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May 8, 2012

Mr. Russ Olsen  
Department of Ecology  
Toxic Cleanup Program, Northwest Regional Office  
3190 160<sup>th</sup> Avenue Southeast  
Bellevue, Washington 98008

**SUBJECT:        Submittal – Draft Remedial Investigation Report, Sampling & Analysis Plan, and Health & Safety Plan  
                     Troy Laundry Site  
                     Agreed Order No. DE 8996  
                     307 Fairview Avenue North  
                     Seattle, Washington**

Dear Mr. Olsen:

On behalf of Touchstone SLU LLC, SoundEarth Strategies, Inc. (SoundEarth) is submitting for your review the enclosed Draft Remedial Investigation (RI) Report, Sampling & Analysis Plan (SAP), and Health & Safety Plan (HASP) for the Troy Laundry Site, generally located at 307 Fairview Avenue North in Seattle, Washington (the Property).

The documents were prepared under the authority of Agreed Order No. DE 8996 between Touchstone SLU LLC and the Washington State Department of Ecology. The Draft RI Report was developed to meet the general requirements of a remedial investigation as defined by the Washington State Model Toxics Control Act (MTCA) in WAC 173-340-350. The SAP was developed to meet the requirements of a SAP as defined in WAC 173-340-820. The HASP was designed to ensure compliance with state and federal regulations governing worker safety on hazardous waste sites. Within the State of Washington, these requirements are addressed in WAC 296-843, Hazardous Waste Operations.

**Site Summary**

Based upon the findings of the investigations summarized herein, the Site includes soil, soil vapor, and groundwater contaminated with gasoline-, diesel-, and oil-range petroleum hydrocarbons (GRPH, DRPH, and ORPH, respectively); tetrachloroethylene (PCE); trichloroethylene (TCE); cis-1,2-dichloroethylene (cis-1,2-DCE); and/or vinyl chloride (VC) beneath the Property, as well as beneath the west-adjointing property and the Boren Avenue North right-of-way. The highest concentrations of chlorinated and Stoddard solvents are located in the center of the Property near the loading dock.

The Site is located on a topographically low-lying area within the downtown area of the City of Seattle. Elevations range from 68 feet (northwest corner of the Property) to 105 feet (southeast corner of the

Property) above NAVD88 and slope toward the northwest. Lake Union is located approximately 0.4 miles to the north of the Site, and Elliot Bay is located approximately 1.5 miles to the west of the Site.

The Property was initially developed prior to 1893 with residences. Residences exclusively occupied the Property until 1925, when the David Smith building was constructed on the northwestern corner of the Property. The Troy Building was constructed between 1926 and 1927, and the Mokas Building was constructed in 1960. According to historical records, by 1948, the Property operated as one of the Pacific Northwest's largest laundry and dry cleaning facilities. At least 15 underground storage tanks containing heating oil, fuel, and dry cleaning solvents, as well as several aboveground storage tanks containing propane, wash water, water-softening agents, dry cleaning solvents, and heating oil, were used on the Property.

Land use in the vicinity of the Property was primarily residential through the early 1900s, when the area transitioned toward commercial and light industrial use.

The results of previous subsurface investigations and the remedial investigation conducted at the Site suggest that the chlorinated solvent impacts confirmed in soil and groundwater beneath the Site are the result of a release from the laundry and dry cleaning facility that operated on the Property from 1927 through 1985. Although the type and location of dry cleaning operations conducted on the Property prior to 1964 could not be confirmed, historical building plans indicated that the bulk of the dry cleaning operations after the mid-1960s were conducted on the southwest portion of the Property. Consistent with this information, the highest concentrations of chlorinated solvents are located near the center of the Property by the loading dock.

Concentrations of PCE and its degradation products within the primary water-bearing zone, which is located at an approximate elevation of 16 feet above mean sea level are relatively low and fairly consistent across the Site. PCE was detected in the monitoring well installed near the source area (MW11), as well as two of the wells completed within the Boren Avenue North right-of-way. Concentrations of cis-1,2-DCE were confirmed above the cleanup level only in wells MW06 and MW09, and VC was detected only in well MW06. Concentrations of TCE were detected above the cleanup level in groundwater samples collected from monitoring wells MW09 and MW12, which were screened 25 to 30 feet below the top of the primary water-bearing zone. The concentrations are consistent with those observed in other, shallower wells screened at the top of the primary water-bearing zone throughout the Site.

The highest concentrations of PCE in soil are present beneath the center of the Property at depths ranging from 3 to 10 feet below ground surface. A very dense silt layer was encountered at depths between 12 and 20 feet bgs. The majority of the PCE contamination appears to be held up at the silt layer as evidenced by the significant drop in PCE concentrations within and beneath the silt (boring/sample P08-10 and P08-14).

Relatively consistent concentrations of PCE in soil appear to have migrated from the primary source area at the Property throughout the western half of the Property primarily through diffusion. Any migration upgradient of the source likely resulted from vapor-phase transport in the vadose zone over several years, as evidenced by the soil gas survey results and facilitated by the relatively loose sandy geology beneath those portions of the Site.

PCE has migrated vertically through soil to depths of up to 65 feet bgs, or approximately 10 to 15 feet above the primary water-bearing zone, in the areas explored. PCE contamination in soil extends east up

to approximately the centerline of the Property, and it has migrated westerly up to the Property boundary; any contamination extending into the adjoining Boren Avenue North right-of-way is likely limited in extent. The presence of both aboveground and belowground utilities limited SoundEarth's ability to precisely define the exact western edge of contamination; however, data collected from borings/wells completed along the west side of the Boren Avenue North right-of-way support this conclusion.

GRPH as Stoddard solvent were also observed in soil and groundwater beneath the Site. In all samples where concentrations of GRPH exceeded MTCA A cleanup level in soil and groundwater, chlorinated solvents were also present, indicating a similar historical use and/or storage of both chemicals.

More detailed information regarding the Site history, investigation findings, and Conceptual Site Model are provided in the enclosed RI Report.

**Closing**

SoundEarth looks forward to your review of the enclosed documents and appreciates the opportunity to work with you on this project. Please contact the undersigned at (206) 306-1900 if you have any questions or require additional information.

Respectfully,

SoundEarth Strategies, Inc.



Erin K. Rothman, MS  
Principal Scientist

Attachments: Draft Remedial Investigation Report, Troy Laundry  
Health & Safety Plan  
Sampling & Analysis Plan

cc: Shawn Parry, Touchstone Corporation

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