

J.C. Broderick & Associates, Inc.

Environmental / Construction Consulting & Testing



1775 Expressway Drive North
Hauppauge, NY 11788
631.584.5492
Fax: 631.584.3395
www.jcbroderick.com

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Mr. Andre Bermudez
Economic Development Specialist
Department of Economic Development and Planning
100 Veterans Memorial Highway, 2nd Floor
Hauppauge, New York 11788

Remediation Estimate
1600 5th Avenue
Bay Shore, New York 11706

- The laboratory analysis results from the soil samples submitted from boring locations B-2 and B-11 did reveal elevated concentrations of two (2) metals, Lead and Zinc; however, the concentration of both metals were well below the restricted residential SCOs. It is recommended that a Track 2: Restricted Use be considered.
- The laboratory analysis results from the soil samples submitted from boring location B-9 and B-11 did reveal elevated concentrations of two (2) pesticides, 4,4-DDD and Chlordane; however, the concentration of 4,4-DDD is well below the restricted residential SCO and Chlordane is well below the restricted commercial SCO. It is recommended that a Track 2: Restricted Use be considered.
- The laboratory analysis results from the groundwater samples submitted from monitoring wells MW-1 and MW-2 did reveal an elevated concentration of one (1) VOC, MtBE. MtBE is typically associated with a gasoline release which has not been established to have occurred at this site and likely from an upgradient site. It is recommended that the monitoring wells be sampled and analyzed for VOCs on a periodic schedule.
- The laboratory analysis results from the groundwater samples submitted from monitoring wells MW-1, MW-2, MW-3, and boring locations B-4:GW, B-5:GW, B-6:GW, B-7:GW, B-8:GW and B-10:GW did reveal several elevated concentrations of heavy metals. It is recommended that the monitoring wells be sampled and analyzed for Priority Pollutant Metals on a periodic schedule.

Remediation Activity	Estimated Quantity	Estimated Cost	Estimated Cost
Monitor the three (3) groundwater monitoring wells for depth to water and total depth on a quarterly schedule.	4 quarters	\$250/each	\$1,000
With the use of a peristaltic pump, purge and sample each monitoring well.	4 quarters	\$150/each	\$600
Laboratory Analysis by EPA 8260 CP-51	8 samples	\$75/each	\$600
Laboratory Analysis by Priority Pollutant Metals	8 samples	\$115/each	\$920
Quarterly Status Report	4 quarters	\$500/each	\$2,000
Estimated Overall Cost			\$5,120

- The laboratory analysis results for the soil/sludge samples submitted from storm drain SD-06 and SD-07 did indicate elevated concentrations of Arsenic and Chromium. It is recommended that the contaminated sludge within the sanitary structure be removed and properly disposed of off-site by a certified industrial waste hauler.

Remediation Activity	Estimated Quantity	Estimated Cost	Estimated Cost
Remove pumpable liquids from storm drains SD-06 and SD-07 and transport under manifest to an approved disposal facility.	3,800 gal	\$0.17/gal	\$646
With the use of a high power combination vacuum truck and high pressure water jet, remove contaminated soil/sludge from storm drains SD-06 and SD-07 and transport under manifest to an approved disposal facility.	1 day	\$1,950/day	\$1,950
Disposal of non-hazardous sludge/soil	6 tons	\$190/ton	\$1,140
Subsequent to remediation, endpoint soil samples will be collected from the bottom of storm drains SD-06 and SD-07 utilizing a stainless steel hand-held Auger. The collected endpoint soil samples will be submitted to a NYSDOH ELAP certified laboratory for analysis by SCDHS Metals to evaluate the effectiveness of the cleanup activities.	2 sample	\$110/each	\$220
Deliver and install clean sand backfill into the structure if it becomes structurally unstable as a result of bottom soil removal during the cleanup activities.	4 yards	\$55/yd	\$220
Environmental Project management and remediation oversight.	10 hours	\$95/hr	\$950
Prepare and submit to the SCDHS a Remediation Summary Report detailing the cleanup activities performed.	1 each	\$750/each	\$750
SCDHS Fees – Application Fee	1 each	\$165/each	\$165
SCDHS Fees – Remediation Oversight and Closure	2 each	\$550/each	\$1,100
Estimated Overall Cost			\$7,141