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April 10, 1998

Ms. Susan Hugo Senior Hazardous Materials Specialist Alameda County Health Care Service Agency Department of Environmental Health Division of Hazardous Materials 1131 Harbor Bay Parkway Alameda, California 94502

RE: Proposed Ground Water Investigation and Well Installation

McGrath Steel Company 6655 Hollis Street Emeryville, California WA Job No. 184-1358-01

Dear Ms. Hugo:

On behalf of McGrath Steel, the owner of the property at 6655 Hollis Street in Emeryville, California, Weiss Associates (WA) is submitting this subsurface investigation workplan for the above referenced site (Figure 1). You requested this subsurface investigation in your February 13, 1997, letter to McGrath Steel. The investigation objective is to determine if petroleum hydrocarbons are present in soil or ground water at the site. This workplan is divided into the following sections: Background, Objective, Investigation Strategy, Scope of Work, and Schedule.

### **Background**

McGrath Steel removed two underground fuel tanks from beneath the Hollis Street sidewalk adjacent to the McGrath property. The Alameda County Health Care Services Agency (ACHCSA) subsequently requested a ground water investigation workplan.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> ACHCSA, Letter to Mr. Robert Thomas of McGrath Steel Company from ACHCSA Senior Hazardous Materials Specialist Susan L. Hugo, 2 pages, February 13, 1997.



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# **Objective**

The objective of WA's proposed investigation is to evaluate whether the former tanks may have been a source of hydrocarbons to the subsurface and, if so, assess the extent of hydrocarbons in ground water. WA's proposed investigation strategy and scope-of-work are presented below.

# **Investigation Strategy**

WA's proposed plan is to delineate the extent of any dissolved hydrocarbons in ground water with a maximum of seven soil borings. WA proposes using a direct push drill rig to core the soil borings to ground water, estimated between about 12 and 15 ft below ground. Figure 2 depicts the approximate location of the proposed borings. Because of the potentially large number of other hydrocarbon sources in the vicinity, WA believes it is prudent to locate three borings up- and crossgradient of the former tank locations: one boring in the open, asphalted area of the McGrath property southeast of the former tanks, one boring on the south side of 67<sup>th</sup> Street west of the Hollis Street intersection and one boring on the north side of 67<sup>th</sup> Street directly across from the former tanks. It is important to establish up-front whether other dissolved petroleum hydrocarbon plumes may interfere with our investigation. Four borings will be located in the anticipated downgradient direction<sup>2</sup> along 67th Street to the west. WA will space these borings at approximately 50-ft intervals in the downgradient direction to delineate the downgradient edge of dissolved hydrocarbons in ground water.

WA will collect a ground water grab sample from each boring and analyze each sample for total petroleum hydrocarbons as gasoline (TPH-G) and diesel (TPH-D), benzene, toluene, ethylbenzene and xylenes (BTEX), and methyl tertiary-butyl ether (MTBE). WA will also collect one soil sample from each boring for possible analysis.

WA anticipates that at least one and possibly two ground water monitoring wells will be required by the ACHCSA.<sup>3</sup> Based on the results of the soil boring data, WA will return to the site to install the 2-inch diameter ground water monitoring wells to a maximum depth of 20 feet. Assuming the ground water table fluctuates between 12 and 15 feet below ground surface (bgs), the wells will be screened from 10 to 20 feet bgs. WA will screen soil samples every five feet with a photo ionization detector (PID). WA will select, if any, the sample with the highest PID reading for laboratory analysis. After the well is completed, WA will also collect a ground water sample for analysis. An analytical laboratory will analyze each sample for TPH-G, TPH-D, BTEX, and MTBE.

<sup>&</sup>lt;sup>2</sup> Personal Communication, Voicemail message from Alameda County Health Care Services Agency caseworker Susan Hugo for Tom Fojut of Weiss Associates, April 10, 1997.

<sup>&</sup>lt;sup>3</sup> Personal Communication, Phone call from Denes Turcsanyi with McGrath Steel to Paul Nuti of Weiss Associates, July 11, 1997.



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# Scope of Work

To conduct the investigation, WA will complete the following scope of work:

- Review agency files to identify other hydrocarbon plumes adjacent to the property;
- Prepare a site-specific health and safety plan for workers conducting the investigation, and contract a line-locating company to identify underground utility lines in the work area;
- Secure boring and well installation permits from the Alameda County Zone 7 Water Agency, secure an encroachment permit from the Emeryville Department of Public Works and notify the ACHCSA at least 48 hours prior to beginning the field work;
- Core up to seven soil borings using a direct push drill rig and collect one soil sample and one ground water sample from each boring;
- Backfill each boring to specifications required by the Zone 7 Water Agency and the Emeryville Department of Public Works;
- Contract a state-certified analytical laboratory to analyze each water sample for TPH-G, TPH-D, BTEX and MTBE;
- Submit the soil samples to the same analytic laboratory and have the samples put on hold for possible analysis at a later date (within the sample holding time). The laboratory, upon request, will analyze the samples for TPH-G, TPH-D, BTEX and MTBE.
- Compile the field data and analytical results of the soil borings;
- Based on the soil boring results, install up to two ground water monitoring wells as directed by McGrath Steel and the ACHCSA (one soil sample will be collected form each well for TPH-G, TPH-D, BTEX and MTBE analysis);
- After developing the well(s), collect ground water samples for TPH-G, TPH-D, BTEX, and MTBE analysis; and,
- Compile the results of the site investigation and prepare an investigation summary report. The report will include a site location map, map of boring and monitoring well(s) locations, descriptions of field procedures, tabulated analytic data, the laboratory certified analytical reports and sample chain-of-custody forms, and recommendations by a registered engineer or geologist.



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### Schedule

This investigation will be conducted after receiving your written approval of this workplan. A report will be submitted after all fieldwork is completed and the analytic data is compiled.

Please call me at (510) 450-6164 if you have any questions or comments regarding this workplan.

Sincerely, Weiss Associates

Paul M. Nuti, P.E. Project Engineer

**Figures** 

CC: Mr. Robert Thomas, McGrath Steel Company, 6655 Hollis Street, Emeryville, California, 94608

Mr. Denes Turcsanyi, 849 Santa Barbara Road, Berkeley, California, 94707

PMN:pmn



Figure 1. Site Location Map-McGrath Steel, 6655 Hollis Street, Emeryville, California



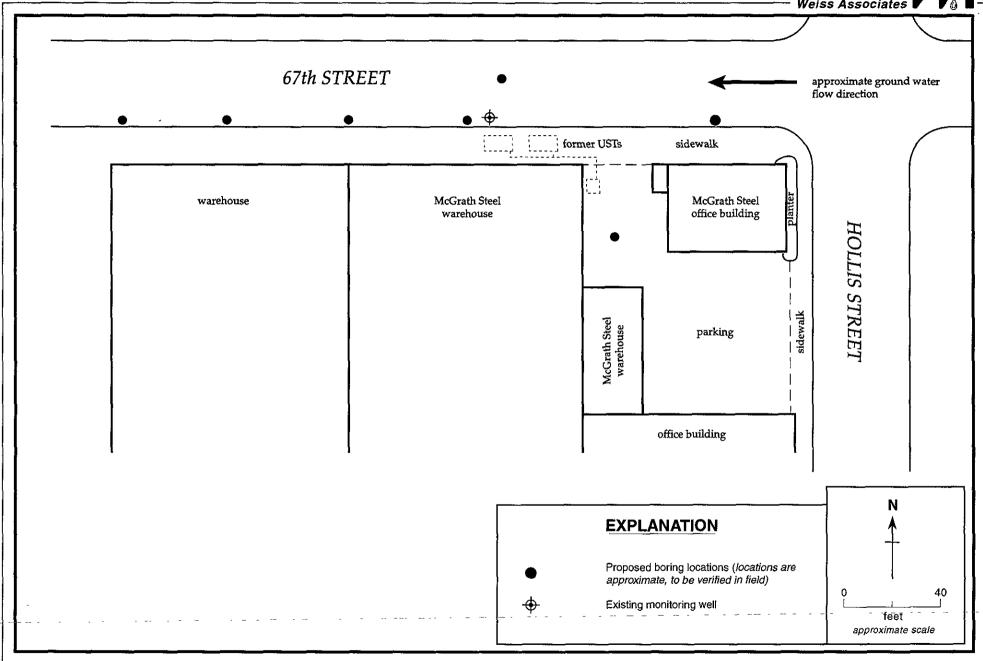


Figure 2. Site Plan-McGrath Steel, 6655 Hollis Street, Emeryville, California