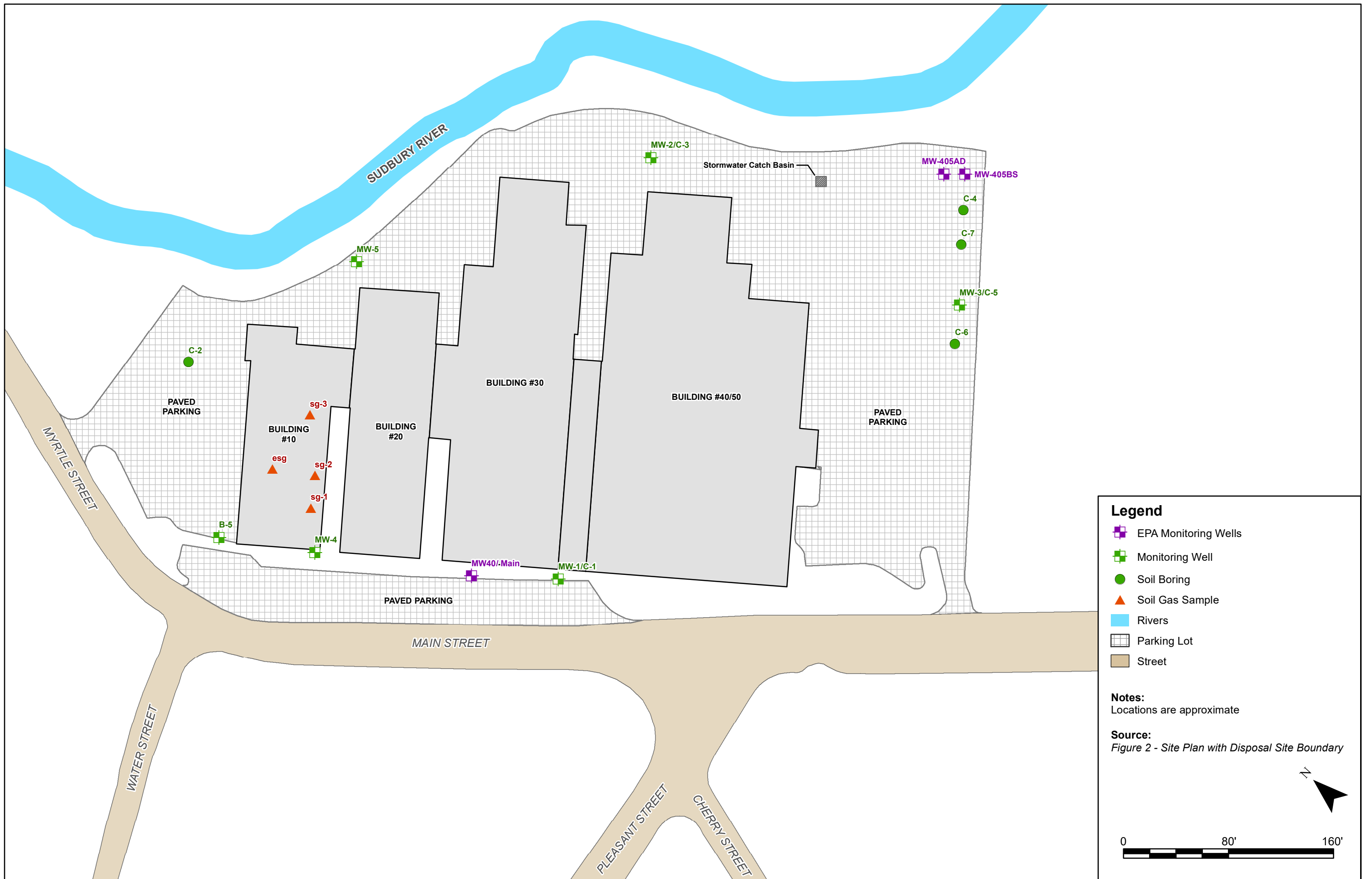
- Sites**
-  Incidents of National Significance
  -  Federal Facility Docket/Superfund NPL/RCRA CA

-  Federal Facility Docket/Brownfields/RCRA CA
-  RCRA Corrective Action/Superfund NPL
-  Federal Facility Docket/Superfund NPL



US EPA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,

Generated from: Cleanups in My Community: Date above is the date map map



**Legend**

- EPA Monitoring Wells
- Monitoring Well
- Soil Boring
- Soil Gas Sample
- Rivers
- Parking Lot
- Street

**Notes:**  
Locations are approximate

**Source:**  
Figure 2 - Site Plan with Disposal Site Boundary

0 80' 160'

N

## TABLES

10-50 Main, Ashland Groundwater Results

<b>Sample Date:</b>	<b>07/17/2024</b>	<b>07/17/2024</b>	<b>07/17/2024</b>	<b>07/19/2024</b>	<b>07/19/2024</b>	<b>MassDEP</b>
<b>Sample Time:</b>	<b>07:09</b>	<b>08:14</b>	<b>10:06</b>	<b>04:26</b>	<b>05:40</b>	<b>GW-2</b>
<b>ClientSample:</b>	<b>MW-4</b>	<b>MW-1</b>	<b>MW-2</b>	<b>MW-5</b>	<b>MW-3</b>	<b>Standard</b>

Analyte	Units					
1,1,1,2-Tetrachloroethane	ug/L	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<2	<2	<2	<2	<2
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	3.4	<1	2
1,2-Dibromo-3-Chloropropane	ug/L	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	ug/L	<1	<1	24	6.5	64.8
1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	1.6
1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	ug/L	<1	<1	5.5	1	13.3
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6
Carbon Tetrachloride	ug/L	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	27.1	15.7	154
Chloroethane	ug/L	<2	<2	<2	<2	<2
Chloroform	ug/L	<1	<1	<1	<1	<1
Chloromethane	ug/L	<2	<2	<2	<2	<2
cis-1,2-Dichloroethene	ug/L	<1	<b>31</b>	<b>63</b>	11.6	<b>32.7</b>
cis-1,3-Dichloropropene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<2	<2	<2	<2	<2
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6
Hexachloroethane	ug/L	<1	<1	<1	<1	<1
Methylene Chloride	ug/L	<2	<2	<2	<2	<2
Tetrachloroethene	ug/L	<1	<1	<1	2.2	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4
Trichloroethene	ug/L	<1	<b>15.6</b>	<1	<b>6.5</b>	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	<1	<1	<1	<1	<b>9.8</b>

(860) 645-1102

Collection Date  
Client Id  
Matrix

12/19/24  
SG-3  
Air


12/19/24  
SG-1  
Air

Project Id : 10-50 MAIN, ASHLAND MA

	CAS	Units	MassDEP Com	SS SGS	Result	RL	Result	RL
<b>Chlorinated Volatiles (TO15) By TO15</b>								
1,1,1,2-Tetrachloroethane	630-20-6	ug/m3			< 6.86	6.86	< 6.86	6.86
1,1,1-Trichloroethane	71-55-6	ug/m3	311,000		< 5.45	5.45	< 5.45	5.45
1,1,1,2-Tetrachloroethane	79-34-5	ug/m3	14		< 0.69	0.69	< 0.69	0.69
1,1,2-Trichloroethane	79-00-5	ug/m3	50		< 0.74	0.74	< 0.74	0.74
1,1-Dichloroethane	75-34-3	ug/m3	50,000		< 4.04	4.04	< 4.04	4.04
1,1-Dichloroethene	75-35-4	ug/m3	12,000		< 3.96	3.96	< 3.96	3.96
1,2-Dibromoethane(EDB)	106-93-4	ug/m3	2.7		< 0.77	0.77	< 0.77	0.77
1,2-Dichlorobenzene	95-50-1	ug/m3	50,000		< 3.00	3.00	< 3.00	3.00
1,2-Dichloroethane	107-06-2	ug/m3	31		< 0.44	0.44	< 0.44	0.44
1,2-dichloropropane	78-87-5	ug/m3	42		< 0.62	0.62	< 0.62	0.62
1,3-Dichlorobenzene	541-73-1	ug/m3	50,000		< 3.00	3.00	< 3.00	3.00
1,4-Dichlorobenzene	106-46-7	ug/m3	120		< 2.40	2.40	< 2.40	2.40
Bromodichloromethane	75-27-4	ug/m3	45		< 0.67	0.67	< 0.67	0.67
Bromoform	75-25-2	ug/m3	730		< 10.3	10.3	< 10.3	10.3
Bromomethane	74-83-9	ug/m3	310		< 2.91	2.91	< 2.91	2.91
Carbon Tetrachloride	56-23-5	ug/m3	130		< 2.70	2.70	< 2.70	2.70
Chlorobenzene	108-90-7	ug/m3	3,100		< 4.60	4.60	< 4.60	4.60
Chloroethane	75-00-3	ug/m3			< 2.64	2.64	< 2.64	2.64
Chloroform	67-66-3	ug/m3	210		< 4.88	4.88	< 4.88	4.88
Chloromethane	74-87-3	ug/m3			< 2.06	2.06	< 2.06	2.06
Cis-1,2-Dichloroethene	156-59-2	ug/m3	370		7.33	3.96	< 3.96	3.96
cis-1,3-Dichloropropene	10061-01-5	ug/m3			< 4.54	4.54	< 4.54	4.54
Dibromochloromethane	124-48-1	ug/m3	33		< 0.85	0.85	< 0.85	0.85
Dichlorodifluoromethane	75-71-8	ug/m3			< 4.94	4.94	< 4.94	4.94
Methylene Chloride	75-09-2	ug/m3	37,000		< 8.68	8.68	< 8.68	8.68
Tetrachloroethene	127-18-4	ug/m3	290		< 6.78	6.78	< 6.78	6.78
Trans-1,2-Dichloroethene	156-60-5	ug/m3	3,700		< 3.96	3.96	< 3.96	3.96
trans-1,3-Dichloropropene	10061-02-6	ug/m3			< 4.54	4.54	< 4.54	4.54
Trichloroethene	79-01-6	ug/m3	120		46.7	2.01	19.1	2.01
Trichlorofluoromethane	75-69-4	ug/m3			< 5.61	5.61	< 5.61	5.61
Trichlorotrifluoroethane	76-13-1	ug/m3			< 7.66	7.66	< 7.66	7.66
Vinyl Chloride	75-01-4	ug/m3	91		< 1.28	1.28	< 1.28	1.28

Result Detected 

RL Exceeds Criteria 

Result Exceeds Criteria 

Project Name 10-50 Main, Ashland MA

GROUNDWATER DATA		MassDEP GW2		MW-1		MW-1		MW-1		MW-2		MW-2		MW-2		MW-3		MW-3		B-5		B-5		
Sample Designation	Standards	MW-1	U	MW-1	U	MW-1	U	MW-2	U	MW-2	U	MW-2	U	MW-3	U	MW-3	U	B-5	U	B-5	U	B-5	U	
Sample Date		04/11/2022		10/20/2022		9/4/23		04/11/2022		09/17/2022		9/4/23		04/11/2022		10/20/2022		09/17/2022		9/4/23		9/4/23		
<b>VOCs</b>																								
1,1,1,2-Tetrachloroethane	ug/L	10	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,1-Trichloroethane	ug/L	4000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	ug/L	9	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	ug/L	900	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	ug/L	2000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	ug/L	80	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloropropene	ug/L	NE	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2,3-Trichlorobenzene	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichloropropane	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	200	1	U	1	U	1	U	1.6	-	2.6	-	1.7	-	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	ug/L	7000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dibromo-3-Chloropropane	ug/L	NE	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane	ug/L	2	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	ug/L	8000	1	U	1	U	1	U	20.4	-	22.8	-	16	-	3.5	-	13.1	-	1	U	1	U	1	U
1,2-Dichloroethane	ug/L	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloropropane	ug/L	3	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	7000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	6000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichloropropane	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	60	1	U	1	U	1	U	4.6	-	5.9	-	3.7	-	1	U	2.6	-	1	U	1	U	1	U
1,4-Dioxane - Screen	ug/L	6000	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U	500	U
2,2-Dichloropropane	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone	ug/L	50000	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chlorotoluene	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	ug/L	NE	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorotoluene	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Isopropyltoluene	ug/L	7000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Methyl-2-Pentanone	ug/L	50000	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	ug/L	50000	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Benzene	ug/L	1000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromobenzene	ug/L	NE	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromochloromethane	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	ug/L	6	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Bromoform	ug/L	700	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	ug/L	7	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbon Disulfide	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1.3	-	1	U	1	U	1	U	1	U
Carbon Tetrachloride	ug/L	2	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	ug/L	200	1	U	1	U	1	U	29.5	-	29	-	22	-	9.2	-	24.8	-	1	U	1	U	1	U
Chloroethane	ug/L	NE	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Chloroform	ug/L	50	1	U	2.4	-	2.4	-	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloromethane	ug/L	NE	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
cis-1,2-Dichloroethene	ug/L	20	29.2	-	12	-	21.4	-	67.5	-	73.6	-	64.1	-	4.5	-	2.9	-	1	U	1	U	1	U
cis-1,3-Dichloropropene	ug/L	10	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Dibromochloromethane	ug/L	20	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromomethane	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dichlorodifluoromethane	ug/L	NE	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Diethyl Ether	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-isopropyl ether	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethyl tertiary-butyl ether	ug/L	NE	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	ug/L	20000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Hexachlorobutadiene	ug/L	50	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Hexachloroethane	ug/L	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene	ug/L	7000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methyl tert-Butyl Ether	ug/L	50000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene Chloride	ug/L	2000	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Naphthalene	ug/L	700	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
n-Butylbenzene	ug/L	7000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
n-Propylbenzene	ug/L	7000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
sec-Butylbenzene	ug/L	7000	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Styrene	ug/L	100	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
tert-Butylbenzene	ug/L	7000	1	U	1	U	1																	

## LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client, Ashland Properties, LLC. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

The purpose of the environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of all hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

This report makes no representations concerning soil and groundwater quality except as described therein. Environmental conditions may exist that were not identified by visual observation or laboratory testing.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported, naturally occurring toxic or hazardous substances, or contaminant concentrations that are not of current concern are not reflected in this document.

Hazardous materials not described in this report, other oil and hazardous materials including (but not limited to), asbestos containing material (ACM), metals, PFAS and related compounds, mold, radon and lead based paint are not part of this assessment. As indicated, this assessment is only applicable to the disposal site described herein.