

March 28, 2013

New York City Office of Environmental Remediation
City Voluntary Cleanup Program
c/o Shaminder Chawla
100 Gold Street, 2nd Floor
New York, NY 10038

Re: 13CVCP104M
547-551 Tenth Avenue
New York, NY
Remedial Action Work Plan (RAWP) Stipulation List

Dear Ms Gribble:

AKRF, Inc. (AKRF or the consultant) hereby submits a Remedial Action Work Plan (RAWP) Stipulation List for the 547-551 Tenth Avenue Site (the Site) to the New York City Office of Environmental Remediation (OER) on behalf of Extell 4110 LLC. This letter serves as an addendum to the RAWP to stipulate additional content, requirements, and procedures that will be followed during the Site remediation. The contents of this list are added to the RAWP and will supersede the content in the RAWP where there is a conflict in purpose or intent. The additional requirements/procedures include the following Stipulation List below:

1. The criterion attached in **Appendix 1** will be utilized if additional petroleum containing tanks or vessels are identified during the remedial action or subsequent redevelopment excavation activities. All petroleum spills will be reported to the NYSDEC hotline as required by applicable laws and regulations. This contingency plan is designed for heating oil tanks and other small or moderately sized storage vessels. If larger tanks, such as gasoline storage tanks are identified, OER will be notified before this criterion is utilized.
2. A pre-construction meeting is required prior to the start of remedial excavation work at the Site. A pre-construction meeting will be held at the Site and will be attended by OER, the developer or developer representative, the consultant, excavation/general contractor, and if applicable, the soil broker.
3. A pre-approval letter from all disposal facilities will be provided to OER prior to any soil/fill material removal from the Site. Documentation specified in the RAWP - Appendix D - Section 1.6 "Materials Disposal Off-Site" will be provided to OER. If a different disposal facility for the soil/fill material is selected, OER will be notified immediately.
4. A CD containing the final RAWP including this approved Stipulation List will be placed in the library that constitutes the primary public repository for project documents.
5. Signage for the project will include a sturdy placard mounted in a publically accessible right of way to building and other permits signage will consist of the NYC VCP Information Sheet (attached **Appendix 2**) announcing the remedial action. The Information sheet will be laminated and permanently affixed to the placard.
6. This NYC VCP project involving the removal and transportation of hazardous waste may be subject to the New York state Department of Environmental Conservation's Special Assessment Tax (ECL 27-0923) and

Hazardous Waste Regulatory Fees (ECL 72-00402). See DEC's website for more information: <http://www.dec.ny.gov/chemical/9099.html>.

7. As excavation activities will extend beneath the groundwater table, collection and analysis of four post-excavation samples from the bottom of the excavation will be collected to evaluate the performance of the remedy with respect to attainment of Track 1 SCOs. Approximate post-excavation sampling locations are shown in **Appendix 3**. Samples will be analyzed for contaminants of concern (SVOCs, mercury, and lead only).
8. Spill Remediation and Closure (NYSDEC Spill No. 9503865) will be coordinated with the NYSDEC independently from OER's RAWP. End point sampling conducted to achieve closure of Spill No. 9503865 will be coordinated with and approved by NYSDEC.
9. In the event that organic silts or peat material are encountered during excavation activities conducted during the redevelopment, methane will be monitored as part of the CAMP to ensure the protection of on-site workers and the surrounding community.
10. Truck route is included in (**Appendix 4**).
11. The signed RIR certification page and stamped/signed RAWP certification page is included in **Appendix 5**.
12. Dewatering will be performed in full compliance with applicable laws, rules and regulations.
13. **Appendix 6** includes Vapor Barrier Pre-Certification letter from Vapor Barrier manufacturer stating that the proposed vapor barrier system mitigates against the contaminants of concern at the site.
14. OER requires parties seeking City Brownfield Incentive Grants (BIG) grants to carry insurance. For a cleanup grant, both the excavator and the trucking firm(s) that handle removal of soil must carry or be covered under a commercial general liability (CGL) policy and a contractors pollution liability (CPL) policy, both of which must provide \$1 million per claim in coverage. Both policies must name the City of New York, the NYC Economic Development Corporation, and Brownfield Redevelopment Solutions as additional insured. A fact sheet regarding insurance is attached as **Appendix 7**.

Very Truly Yours,

cc: S. Chawla, OER

Appendix 1

Generic Procedures for Management of Underground Storage Tanks identified under the NYC VCP

Prior to Tank removal, the following procedures should be followed:

- Remove all fluid to its lowest draw-off point.
- Drain and flush piping into the tank.
- Vacuum out the “tank bottom” consisting of water product and sludge.
- Dig down to the top of the tank and expose the upper half.
- Remove the fill tube and disconnect the fill, gauge, product, vent lines and pumps. Cap and plug open ends of lines.
- Temporarily plug all tank openings, complete the excavation, remove the tank and place it in a secure location.
- Render the tank safe and check the tank atmosphere to ensure that petroleum vapors have been satisfactorily purged from the tank.
- Clean tank or remove to storage yard for cleaning.
- If the tank is to be moved, it must be transported by licensed waste transporter. Plug and cap all holes prior to transport leaving a 1/8 inch vent hole located at the top of the tank during transport.
- After cleaning, the tank must be made acceptable for disposal at a scrap yard, cleaning the tanks interior with a high pressure rinse and cutting the tank in several pieces.

During the tank and pipe line removal, the following field observations should be made and recorded:

- A description and photographic documentation of the tank and pipe line condition (pitting, holes, staining, leak points, evidence of repairs, etc.).
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with a calibrated photoionization detector (PID).

Impacted Soil Excavation Methods

The excavation of the impacted soil will be performed following the removal of the existing tanks. Soil excavation will be performed in accordance with the procedures described under Section 5.5 of Draft DER-10 as follows:

- A description and photographic documentation of the excavation.

- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with calibrated photoionization detector (PID).

Final excavation depth, length, and width will be determined in the field, and will depend on the horizontal and vertical extent of contaminated soils as indentified through physical examination (PID response, odor, staining, etc.). Collection of verification samples will be performed to evaluate the success of the removal action as specified in this document.

The following procedure will be used for the excavation of impacted soil (as necessary and appropriate):

- Wear appropriate health and safety equipment as outlined in the Health and Safety Plan.
- Prior to excavation, ensure that the area is clear of utility lines or other obstructions. Lay plastic sheeting on the ground next to the area to be excavated.
- Using a rubber-tired backhoe or track mounted excavator, remove overburden soils and stockpile, or dispose of, separate from the impacted soil.
- If additional UST's are discovered, the NYSDEC will be notified and the best course of action to remove the structure should be determined in the field. This may involve the continued trenching around the perimeter to minimize its disturbance.
- If physically contaminated soil is present (e.g., staining, odors, sheen, PID response, etc.) an attempt will be made to remove it, to the extent not limited by the site boundaries or the bedrock surface. If possible, physically impacted soil will be removed using the backhoe or excavator, segregated from clean soils and overburden, and staged on separated dedicated plastic sheeting or live loaded into trucks from the disposal facility. Removal of the impacted soils will continue until visibly clean material is encountered and monitoring instruments indicate that no contaminants are present.
- Excavated soils which are temporarily stockpiled on-site will be covered with tarp material while disposal options are determined. Tarp will be checked on a daily basis and replaced, repaired or adjusted as needed to provide full coverage. The sheeting will be shaped and secured in such a manner as to drain runoff and direct it toward the interior of the property.

Once the site representative and regulatory personnel are satisfied with the removal effort, verification of confirmatory samples will be collected from the excavation in accordance with DER-10.

Appendix 2

Signage



NYC Voluntary Cleanup Program

This property is enrolled in the New York City Voluntary Cleanup Program for environmental remediation. This is a voluntary program administered by the NYC Office of Environmental Remediation.

For more information, log on to:

www.nyc.gov/oer



If you have questions or would like more information, please contact:

Shaminder Chawla at (212) 788-8841

or email us at brownfields@cityhall.nyc.gov

547-551 Tenth Avenue

Site #: 13CVCP104M

Appendix 3

Endpoint Sampling Map



LEGEND:

- | | | | |
|---|-----------------------------------|---|--|
|  | Excavation to 10 feet below grade |  | Excavation to 18 feet below grade |
|  | Excavation to 13 feet below grade |  | Excavation to 31 feet below grade |
|  | Excavation to 16 feet below grade |  | Proposed Post-Excavation Sampling Location |



DATE
3.21.2013

PROJECT NO.
11454

SCALE
as shown

APPENDIX
3

Appendix 4
Truck Route



Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community

Legend

-  Project Site Location
-  Entrance Truck Route
-  Exit Truck Route



547-551 TENTH AVENUE
New York, New York



DATE 3/14/2013
PROJECT No. 11454
FIGURE 1

TRUCK ROUTE MAP

Environmental Consultants
440 Park Avenue South, New York, N.Y. 10016

Appendix 5

RIR and RAWP certification page

CERTIFICATION

I, Michelle Lapin, am a Qualified Environmental Professional, as defined in RCNY § 43-1402(ar). I have primary direct responsibility for implementation of the Remedial Investigation for the Extell 551 Tenth Avenue Site, (NYC VCP Site No. 13CVCP104M). I am responsible for the content of this Remedial Investigation Report (RIR), have reviewed its contents and certify that this RIR is accurate to the best of my knowledge and contains all available environmental information and data regarding the property.

Michelle Lapin 3-14-13 
Qualified Environmental Professional Date Signature

CERTIFICATION

I, Michelle Lapin, am a Professional Engineer licensed in the State of New York. I have primary direct responsibility for implementation of the remedial action for the Extell 551 Tenth Avenue Site [Site Number 13CVCP104M].

I certify that this Remedial Action Work Plan (RAWP) has a plan for handling, transport and disposal of soil, fill, fluids and other materials removed from the property in accordance with applicable City, State and Federal laws and regulations. Importation of all soil, fill and other material from off-Site will be in accordance with all applicable City, State and Federal laws and requirements. This RAWP has provisions to control nuisances during the remediation and all invasive work, including dust and odor suppression.

Michelle Lapin

Name

073934

NYS PE License Number

Michelle Lapin

Signature

3-14-13

Date



Appendix 6

Vapor Barrier Pre-Certification letter

GRACE

Construction Products

Mark A. Franciosi
Technical Service Engineer - Americas

T 617-498-4303

mark.a.franciosi@grace.com

W. R. Grace & Co.-Conn.
62 Whittemore Avenue
Cambridge, MA 02140

March 1st, 2013

Michelle Lapin
AKRF, Inc
440 Park Avenue South
7th Floor
New York, NY 10016

Project: 547-551 10th Avenue Block 1069, Lot 29 & 34 New York, NY OER# 13VCP104M DOB
Job # 121328116

Dear Ms. Lapin,

I have reviewed the following documents for the above referenced project:

- Tables 1 - 4 from the January 2013 Remedial Investigation Report, Soil Analytical Results prepared by AKRF, Inc.
- Tables 5 - 8 from the January 2013 Remedial Investigation Report, Groundwater Analytical Results prepared by AKRF, Inc.
- Table 9 from the January 2013 Remedial Investigation Report, Soil Vapor Analytical Results prepared by AKRF, Inc.
- Figure 1 – Project Site Location, prepared by AKRF, Inc., dated 1.20.2012
- Figure 2 – GPR Results and Sampling Locations, prepared by AKRF, Inc., dated 2.17.2012
- Figure 3 – Proposed Redevelopment Plan, prepared by AKRF, Inc., dated 10.22.2012
- Figure 4 – Excavation Plan, prepared by AKRF, Inc., dated 10.24.2012

The identified contaminants at the levels reported will not have an adverse effect on the waterproofing or vapor barrier properties of Preprufe[®] 300R, Florprufe[®] 120 or Bituthene Systems, provided standard design and installation procedures are followed. Standard installation instructions and details can be found on our website at www.graceconstruction.com. If you have any questions, please feel free to call me at the number above.

Sincerely,

Mark Franciosi

Mark Franciosi

cc: K. Burke, J. Ridgeway

Appendix 7

Insurance Fact Sheet

FACT SHEET - BIG PROGRAM INSURANCE REQUIREMENTS

Investigation Grants – for a developer or site owner to be eligible for a BIG investigation grant, its environmental consultant(s) must be:

- a Qualified Vendor in the BIG Program; and
- maintain Professional Liability (PL) insurance of \$1M per claim and annual aggregate.

Cleanup Grants – for a developer or site owner to be eligible for a BIG cleanup grant:

- Its general contractor or excavation/foundation contractor hired to perform remedial work must maintain:
 - a. Commercial General Liability(CGL) insurance of at least \$1M per occurrence and \$2M in the general aggregate; and
 - b. Contractors Pollution Liability (CPL) insurance of at least \$1M per occurrence.

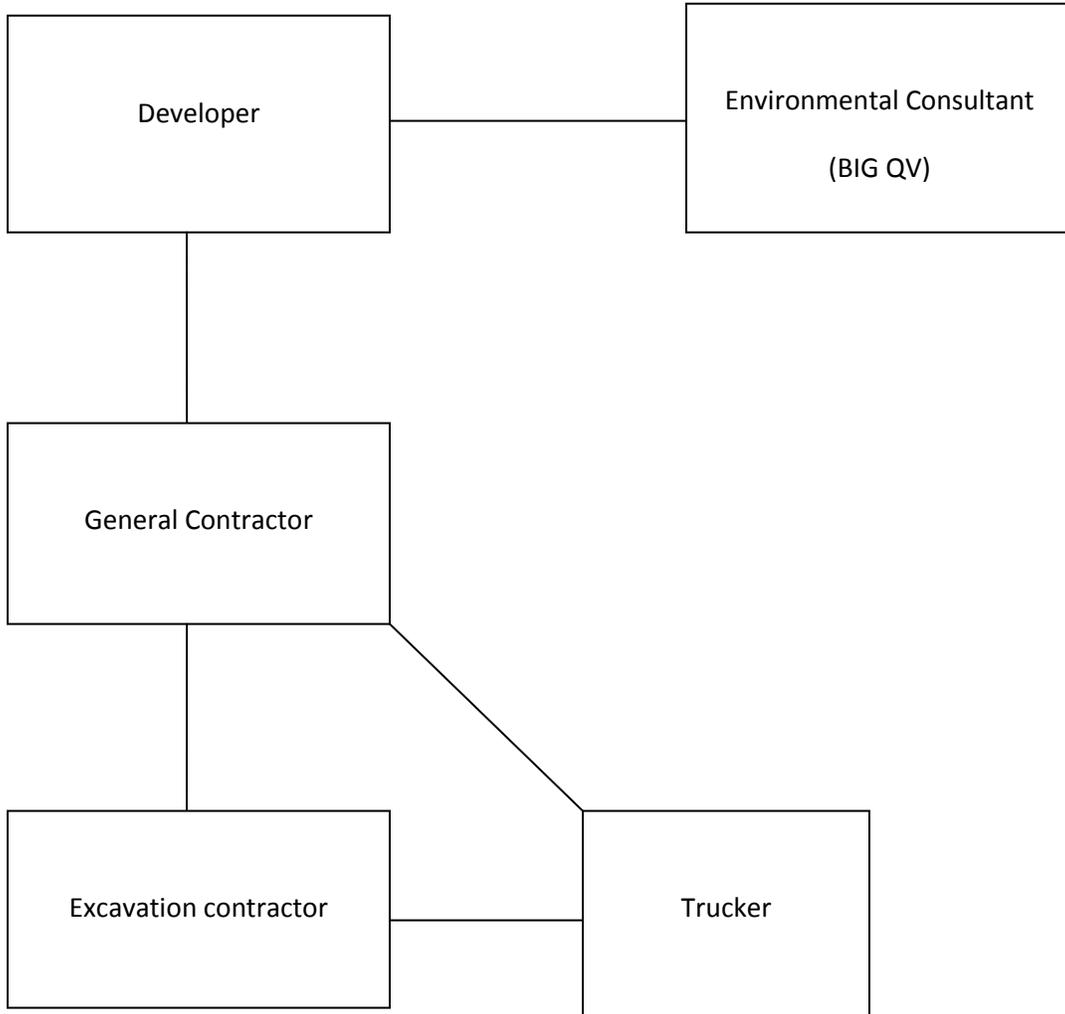
Both policies must list the city, EDC and BRS as additional insureds, include completed operations coverage and be primary and non-contributory to any other insurance the additional insureds may have.

- Its subcontractors who are hired by the general contractor etc. to perform remedial work at a site, including soil brokers and truckers, must also maintain CGL and CPL policies in the amount and with the terms set forth above; and
- Its environmental consultant(s) hired to oversee the cleanup must be:
 - a. a BIG Qualified Vendor; and
 - b. maintain Professional Liability (PL) insurance of \$1M per claim and annual aggregate.

If, in the alternative, the developer hires its environmental consultant to perform the cleanup, the environmental consultant must maintain CGL and CPL insurance in the amount and with the terms set forth above.

Example of Contractual Relationships for Cleanup Work

The Office of Environmental Remediation’s Voluntary Cleanup Plan program requires applicants to identify the parties who are engaged in active remediation of their sites including: the General Contractor hired to remediate and/or the excavation contractor hired to excavate soil from the site and the trucking firm(s) that remove soil from the site for disposal at approved facilit(ies).



The chart above shows contractual relationships that typically exist for projects that are enrolled in the Voluntary Cleanup Program.

The full names and addresses of the additional insureds required under the Required CGL and Required CPL Policies are as follows:

“City and its officials and employees”

New York City Mayor’s Office of Environmental Remediation
253 Broadway, 14th Floor
New York, NY 10007

“NYC EDC and its officials and employees”

New York City Economic Development Corporation
110 William Street
New York, NY 10038

“BIG Grant Administrator and its officials and employees”

Brownfield Redevelopment Solutions, Inc.
739 Stokes Road, Units A & B
Medford, NJ 08055