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June 6, 2016

Mr. Matt Segrest Alamo Manhattan Bellevue LLC 2808 Fairmount Street Dallas, TX 75201

Re: Further Action at the following Site:

• Site Name: Alamo Manhattan Main Street

• Site Address: 10505 Main Street, Bellevue, WA 98004

Cleanup Site ID: 12266
Facility/Site No.: 5245
VCP Project No.: NW2811

Dear Mr. Segrest:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Alamo Manhattan Main Street facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

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Description of the Site

This opinion applies only to the Site described below. The Site as characterized to date is defined by the nature and extent of contamination associated with the following releases:

- Benzene, ethylbenzene, xylenes, total petroleum hydrocarbons (TPH) as gasoline (TPHg), TPH as diesel (TPHd), TPH as oil (TPHo), tetrachloroethene (PCE), and naphthalene releases in Soil.
- Benzene, TPHg, TPHd, TPHo, and PCE releases in Ground Water.

The Site is more particularly described in **Enclosure A** to this letter, which includes detailed Site diagrams. The description of the Site is based solely on the information contained in the documents listed below in this letter.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcels associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

- 1. The Riley Group, Phase I Environmental Site Assessment Report, Aaron Brothers Retail Property, 10505, 10507, 10509, and 10525 Main Street, Bellevue, Washington, March 21, 2012.
- 2. The Riley Group, *Phase II Subsurface Investigation Report, Proposed Main Street Development, 10505 to 10509 and 10515 to 10525 Main Street, Bellevue, Washington*, July 24, 2012.
- 3. The Riley Group, Additional Groundwater Monitoring Well Installation and Sampling Report, Proposed Main Street Development, 10505 to 10509 and 10515 to 10525 Main Street, Bellevue, Washington, June 19, 2013.
- 4. The Riley Group, Phase I Environmental Site Assessment Update, Main Street Development Property, 10505 to 10525 Main Street, Bellevue, Washington, June 26, 2013.
- 5. The Riley Group, Excavation Work Plan, Main Street Development, 10505 to 10525 Main Street, Bellevue, Washington, July 17, 2013.
- 6. The Riley Group, *Remedial Action Report*, June 13, 2014.
- 7. The Riley Group, Groundwater Characterization Work Plan, Main Street Apartments Development, 10505 Main Street, Bellevue, Washington, October 30, 2014.
- 8. The Riley Group, Groundwater Characterization Report, Alamo Manhattan Main Street, 10505 Main Street, Bellevue, Washington, July 22, 2015.

Matt Segrest June 6, 2016 Page 3

The reports listed above will be kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Appointments can be made by calling the NWRO resource contact at 425-649-7235 or sending an email to nwro-public request@ecy.wa.gov.

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of ground water at the Site is not sufficient to select a cleanup action, as documented by the following discussion and request for additional information:

- Ground water characterization and monitoring conducted prior to installation of monitoring well MW-5 in December 2014 assumed a ground water flow direction to the northwest. This assumption was based on data from former monitoring wells MW-3 and MW-4 (see Enclosure A, Figure 3). Subsequent ground water level measurements incorporating MW-5 indicate ground water flow directions ranging from north-northeast to east-northeast (see Enclosure A, Figure 4). Therefore, MW-5 is not downgradient of ground water contamination previously documented at the Site.
- The most recent ground water samples tested for TPHd from monitoring wells RW1 and RW2 (between December 2014 and May 2015) were subjected to a silica gel cleanup procedure prior to laboratory analysis, which can result in artificially lowered TPHd concentrations. Results of silica gel cleanup of ground water samples analyzed for TPH-Dx are not recognized as acceptable by Ecology.
- The extent of impacts from releases to ground water has not been established downgradient of the following locations of prior exceedance of MTCA ground water cleanup levels on the western third of the Property:
 - o Existing monitoring wells RW1 and RW2.
 - Decommissioned monitoring wells B-1A and MW-4.
- Ground water elevations, flow directions, gradients, and potential chemical impacts from previously documented areas of soil contamination have not been characterized in the eastern part of the Property (former Parcel 0005), where the following former contamination sources were located (see Enclosure A, Figures 2 and 3):

- Pump islands and a 500-gallon UST associated with a former service station and auto repair facility.
- 500-gallon heating oil UST.
- o 900- and 660-gallon USTs associated with a former fueling area.
- Oil/water separator.
- The full range of chemicals of potential concern (COPCs) associated with the identified contamination sources was not included in all of the soil and ground water sample analyses completed to date, as summarized in Table 1 of Enclosure B to this letter. Use of the tested analytes in soil as indicator hazardous substances to guide the completed excavation and removal of soil from the Site was acceptable; however, all COPCs must also be analyzed in ground water.
- Ecology recommends the following actions to address Site characterization data needs:
 - o Install ground water monitoring wells meeting resource protection well standards (WAC 173-160) in the vicinity of the following locations (see **Enclosure A, Figure 4**):
 - Existing monitoring wells RW1 and RW2.
 - Former monitoring wells B-1A and MW-4.
 - Former contamination sources in the eastern part of the Site.
 - These monitoring wells should be located in a downgradient ground water flow direction with respect to documented areas of historical soil and ground water contamination at the Site. The well screens should be positioned such that anticipated seasonal ground water levels are within the screened interval of each well (well screens must not be totally submerged).
 - Collect four quarterly sets of samples from the four monitoring wells using low-flow purge and sampling techniques.
 - Prepare ground water level elevation contour maps for each quarterly monitoring event, illustrating ground water flow directions and providing data to calculate ground water gradients.
 - Submit the ground water samples for analysis by an Ecology-certified laboratory for the following chemical parameters:

- Western part of Property, downgradient of RW1/RW2 and B-1A/MW-4: TPHg, TPHd, TPHo, BTEX, and volatile organic chemicals (VOCs).
- Eastern part of Property, downgradient of former contamination sources: TPHg, TPHd, TPHo, BTEX, VOCs, metals (lead, cadmium, chromium, nickel, and zinc), polychlorinated biphenyls (PCBs), carcinogenic polycyclic aromatic hydrocarbons (cPAHs), and naphthalenes.
- o If any ground water samples from the first and second quarterly sampling events show detectable PCBs, cPAHs, or metals other than lead at concentrations less than MTCA ground water cleanup levels, these analytes can be eliminated from the third and fourth quarterly ground water sampling events for those specific monitoring wells.
- Note that a silica gel cleanup procedure is not acceptable for ground water samples analyzed for TPH-Dx. Laboratory reporting limits that are below the respective MTCA ground water cleanup levels need to be specified.
- o Incorporate the updated characterization of ground water conditions into a conceptual Site model that fully addresses contamination sources, migration pathways, and potential receptors (see Section 6.3, Use of a Conceptual Site Model, in *Guidance for Remediation of Petroleum Contaminated Sites, Toxics Cleanup Program Publication No. 10-09-057*, September 2011). Include a Terrestrial Ecological Evaluation per the requirements of WAC 173-340-7490 and associated Ecology guidance.
- O Present the updated Site characterization data in a Remedial Investigation (RI) report format that consolidates all pertinent Site historical information, collected soil and ground water data, and completed soil cleanup data. See the following Ecology web page for RI report format and content requirements: http://www.ecy.wa.gov/programs/tcp/policies/checklists.

2. Establishment of cleanup standards and selection of a cleanup action.

Ecology has determined the cleanup standards and cleanup action you selected for the Site do not meet the substantive requirements of MTCA. The Site characterization is not complete; therefore, establishment of cleanup standards is not complete, and Ecology considers the cleanup actions conducted at the Site (soil removal and off-Site disposal) as an interim cleanup action. The completed Site characterization (RI) should be the basis for preparation of a Feasibility Study (FS) that meets the MTCA requirements for selection of a cleanup action. See the following Ecology web page for a preferred FS report format and content requirements: http://www.ecy.wa.gov/programs/tcp/policies/checklists.

3. Other Issues

- Electronic submittal of all sampling data into Ecology's electronic Environmental Information Management (EIM) database is a requirement in order to receive a final Ecology opinion for this Site. Jenna Durkee (email jedu461@ecy.wa.gov, or via telephone at 509-454-7865) is Ecology's contact and resource on entering data into EIM.
- Before further work is completed, Ecology encourages the development of a work plan to ensure that sufficient data for the soil and ground water is collected to avoid unnecessary expenditure of time and money.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. See RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After

Matt Segrest June 6, 2016 Page 7

you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at 425-649-7257 or e-mail at michael.warfel@ecy.wa.gov.

Sincerely,

Michael R. Warfel, Site Manager NWRO Toxics Cleanup Program

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Enclosures (2): A – Description and Diagrams of the Site

B – Table 1, Chemicals of Potential Concern at the Alamo Manhattan Main

Street Site

cc: Jerry Sawetz, The Riley Group

Sonia Fernandez, VCP Coordinator, Ecology

Enclosure A Description and Diagrams of the Site

Site Description

This section provides Ecology's understanding and interpretation of Site conditions, and is the basis for the opinions expressed in the body of the letter.

<u>Site</u>: The Site is defined by benzene, ethylbenzene, xylenes, total petroleum hydrocarbons (TPH) as gasoline (TPHg), TPH as diesel (TPHd), TPH as oil (TPHo), tetrachloroethene (PCE), and naphthalene releases in Soil; and benzene, TPHg, TPHd, TPHo, and PCE releases in ground water. The Site is located at 10505 Main Street in Bellevue, Washington (the Property) on King County tax parcel number 5223300005 which covers 1.45 acres. Two former parcels (0005 and 0015) were combined to form this current parcel (see **Figure 2**).

Area and Property Description: The Property is located in downtown Bellevue (see Figure 1). The Property is bounded by 105th Avenue SE on the west, Main Street on the north, 107th Avenue SE on the east, and a multi-unit residential building on the south. The Property is presently occupied by a six-story wood-frame apartment building with 260 units and two levels of underground parking that was constructed in 2014.

<u>Site History and Current Use</u>: Historical Property included the following businesses since the mid-1940s:

- Automobile sales and repair.
- Gasoline service stations.
- Oil fuel sales.
- Photo processing.
- Residential dry cleaning.
- Pet supply store.
- Restaurant.

<u>Sources of Contamination</u>: The following potential and documented sources of soil and ground water contamination were identified by due diligence assessments, subsurface investigations, and remedial excavations (see Figures 2, 3, 5, and 6):

- Former Parcel 0015, western 1/3 of Property:
 - o Dry cleaning machine.
 - o Floor drains and septic tank.

- o 2,000-gallon fuel underground storage tank (UST), pump island dispenser, and associated piping.
- Former Parcel 0005, eastern 2/3 of Property:
 - o Three 1,000-gallon fuel USTs, a 500-gallon UST, pump island dispensers, underground fuel piping, and two underground hydraulic hoists associated with a former service station and auto repair facility.
 - o 500-gallon heating oil UST.
 - o 900- and 660-gallon USTs associated with a former fueling area.
 - o Oil/water separator.

<u>Physiographic Setting</u>: The Site is situated on the northern terminus of a ridge the trends north-south parallel to Lake Washington to the west. Land surface at the Site slopes from south to the northwest, north, and northeast, between approximate elevations of 120 feet to 80 feet above mean sea level (msl).

<u>Surface/Storm Water System</u>: The nearest identified surface water body is Meydenbauer Bay (an inlet of Lake Washington) located approximately 2,000 feet west of the Site (see **Figure 1**). Storm water in the vicinity of the Site is collected in catch basins on City of Bellevue streets.

<u>Ecological Setting</u>: The Site is located in a developed area adjacent to the downtown core of Bellevue and is surrounded by commercial and residential land uses. The Property is primarily covered by impervious surfaces (apartment building roof and sidewalks), with bordering landscaped areas. The surrounding area is developed commercial and residential land uses.

Geology: Borings and monitoring wells drilled on the Site encountered 25 to 37 feet of dense to very dense silty fine sand, on top of a very dense silty sand to sandy silt that was observed to a depth of 60 feet below ground surface (bgs), the maximum depth explored.

<u>Ground Water:</u> Subsurface explorations drilled at the Site prior to construction of the present apartment building encountered ground water at depths of 45 to 50 feet bgs. Ground water data from two former monitoring wells drilled prior to December 2014 (MW-3 and MW-4; see **Figure 4**) indicated a likely ground water flow direction to the northwest. Subsequent ground water elevations incorporating existing monitoring wells RW1, RW2, and MW-5 show ground water flow directions ranging from north-northeast to east-northeast (see **Figure 4**). Monitoring wells RW1 and RW2 were installed below the lower level of the underground parking garage beneath the apartment building, which is at an elevation of approximately 79 feet msl.

Release and Extent of Contamination: In 2013?, soil with TPHd and PCE concentrations above MTCA Method A cleanup levels were detected at a depth of approximately 36 feet bgs in the MW-4 borehole. Ground water samples collected from MW-4 in May and June 2013

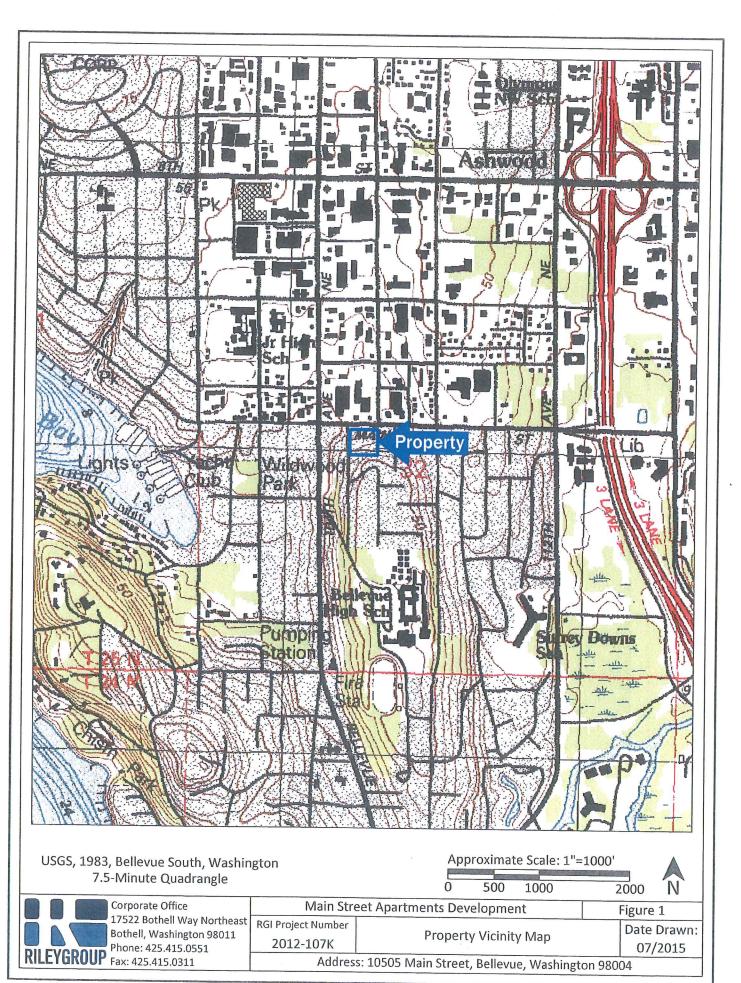
showed concentrations of benzene above Method A cleanup levels. Subsequent sampling conducted during subsurface investigations and remedial excavations completed at the Site confirmed the release of the other chemicals noted above in the Site definition.

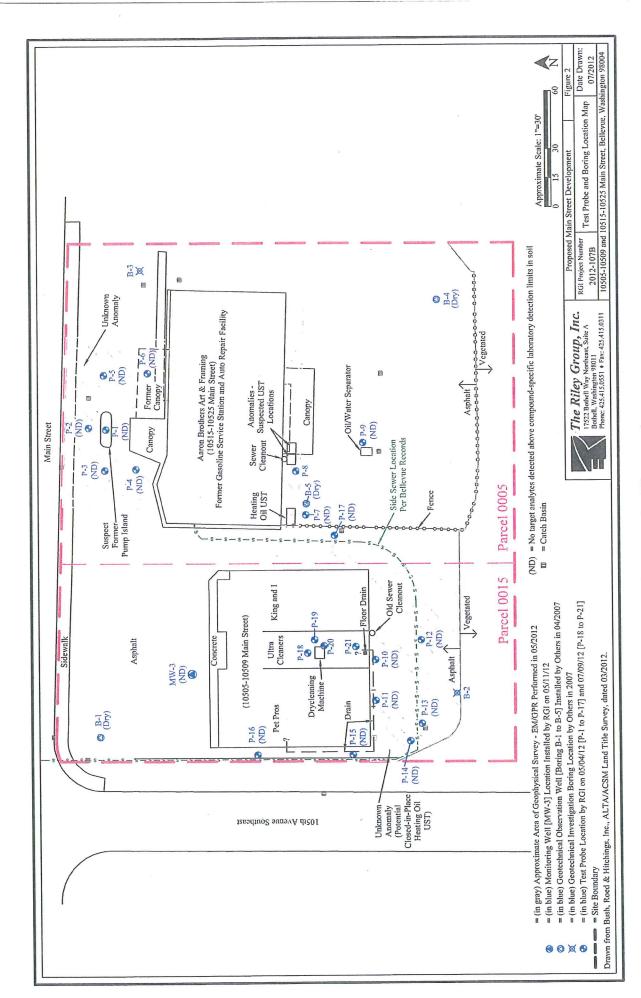
Interim Cleanup Actions: Five USTs and a septic tank were encountered and decommissioned as part of remedial action work completed at the Site during August through October 2013. Soil was excavated at the Site to an elevation of approximately 74 feet msl prior to construction of the apartment building. Of this excavated soil, a total of 1,434 tons of contaminated soil were removed from the Site and transported for off-Site disposal at licensed facilities.

The following residual soil contamination remains at the Site (see Figure 6):

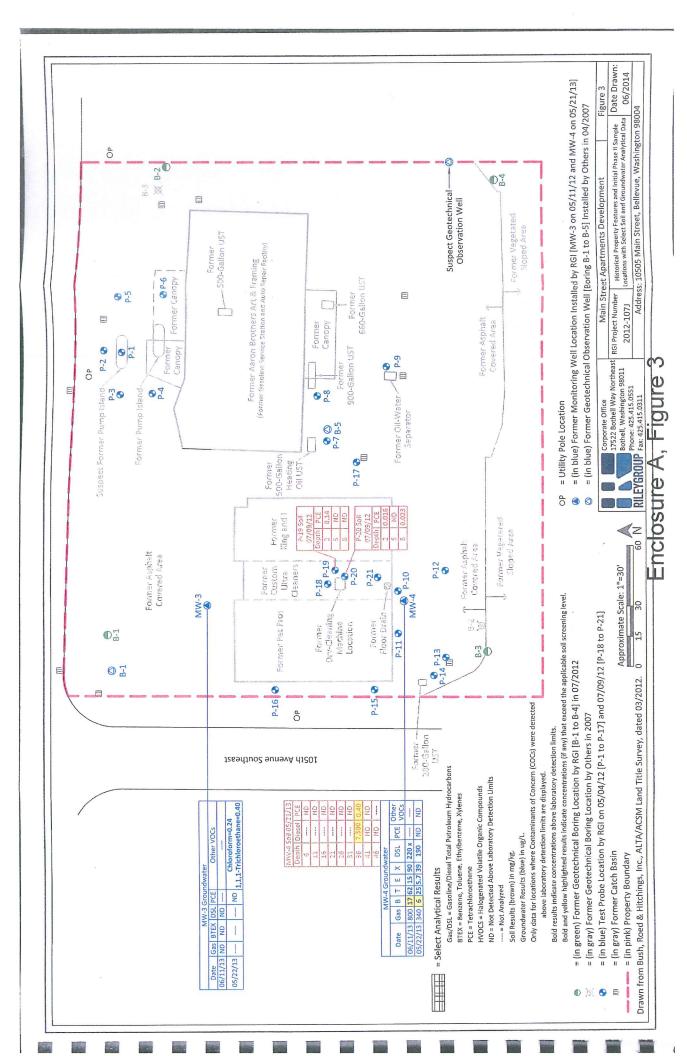
- Soil with TPHd concentrations above MTCA Method A cleanup levels, between 42 and 50 feet bgs in remedial excavation Area 3.
- Soil with TPHd and tetrachloroethene (PCE) concentrations above MTCA Method A cleanup levels, at a depth of approximately 36 feet bgs at the location of former monitoring well MW-4.

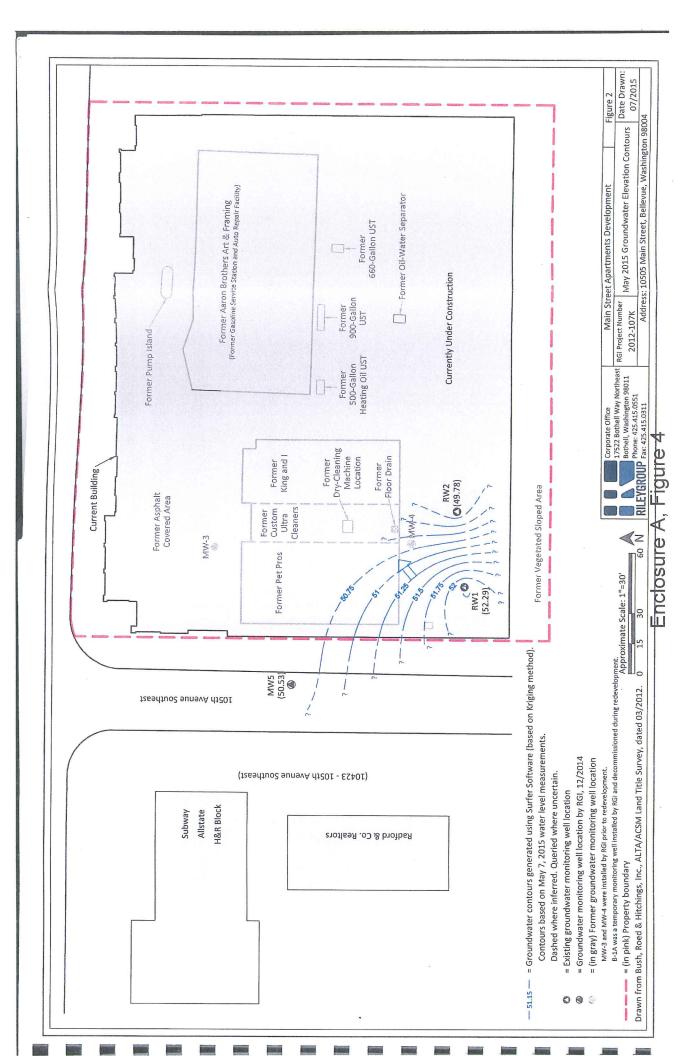
Site Diagrams

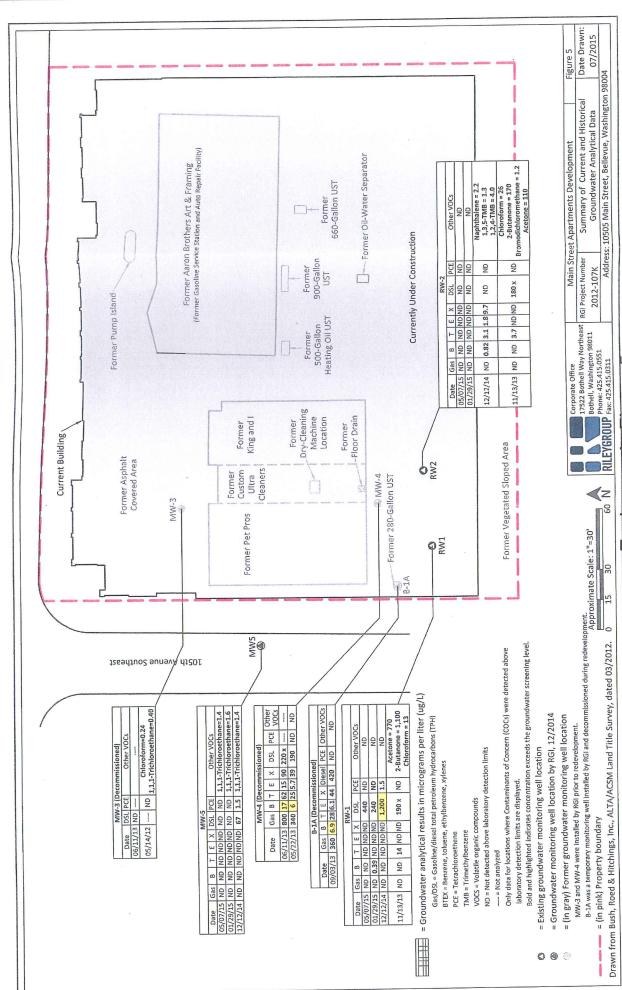




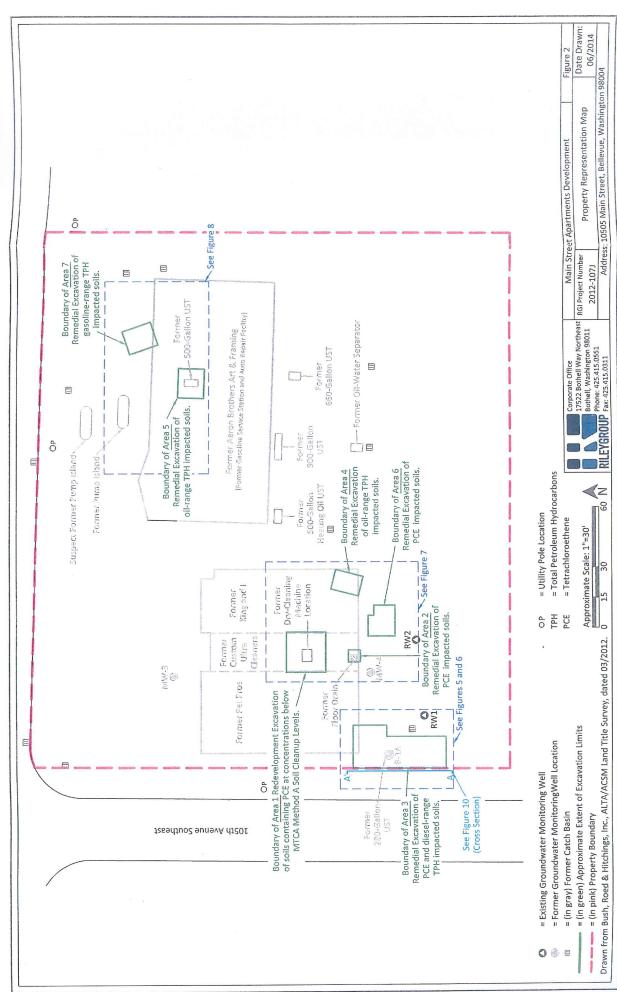
Enclosure A, Figure 2







Enclosure A, Figure 5



Enclosure A, Figure 6

Enclosure B

Table 1, Chemicals of Potential Concern, Alamo Manhattan Main Street Site

| Contaminant Source and Associated Test Borings | Chemicals of Potential Concern (Shaded); Tested: s = | | | | | | | | | | | | |
|---|--|-----|------|------|----|-----|---|----|----|-----|-----|------|--------------|
| | soil, g = ground water | | | | | | | | | | | | |
| | TPHg | ТРН | TPHo | ВТЕХ | Pb | cq | ڻ | N: | Zn | NOC | PCB | СРАН | Naphthalenes |
| Former Parcel 0015 (west 1/3 of property)* | | | | | | | | | | | | | |
| Dry cleaners | | | | | | | | | | s,g | | | |
| 280-gallon heating oil UST | | s,g | s,g | | | | | | | | | | S,Ę |
| 2,000-gallon fuel UST | s,g | | | s,g | S | | | | | | | | |
| Septic tank | s,g | s,g | s,g | s,g | S | s,g | | | | s,g | | | |
| Former Parcel 0005 (east 2/3 of property)* | | | | | | | | | | | | | |
| Fuel USTs/dispensers north of building | 'S | | | | S | | | | | | | | |
| Service station (hoists, waste oil) | S | S | S | | S | | | | | | S | s | S |
| Fuel USTs/dispensers south of building | S | | | | S | | | | | | | | |
| Heating oil UST | | S | S | | | | | | | | | | |
| Oil/water separator | S | S | S | S | | | | | | S | | | |

^{*} See Enclosure A, Figure 2