

### IMPACT ENVIRONMENTAL

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June 03, 2025

New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, Albany, NY 12233-7014

Re: Petroleum Bulk Storage Tank Removal / In-Situ Remediation Work Plan 48-60 McLean Avenue, Yonkers, New York NYSDEC BCP Site #C360211

Impact Environmental Engineering and Geology, PLLC (IEEG) is submitting this Work Plan to the New York State Department of Environmental Conservation (NYSDEC) to provide details regarding the removal of underground storage tanks (USTs) and associated soil remediation activities. On April 23, 2025, during excavation of the building's ramp that leading to the second floor, four (4) previously undocumented USTs were discovered approximately 10-feet south of the previously removed 5,000-gallon fuel oil UST. The existing asphalt-paved ramp has since been mostly demolished and will be restored in accordance with the new redevelopment plans upon completion of remediation activities. IEEG collected samples of the liquid contents found within the USTs to determine the nature of the material and to obtain facility disposal approval. Laboratory analysis confirmed that the tank contents as gasoline. Each UST has an approximate capacity of 550-gallons and were located approximately 5-7-feet below the ramp's surface.

The proposed tank removal will occur during the ongoing rehabilitation and conversion of the existing building, which has been filed and approved by the City of Yonkers under Application: B0036579. The proposed removal of the four (4) USTs has also been approved and permitted (see **Attachment A**) by Westchester County Department of Health (WCDOH). Details of the planned work are provided below and in the enclosed drawings:

#### Tank Closure/Removal

- Work will be limited to the southeast portion of the subject property to remove four (4) 550-gallon gasoline USTs, and, if present, impacted soils. The tanks are situated beneath an asphalt-paved ramp starting at grade along McLean Avenue (refer to Plate 1) and lead to the second floor of the existing structure. For reference, the specific work area is illustrated on Plate 2. The tank removal, backfill and possible associated soil remediation is a very small portion of the work associated with the Construction and Demolition applications referenced above.
- No bracing or structural support is required for the removal of the tanks, due to the presence of retaining walls to the north, east, and west. Refer to **Plate 2** Underground Storage tank Locations.
- Once all required permits have been received, the NYSDEC, City of Yonkers and Westchester County Department of Health (WCDOH) will be contacted to schedule the required physical inspections and work oversight.
- The four (4) tanks will be fully uncovered by the construction contractor, D-Best Industries (D-Best) using a small excavator or backhoe, and any remaining standing product will be evacuated from each tank using a vacuum pump truck operated by the tank removal contractor, Brookside Environmental

(Brookside). The removed product will be transported under non-hazardous manifest to Advanced Waste Water Treatment of Farmingdale, New York.

- Once free of standing liquid, the tanks will be removed from the ground and staged on poly sheeting at grade. Each tank will be tested with an oxygen/explosivity meter, and if needed, nitrogen or carbon dioxide will be used to reduce any elevated readings to below acceptable levels prior to opening.
- Once inert, the tanks will be cut open, and any remaining sludge will be scraped from the bottom of each tank and placed in DOT-regulated steel 55-gallon drums, sealed, and staged in a designated area pending collection, transport under non-hazardous manifest, and disposal to Clean Water of New York, Staten Island, NY.
- Once fully cleaned, the tank bodies will be inspected by NYSDEC, City of Yonkers and WCDOH staff, prior to being transported and disposed of as scrap metal.
- Tank removal and soil disturbance work will be subject to the community air monitoring plan, as
  described in the Remedial Action Work Plan (RAWP). Upwind and downwind particulate and volatile
  organic compound (VOC) monitors will be utilized. If either particulate or VOC concentrations exceed
  their respective thresholds, work will be stopped until levels return to background levels, and work
  may resume. If excessive VOC concentrations are continuously detected, IEEG will employ a vapor
  mitigation product (BioSolve, or similar), in which the disturbed soils are sprayed/misted with the
  vapor mitigation product to decrease off gassing of VOCs, and potential in-air migration of vapors to
  surrounding occupied off-site receptors. Work may only be allowed to continue once VOC
  concentrations decrease to below the action levels.

#### Soil Screening, Excavation, and Sampling

- The underlying soils within the tank grave will be inspected and field screened with a photo-ionization detector by qualified personnel for the presence of volatile organic compounds (VOCs) or evidence of release (i.e., soil discoloration or olfactory indications). The NYSDEC, City of Yonkers and WCDOH staff will also inspect the tank graves for signs of a release.
- If evidence of soil contamination is identified, over excavation of non-saturated suspect materials will be performed using an excavator to the extent practicable. Removed soils will be stockpiled on poly sheeting and covered overnight, pending characterization, transport, and disposal facility approval. It is anticipated that the four (4) USTs are seated in perched groundwater.
- Once/if impacted overburden is successfully removed from the tank grave, if non-saturated soil is
  present, IEEG will collect bottom confirmatory endpoint samples in accordance with NYSDEC DER-10
  sampling guidance; a minimum of one(1) sample per former 550-gallon tank location for a total of four
  (4) samples. Each sample will be placed in laboratory supplied certified clean glassware, placed on ice,
  and transported to an ELAP Certified lab for analysis of NYSDEC CP-51 list VOCs and semi-volatile
  organic compounds (SVOCs).
- If non-saturated soils are accessible from the excavation sidewalls, additional sidewalk endpoint samples may also be collected in accordance with DER-10, approximately one(1) sidewall sample for every 20-linear feet of sidewall.

• As per DER-10, if the tank grave is infiltrated with shallow groundwater following any over excavation, which is a distinct probability, IEEG will collect a minimum of one (1) sample of the standing groundwater. If collected, the sample will be collected and analyzed for the same parameters as above.

#### In-Situ Groundwater Remediation

- Based on the anticipated depth to groundwater, it is likely to infiltrate the tank grave following tank removal. IEEG will coordinate Brookside to utilize a vacuum pump truck to extract as much standing contaminated groundwater as possible (expected to be approximately 400-500 gallons) in a single event.
- As per the June 22, 2021, Remedial Investigation Work Plan / Interim Remedial Measures Work Plan (RIWP/IRMWP) prepared by IEEG and subsequently approved by NYSDEC, it was proposed that contaminated groundwater would be remediated using Regenesis ORC Advanced<sup>®</sup> (Calcium Oxyhydroxide) by way of seven (7) in-situ injection points within a 600 square foot area proximal to monitoring well WP-11 (located in the ramp, in the location of the newly discovered gasoline USTs). Due to observed groundwater infiltration into the excavation following the UST removal, IEEG now proposes to apply the ORC Advanced<sup>®</sup> remedial product directly into the open excavation following evacuation of standing water.
- The excavation is expected to measure approximately 20 feet wide and 10 feet deep, with an
  estimated 2-to-3-feet of groundwater accumulation. Therefore, IEEG equates that 400 cubic feet of
  groundwater will be directly treatable. Based on consultation with Regenesis, approximately four (4)
  bags (160 pounds total) of the product will be required to treat this volume.
- The ORC Advanced<sup>®</sup> will be broadcast directly to the exposed groundwater surface, and an excavator will be used to mechanically agitate and distribute the product to enhance contact and dispersion. The excavation will be left open for a minimum of 24 hours prior to backfilling, to allow the product to fully diffuse and dissolve in the exposed groundwater.

#### **Backfilling and Restoration**

- The tank grave will only be backfilled once the results of the soil and/or groundwater sampling has been received, tabulated, compared to local and state standards, and provided to WCDOH and NYSDEC for their review.
- If deemed acceptable by the referenced Departments, the tank grave will be backfilled to the ramp grade using an estimated 160-200 cubic yards of self-compacting open-graded gravel from Plymouth Industries, LLC located at 3498 Route 22 West, Branchburg, New Jersey 08876. The referenced backfill material is naturally compacted when placed and spread. Placement of fill-in lifts or mechanical compaction is not required. A bill of lading from the carrier will be provided for the transportation and delivery of the referenced materials planned for use as backfill.
- The results of the soil and/or groundwater samples will be forwarded to the department for review and will be included in the Final Engineering Report.

Please contact me should you have any questions regarding this matter at (631) 269-8800.

# Sincerely, IMPACT ENVIRONMENTAL CLOSURES, INC.

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Chris Connolly Project Manager

Cc. G. Mendez-Chicas, Impact Michael Colvin, SNL Yonkers LLC Lynn Cann, Park East Construction Corp. Steve Alister, Park East Construction Corp. Scott Dumont, Genesis Realty

Encl.

Plate 1:	Site Location Map
Plate 2:	Existing Site Layout & Underground Storage Tank Location
Attachment A:	WCDOH Tank Closure Permit
Attachment B:	ORC Advance Product Sheet

# PLATES

## 48-60 McLean Avenue, Yonkers, New York

#### Petroleum Bulk Storage Tank Removal / In-Situ Remediation Work Plan

C360211







# ATTACHMENTS

## 48-60 McLean Avenue, Yonkers, New York

#### Petroleum Bulk Storage Tank Removal / In-Situ Remediation Work Plan

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# Attachment A

## 48-60 McLean Avenue, Yonkers, New York

#### WCDOH Tank Closure Permit

C360211





Westchester County Department of Health Office of Environmental Health Risk Control 25 Moore Avenue Mount Kisco, NY 10549 Telephone: 914-864-7278 or 914-864-7279 24-hour Emergency Phone: 914-813-5000

#### PETROLEUM BULK STORAGE WORK PERMIT

In accordance with Articles XXV and XXVI of the Westchester County Sanitary Code, this work permit grants permission to modify the referenced Petroleum Bulk Storage facility in the manner listed below.

FACILITY	<b>CONTRACTOR</b> (responsible for PBS compliance and		
	environmental assessment)		
PBS No. 3-800424			
LIFE STORAGE - MCLEAN AVENUE	Brookside Environmental		
60 Mclean Avenue	22 Ocean Ave.		
Yonkers, NY 10705	COPIAGUE, NY 11726		
Contact: Aaron Stevens	Contact: Richard Taylor		
Telephone: (718) 753-0909	Telephone: (631) 608-8810		

WORK TO BE PERFORMED						
Type of Work	Tank ID	Capacity	Product			
Remove tank	01	5000	0002. #4 Fuel Oil			
1. THAT this permit is valid for 90 days from issue date.						
2. THAT the petroleum bulk storage tank(s) and/or piping shall be installed in accordance with Chapter 873, Articles XXV and XXVI, respectively, of the Laws of Westchester County NY.						
3. THAT the facility owner and contractor shall be responsible for the proper installation of the petroleum bulk storage tank(s) and/or piping in accordance with Chapter 873, Articles XXV and XXVI, respectively, of the Laws of Westchester County NY.						
4. THAT any changes or modifications to the Petroleum Bulk Storage Work Permit requires filing an application and obtaining a revised work permit to reflect said changes.						
5. THAT upon installation of the petroleum bulk storage tank(s) and/or piping, the tank(s) shall remain out of service until such time as a tank testing report(s) satisfacto to the department is received, and an "as built" plan prepared by professional engineer in the State of New York is filed with the department which certifies that installation complies with Chapter 873, Articles XXV and XXVI, respectively, of the Laws of Westchester County NY.						

Issued by:	Westchester County Department of Health	Issue Date	Expiration Date
	Sherlita Amler, M.D.	10/18/2022	01/18/2022
	Commissioner of Health	10/18/2022	01/18/2022

George Latimer County Executive

# Attachment B

48-60 McLean Avenue, Yonkers, New York

**Regenesis ORC Advanced Product Sheet** 

C360211





# **ORC** Advanced<sup>®</sup> Technical Description

ORC Advanced<sup>®</sup> is an engineered, oxygen release compound designed specifically for enhanced, *in situ* aerobic bioremediation of petroleum hydrocarbons in ground-water and saturated soils. Upon contact with groundwater, this calcium oxyhydroxide-based material becomes hydrated producing a controlled release of molecular oxygen (17% by weight) for periods of up to 12 months on a single application.

ORC Advanced decreases time to site closure and accelerates degradation rates up to 100 times faster than natural degradation rates. A single ORC Advanced application can support aerobic biodegradation for up to 12 months with minimal site disturbance, no permanent or emplaced above ground equipment, piping, tanks, power sources, etc are needed. There is no operation or maintenance required. ORC Advanced provides lower costs, greater efficiency and reliability compared to engineered mechanical systems, oxygen emitters and bubblers.



Example of ORC Advanced

ORC Advanced provides remediation practitioners with a significantly faster and highly effective means of treating petroleum contaminated sites. Petroleum hydrocarbon contamination is often associated with retail petroleum service stations resulting from leaking underground storage tanks, piping and dispensers. As a result, ORC Advanced technology and applications have been tailored around the remediation needs of the retail petroleum industry and include: tank pit excavations, amending and mixing with backfill, direct-injection, bore-hole backfill, ORC Advanced Pellets for waterless and dustless application, combined ISCO and bioremediation applications, etc.

For a list of treatable contaminants with the use of ORC Advanced, view the Range of Treatable Contaminants Guide

#### **Chemical Composition**

- Calcium hydroxide oxide
- Calcium hydroxide
- Monopotassium phosphate
- Dipotassium phosphate

#### Properties

- Physical state: Solid
- Form: Powder
- Odor: Odorless
- Color: White to pale yellow
- pH: 12.5 (3% suspension/water)



# **ORC** Advanced<sup>®</sup> Technical Description

#### Storage and Handling Guidelines

#### Storage

Store in a cool, dry place out of direct sunlight

Store in original tightly closed container

Store in a well-ventilated place

Do not store near combustible materials

Store away from incompatible materials

Provide appropriate exhaust ventilation in places where dust is formed

# HandlingMinimize dust generation and accumulationKeep away from heatRoutine housekeeping should be instituted to<br/>ensure that dust does not accumulate on surfacesObserve good industrial hygiene practicesTake precaution to avoid mixing with combustibles<br/>materialsAvoid contact with water and moistureAvoid contact with eyes, skin, and clothingAvoid prolonged exposureWear appropriate personal protective equipment

#### Applications

- Slurry mixture direct-push injection through hollow rods or direct-placement into boreholes
- In situ or ex situ slurry mixture into contaminated backfill or contaminated soils in general
- Slurry mixture injections in conjunction with chemical oxidants like RegenOx or PersulfOx
- Filter sock applications in groundwater for highly localized treatment
- Ex situ biopiles

#### Health and Safety

Wash thoroughly after handling. Wear protective gloves, eye protection, and face protection. Please review the <u>ORC Advanced Safety Data Sheet</u> for additional storage, usage, and handling requirements.



www.regenesis.com 1011 Calle Sombra, San Clemente CA 92673 949.366.8000

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