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TECHNICAL MEMORANDUM

TO: **Carl Bach (Boeing)** **Date: August 24, 2007**

FR: **Ted Norton (Golder)** **Job No.: 043-1126.200.400**

RE: **Parcel 2, 10-80s Property Addendum Additional Phase II Investigation**

Introduction

This technical memorandum has been prepared by Golder Associates Inc. (Golder) to support the Boeing Company (Boeing) in resolving concerns related to Recognized Environmental Conditions (RECs) associated with the property referred to as Parcel 2, the 10-80s Property (Site). The RECs were identified in the "*Report On Phase I Environmental Site Assessment Boeing Renton Facility - Parcel 2 (10-80s Property) 635 and 800 Park Avenue North, Renton, Washington" [(Phase I), Golder 2005].* The Site was formerly located within the Boeing Renton Facility plant boundaries. The original Phase II environmental site assessment (Phase II) was conducted in April 2005 in accordance with "*Boeing Renton Facility - Parcel II The 10-80s Property 635 and 800 Park Avenue South, Renton, Washington Phase II Sampling Plan"* [Phase II Sampling Plan (Golder, 2005)]. This technical memorandum is provided as an addendum and presents a scope of work for additional drilling and sampling investigations to be conducted at the Site.

Boeing's Renton facility is located in Renton, King County, Washington. The 10-80s property consists of 22.4 acres which is bisected by Park Avenue North into two portions, the "10-80s property" and "Lot 10" (Figure 1). The 10-80s property is bounded by Park Avenue North on the east, by Logan Avenue North on the west, and south (Parcel 2 – 10-71 property). Lot 10 is bounded by Park Avenue North on the west, by North 8th Street on the north, by Garden Avenue North on the east and by Boeing Property (parking garage for the 10-18 Building) on the south.

The scope of work as provided presents descriptions of the planned investigation activities, including performing soil borings utilizing direct-push technology and soil and groundwater sampling. Soil and groundwater sampling will be performed in accordance with the methods and procedures outlined in the Quality Assurance Project Plan (QAPP) as presented in Phase II Sampling Plan (Golder, 2005).

Soil Borings

In general, soil and groundwater sampling will be performed at various locations selected to increase the resolution of data on the property (Figure 1). Soil borings were placed primarily based on a grid system modified to focus select borings on RECs identified in the Phase I ESA (Golder 2005). Three boring locations were specifically adjusted to address RECs identified in the Phase I. One boring was positioned near the former locations of sumps, SRE-2076 and SRE-2079, a second boring was located near former sump SRE-3084. The third boring was positioned near the location of the former diesel underground storage tank (UST) on the southeast side of the 10-81 Building.

One soil boring and four groundwater sample locations were located based on sampling results from the original Phase II investigation. One soil (with groundwater) in conjunction with four groundwater locations are centered on the original Phase II location SB-7001 where diesel range petroleum

hydrocarbons were detected in the groundwater. One soil boring was added to the grid near Phase II boring SB-8003 to investigate arsenic concentrations in soil. Elevated concentrations of arsenic were detected in the groundwater sample collected from the Phase II boring.

A total of 19 additional direct-push soil borings will be advanced for the collection of soil samples for chemical analysis. A groundwater sample will be collected at one of these 19 locations. Four additional borings will be advanced for the collection of groundwater samples only. In general, borings drilled for the collection of soil samples will be advanced to a depth of approximately 7-ft below ground surface (bgs). Two soil samples will be obtained from each of these 19 soil boring at depths of 1-ft and 5-ft bgs and analyzed for volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH) diesel through motor oil range and metals. Of these 36 samples, 10-20% will be additionally analyzed for semi-volatile organic compounds (SVOCs) including carcinogenic polynuclear aromatic hydrocarbons (cPAHs). CPAHs will be analyzed using the select ion method (SIM). In addition, two samples from the boring located next to the location of the former SRE-3084 sump will also be analyzed for polychlorinated biphenyls (PCBs). The laboratory analytical methods to be used of chemical analysis of the soil samples are presented in the QAPP.

Upon completion of soil sampling the boring located next to the original Phase II boring SB-7001 will be advanced to a depth of approximately 12 ft bgs for the collection of a groundwater sample for TPH. Four additional borings will be advance around the perimeter of the original Phase II boring SB-7001 to a depth of approximately 12-ft bgs (see Figure 1). Groundwater samples will be collected from these four samples locations only and will be analyzed for TPH-Dx with silica gel cleanup. The laboratory analytical methods to be used of chemical analysis of the groundwater samples are presented in the QAPP.

Summary

Field activities are scheduled to begin August 31, 2007 and be completed by September 5, 2007. Soil samples will be submitted to Analytical Resources, Inc. laboratories in Tukwila, WA on a standard two week turnaround. Groundwater samples will be submitted under a separate chain of custody form on an accelerated one week turnaround.

References

Golder Associates, Inc. *Report On Phase I Environmental Site Assessment Boeing Renton Facility - Parcel 2 (10-80s Property) 635 and 800 Park Avenue, Renton, Washington.* March, 2005

Golder Associates, Inc. *Boeing Renton Facility- Parcel II The 10-80s Property 635 and 800 Park Avenue South, Renton, Washington Phase II Sampling Plan.* March, 2005.

cc: K. Angelos (Golder)
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