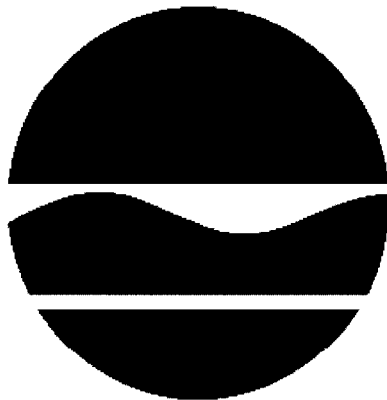


DECISION DOCUMENT

Orangeburg (Orangetown) Shopping Center
Brownfield Cleanup Program
Orangeburg, Rockland County
Site No. C344066
December 2011



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

Orangeburg (Orangetown) Shopping Center
Brownfield Cleanup Program
Orangeburg, Rockland County
Site No. C344066
December 2011

Statement of Purpose and Basis

This document presents the remedy for the Orangeburg (Orangetown) Shopping Center site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Orangeburg (Orangetown) Shopping Center site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM(s) undertaken at this site are discussed in Section 6.2.

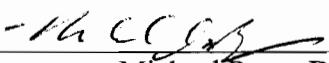
Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

12/21/11

Date



Michael Ryan, Director
Remedial Bureau C

DECISION DOCUMENT

Orangeburg (Orangetown) Shopping Center
Orangeburg, Rockland County
Site No. C344066
December 2011

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This DD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Orangeburg Library
Attn: Nancy Wissman
20 South Greenbush Road
Orangeburg, NY 10962
Phone: 845-359-2244

NYSDEC Region 3
Attn: Please Call for Appointment
21 S. Putt Corners Road
New Paltz, NY 12561
Phone: 845-256-3154

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The Orangeburg Shopping Center site is located in a suburban area of the Town of Orangetown, Rockland County. The shopping center property is generally bounded by Orangeburg Road to the north, Dutch Hill Road to the west, Highview Avenue to the south and Oak Street to the east. The site consists of approximately 1.33-acres in the southeastern portion of the 11-acre shopping plaza parcel.

Site Features: The shopping plaza contains three buildings with various commercial businesses. The site comprises a portion of the eastern building and an adjacent parking area and roadway. The eastern portion of the property and the site drops steeply along a wooded slope.

Current Zoning/Use(s): The site is zoned commercial and is part of a commercial property which contains several businesses. There is an active dry cleaning facility located near the southern end of the eastern building. The surrounding area is used for a mixture of commercial and residential purposes. The site adjoins several residential parcels.

Historical Uses(s): A dry cleaner has been present in the plaza since approximately 1966. Contamination has been identified in the vicinity of the dry cleaner and former dry cleaning operations/disposal practices are considered to be the source of the contamination.

Site Geology and Hydrogeology: Soil at the site consists of hard, dense reddish till. The depth to bedrock ranges from approximately 30 feet adjacent to the on-site buildings to approximately 10

feet along Oak Street. Bedrock is reported to be a reddish-brown shale-like mudstone with alternating layers of red-brown sandstone, with the top 10 to 20 feet being weathered.

Shallow groundwater flow is to the east. Perched groundwater was encountered above the regional groundwater table on-site, in some instances directly beneath the asphalt parking lot. The groundwater table was typically encountered around 30 to 40 feet below grade.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the remedial investigation (RI) Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Participant. The Applicant has an obligation to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for

review in the site document repository and the results are summarized in section 6.4.

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Information

The analytical data collected on this site includes data for:

- air
- groundwater
- soil
- soil vapor
- indoor air

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

tetrachloroethylene (PCE)
trichloroethene (TCE)

dichloroethylene
vinyl chloride

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

IRM Soil Excavation

An excavation was performed immediately behind the dry cleaner to remove heavily contaminated soils from the vicinity of the sewer lateral exiting the dry cleaner. The sewer lateral had failed and been repaired historically. Soil sampling showed elevated levels of contaminants in the vicinity of the lateral.

The extent of excavation was limited due to the building foundation to the west and utilities (gas and water) to the east, south and north. The excavation measured approximately 15 feet by 10 feet and extended approximately 4 feet below grade.

Perched groundwater was present immediately below the ground surface and was removed during the course of excavation.

1,790 gallons of water were removed for off-site disposal.

12.9 tons of soil were removed for off-site disposal at a permitted facility as hazardous.

39.53 tons of soil were removed for treatment as non-hazardous waste at an off-site, permitted thermal treatment facility.

IRM In-Situ Treatment

Based on evidence of ongoing natural degradation of the PCE and TCE, an in-situ technology biostimulation IRM was undertaken to enhance this degradation. The goal of this IRM was to treat contaminated groundwater by injecting a molasses and water solution into the subsurface to enhance the biological breakdown of site contaminants through anaerobic reductive dechlorination. The groundwater plume extends at least 300' to the northeast, below Oak Street, at a concentration of DCE at 7 ppb. Injections of molasses were performed within the source area in May, July and November 2010; and groundwater sampling was performed in June, August and December 2010. Groundwater sampling results showed little effect on the concentration of site contaminants following the 2010 injections. Additional injections were performed in May and June 2011; and groundwater sampling was performed in April (baseline), May and June 2011. Groundwater results indicated that dechlorination is occurring when appropriate geochemical conditions are achieved. In order to achieve efficient biostimulation, the current system will be expanded in early 2012. Additional injection points will be added to form a downgradient injection gallery. Also, in the event that appropriate aquifer pH (6-8) and total organic carbon (TOC) concentration (greater than 50 mg/l) cannot be simultaneously maintained, the injection solution will be buffered with sodium bicarbonate to counteract the organic acids generated from biological activity.

IRM Soil Vapor Mitigation

Sub-slab depressurization systems were installed in three retail spaces in the shopping center in order to prevent soil vapor intrusion of site contaminants of concern. The affected retail spaces

are the three spaces closest to the source area of contamination, which are located at the south end of the easternmost building at the plaza. As of February 2011, these spaces were occupied by a Chinese restaurant, a dry cleaner and a deli.

The systems were installed between February 2010 and September 2010. Pressure field testing conducted in the three spaces showed adequate vacuum beneath the slabs at each monitoring point.

There are three extraction points located in the Chinese restaurant and five extraction points located in the dry cleaner. These eight extraction points are connected to five blowers. There are five extraction points within the deli, which are connected to three blowers. Each of the eight blowers has its own discharge stack.

6.3: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Since some contaminated soil remains at the site below buildings or clean backfill, people will not come in contact with contaminated soils unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Sub-slab depressurization systems (systems that ventilate/remove the air beneath the building) have been installed in on-site tenant spaces to prevent the indoor air quality from being affected by the contamination in soil vapor beneath the buildings. Sampling indicates soil vapor intrusion is not a concern for off-site buildings.

6.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination: The primary contaminants of concern at the site are dry cleaning solvents and associated degradation products, which include tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (DCE) and vinyl chloride (VC).

Soil: An Interim Remedial Measure (IRM) was conducted to remove contaminated shallow subsurface soil from an area behind the dry cleaner, surrounding the sewer line exiting the dry

cleaner, which was believed to be the primary source area of contamination. Prior to the IRM, soil samples from this area contained PCE up to 30.9 parts per million (ppm). Several post-excavation samples contained levels of contaminants of concern above unrestricted soil cleanup objectives. PCE was detected at a maximum level of 16 ppm in post-excavation samples in areas inaccessible for excavation.

Contamination was also detected in sub-surface soil samples collected from three borings installed inside the dry cleaning facility at a depth of approximately 12 feet below the building slab surface. PCE was detected at a maximum concentration of 24 ppm and DCE was detected at a maximum concentration of 83 ppm in these samples.

Investigations conducted have determined that subsurface soil contamination was limited to the area of the dry cleaner. Contaminants of concern were not detected above commercial soil cleanup objectives at other locations east and south of the dry cleaner or in exposed surface soils.

Groundwater: Monitoring wells show impacted groundwater originating from the vicinity of the dry cleaner and extending off-site to the east. Concentrations of TCE, DCE and VC have been detected in groundwater above groundwater standards. The highest concentration of site contaminants detected in groundwater was DCE at 18,000 parts per billion (ppb), compared to its groundwater standard of 5 ppb. TCE was detected at concentrations up to 340 ppb, compared to its groundwater standard of 5 ppb and VC was detected at concentrations up to 380 ppb, compared to its groundwater standard of 2 ppb. The highest concentration of contaminants detected in off-site groundwater was DCE at 16 ppb in 2007, which has since been reduced to 7 ppb in 2010.

Soil Vapor: Soil vapor in the vicinity of the dry cleaner was found to be contaminated with site-related contaminants of concern, and with petroleum-related compounds which do not appear to be associated with the site. Based on the level of contaminants of concern present in soil vapor in the vicinity of the dry cleaner, sub-slab depressurization systems were installed as an IRM on three commercial business spaces on-site; the dry cleaner and the adjacent business on each side of the dry cleaner. Based on results from soil vapor intrusion investigations conducted at off-site residences and additional commercial business spaces within the shopping plaza that indicate compounds of concern detected in indoor air are within typical background and concentrations detected in sub-slab vapor were not expected to affect indoor air quality, no additional actions are needed.

The site was determined to present a significant environmental threat due to the elevated level of groundwater contamination.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the

contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

Based on the results of the investigation at the site, the IRMs that have been performed, and the evaluation presented here, the Department is proposing No Further Action with continued operation of the sub-slab depressurization systems (SSDS) to mitigate the potential for soil vapor intrusion, biostimulation treatment of the subsurface soil and groundwater, maintenance of the cover system consisting of existing impermeable surfaces (concrete slabs, asphalt paving, etc) or at least one foot of clean soil, as defined by 6 NYCRR 375-6.7(d); and the implementation of institutional and engineering controls (ICs/ECs): environmental easement, Site Management Plan, sub-slab depressurization systems, biostimulation injection system and cover system.

The elements of the institutional and engineering controls are listed below.

1. A site cover currently exists over all areas where soil contamination exceeds soil cleanup objectives (SCOs) for commercial use, consisting of the existing buildings and pavement at the site. The site cover will be maintained as a component of any future site development, to allow for the commercial use of the site, which will consist either of the structures such as buildings,

pavement, sidewalks comprising the site development, or a soil cover in areas where the soil exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

2. Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- a. Requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3)
- b. Allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), though land use is subject to local zoning laws;
- c. Restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the Department, NYSDOH or County DOH;
- d. Prohibits agriculture or vegetable gardens on the controlled property; and
- e. Requires compliance with the Department approved Site Management Plan.

3. A Site Management Plan is required, which includes the following:

- a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement for the controlled property discussed previously; and

Engineering Controls: The continued operation of the sub-slab depressurization systems, the biostimulation injection system and the site cover system as discussed above.

This Institutional and Engineering Control Plan includes, but may not be limited to:

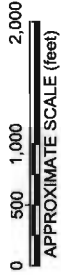
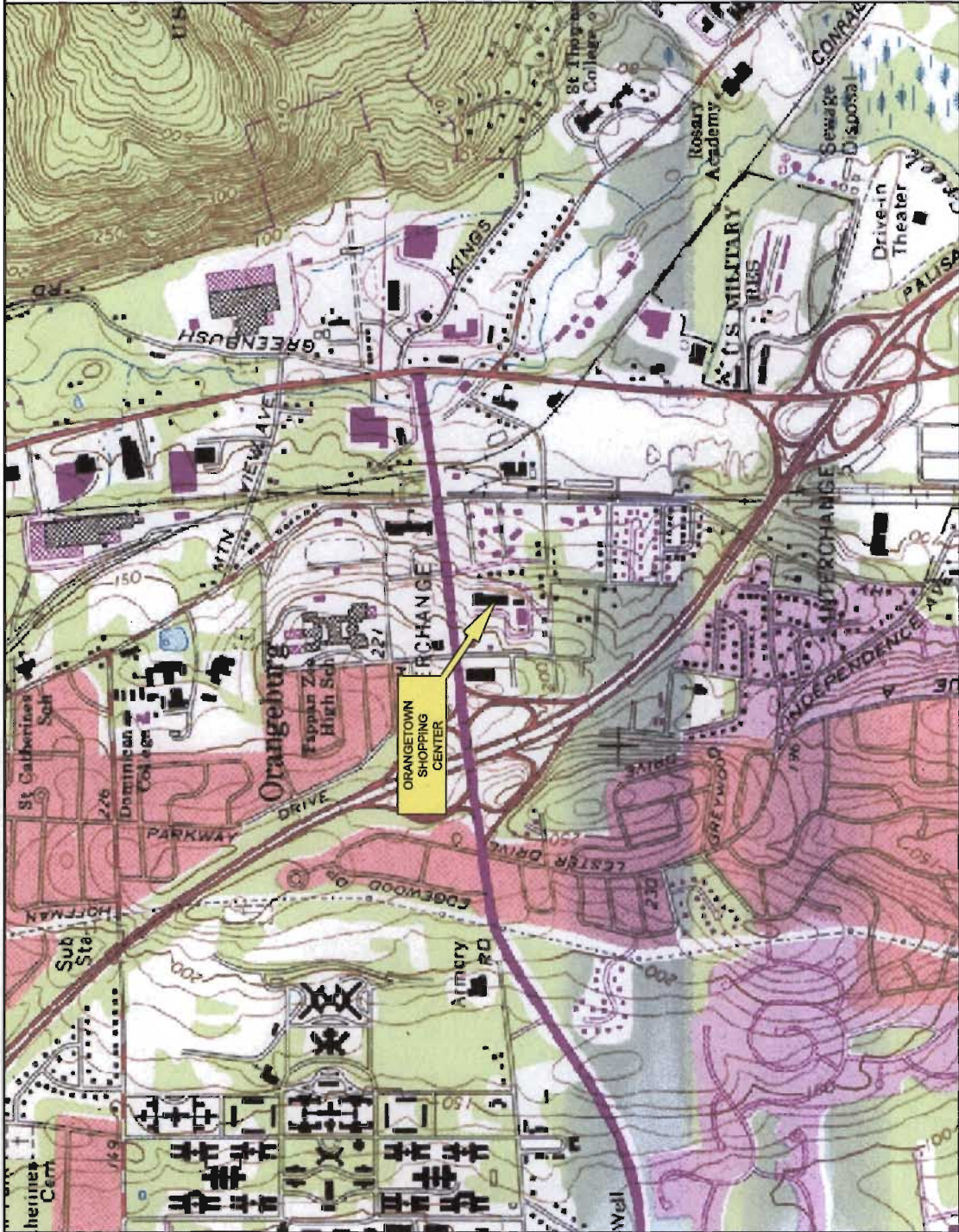
- i. an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- ii. descriptions of the provisions of the environmental easement including any land use and/or groundwater use restrictions;
- iii. a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- iv. provisions for the management and inspection of the identified engineering controls (i.e., the sub-slab depressurization systems, biostimulation injection system and site cover system);
- v. maintaining site access controls and Department notification; and
- vi. the steps necessary for the periodic reviews and certification of the institutional and engineering controls.

b. a monitoring plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- i. monitoring of groundwater to assess the performance and effectiveness of the remedy;
- ii. a schedule of monitoring and frequency of submittals to the Department;
- iii. monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required pursuant to item a.ii. above

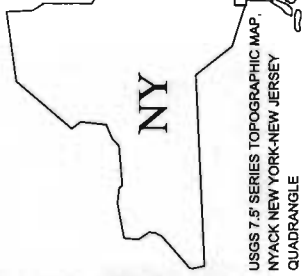
c. an Operation and Maintenance Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of for any mechanical or physical components of the remedy. The plan includes, but is not limited to:

- i. compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- ii. maintaining site access controls and Department notification; and
- iii. providing the Department access to the site and O&M records.



APPROXIMATE SCALE (feet)

LATITUDE: 41° 02' 40.82" N
 LONGITUDE: 73° 57' 09.83" W



USGS 7.5' SERIES TOPOGRAPHIC MAP,
 NYACK NEW YORK-NEW JERSEY
 QUADRANGLE

QUADRANGLE
 LOCATION

NOTES:

The information included on this graphic representation has been prepared from a variety of sources, including but not limited to, aerial photography, ground surveys, and other data. It is intended for general information only and should not be used for engineering or other professional purposes. The user assumes all responsibility for the use of this information. The information is provided "as is" and the user assumes all responsibility for the use of this information.



PROJECT NO. 69872
 DRAWN: 12/15/2010 CTH
 DRAWN BY:
 CHECKED BY: KAF
 FILE NAME: 69872CCRNOV10.dwg

LOCUS PLAN
 ORANGETOWN SHOPPING CENTER
 1-45 ORANGEBOURG ROAD
 ORANGEBOURG, NEW YORK

PLATE
1

NO.	REVISION	DATE

PROJ. NO.	19972
PROJ. NAME	ORANGETOWN SHOPPING CENTER
DESIGNED BY	KLING STUBBINS
CHECKED BY	
DATE	

SCALE	AS SHOWN
DATE	07/15/11
PLATE	2

LEGEND

- ▬ PROPERTY BOUNDARY
- ▬ HYDRANT
- ▬ UTILITY POLE
- ▬ ELECTRIC COVER
- ▬ MANHOLE COVER (UNKNOWN)
- ▬ TELEPHONE MANHOLE COVER
- ▬ CATCH BASIN
- ▬ LIGHT POLE
- ▬ SEWER MANHOLE
- ▬ C.L.F. CHAIN LINK FENCE
- ▬ C.H.W. CONCRETE HEAD WALL
- ▬ C.M.P. CORRUGATED METAL PIPE
- ▬ O.H.W. OVERHEAD WIRES
- ▬ R.C.P. REINFORCED CONCRETE PIPE
- ▬ S.M.H.W. STONE MASONRY HEAD WALL
- ▬ MONITORING WELL
- ▬ MONITORING WELL (PAVED OVER OR ABANDONED)
- ▬ PIEZOMETER
- ▬ VAPOR POINT/AMBIENT AIR SAMPLE
- ▬ STREET ADDRESS NUMBER

COMMERCIAL STORE ID TABLE (BUILDING #2)

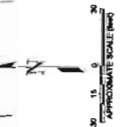
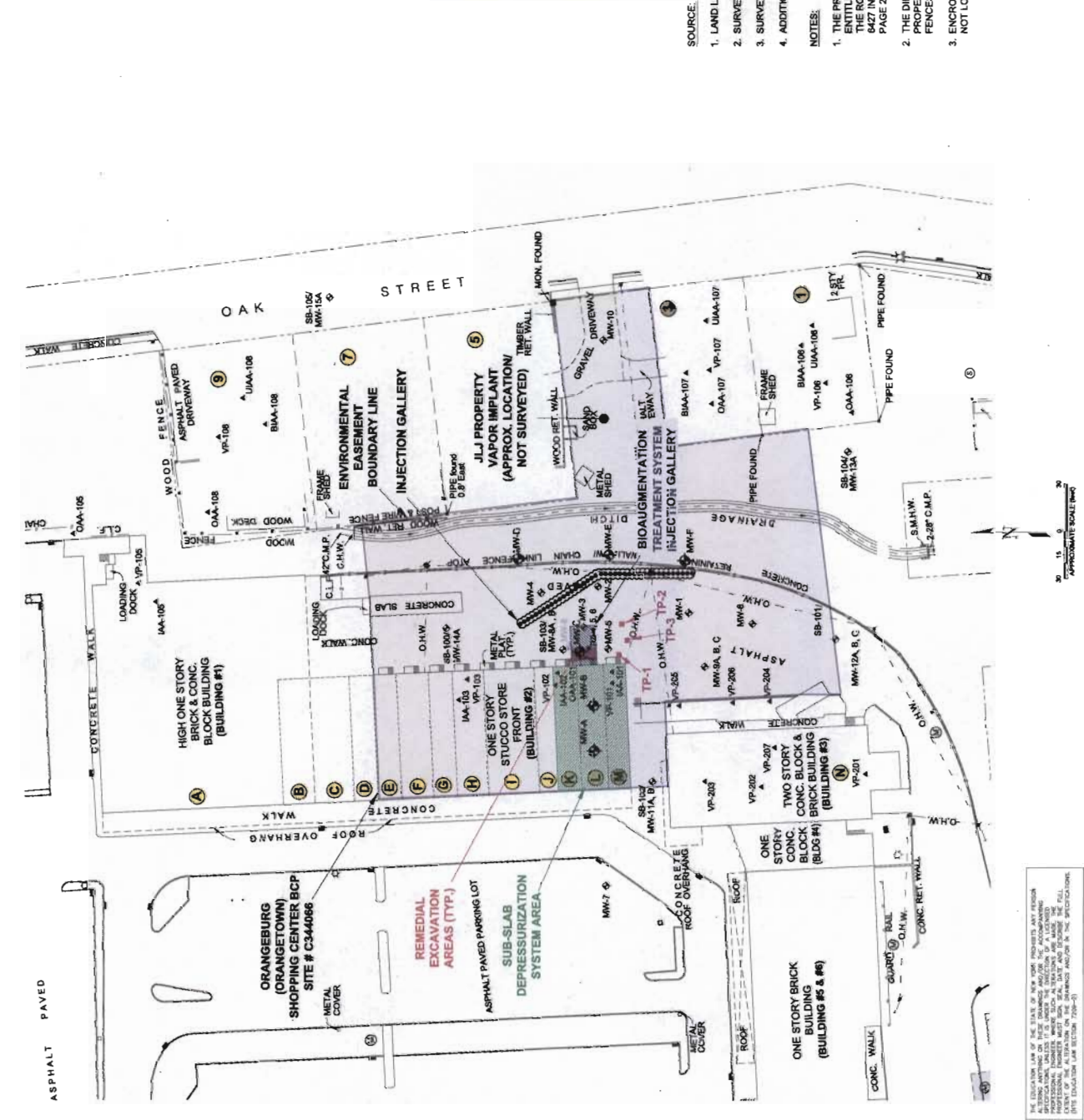
- ① CVS PHARMACY
- ② ORANGE FARM MARKET
- ③ RAINBOW LAUNDROMAT
- ④ MAGIE TOUCH NAILS
- ⑤ STELLA LUNA
- ⑥ TIP TOP SHOPPER
- ⑦ ALL STATE INSURANCE
- ⑧ HIKARU SUSHI
- ⑨ KARATE
- ⑩ JIU JITSU
- ⑪ THE DELI SPOT
- ⑫ SPARKLE CLEANERS
- ⑬ NEW CHINA HOUSE
- ⑭ DUNKIN DONUTS & DISCOUNT STORE

SOURCE:

1. LAND LINK SURVEYORS P.C. SURVEY MAP DATED NOVEMBER 4, 2003.
2. SURVEY AMENDED TO SHOW NEW CERTIFICATION JUNE 1, 2005.
3. SURVEY AMENDED WELL LOCATION DECEMBER 19, 2007.
4. ADDITIONAL WELLS MW10, MW12, AND MW13 LOCATED DECEMBER 27, 2007

NOTES:

1. THE PREMISES SHOWN HEREON DESIGNATED AS LOT 1 ON A CERTAIN MAP ENTITLED "SUBDIVISION OF PROPERTY ORANGETOWN CENTER" AS FILED IN THE ROCKLAND COUNTY CLERK'S OFFICE ON FEBRUARY 26, 1980 AS MAP No. 8427 IN Book 111 Page 59 AND ARE DESCRIBED IN DEED RECORDED REEL 404, PAGE 2555.
2. THE DIMENSIONS SHOWN HEREON FROM THE STRUCTURES TO THE PROPERTY LINE ARE NOT INTENDED TO BE USED FOR THE ERECTION OF FENCES, STRUCTURES OR ANY OTHER IMPROVEMENT.
3. ENCROACHMENTS BELOW GRADE AND/OR SUBSURFACE FEATURES, IF ANY, NOT LOCATED OR SHOWN HEREON.



THE EDUCATION LAW OF THE STATE OF NEW YORK PROVIDES THAT PERSONS WHOSE NAMES ARE ON THIS PLAN ARE NOT BEING LISTED AS A LICENSED PROFESSIONAL ENGINEER UNDER THE EDUCATION LAW OF THE STATE OF NEW YORK. THE PROFESSIONAL ENGINEER MUST SIGN, DATE AND EXPIRE THE FULL PROFESSIONAL ENGINEER'S LICENSE AND SIGNATURE AND/OR IN THE PROFESSIONAL ENGINEER'S LICENSE (SECTION 2209-2)