ATT

May 20, 1988

Mr. Lowell Miller
Alameda County Hazardous
Materials Unit
80 Swan Way
Oakland, CA 94621

Subject: Plan to Evaluate the Hazardous Waste Characteristics of an Asphalt-like Material Found on the Marketplace and Nielsen Sites in Emeryville, California

Dear Mr. Miller:

Aqua Terra Technologies
Consulting Engineers
& Scientists

2950 Buskirk Avenue
Suite 120
Walnut Creek, CA
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415 934-4884

At the request of The Martin Company, Aqua Terra Technologies, Inc. (ATT) proposes to evaluate the hazardous waste characteristics of the asphalt-like material found in soil and as floating material on groundwater at the Marketplace and Nielson Sites in Emeryville, California. The hazardous waste characteristics are those described in the California Code of Regulations (CCR), Title 22, Section 66680 et seq.

The evaluation of hazardous waste characteristics of the asphalt-like material will be according to the tasks described below:

**Task 1 - Collect Representative Samples of the Asphalt-like Material**

Four representative sampling locations have been selected based on an analysis of available data on subsurface contaminants found at the Marketplace and Nielson Sites. The sampling locations are identified in Attachment A, Plate 1.

- A sample will be collected from the floating product on Well 5. This well is located in the area previously used by the Parrafin Companies, Pabco and Fiberboard Corporation, for the production of roofing materials, floor coverings and industrial asphalts. Well 5 contains a thick layer of floating asphalt-like material. The floating product sample from Well 5 is considered representative of the asphalt-like floating material found in other monitoring wells at the site.

- A second sample of the asphalt-like material will be collected from the immediate vicinity of Test Pit 7. At Test Pit 7, a "relatively

pure" layer of the asphalt-like material was found in soil between the depths of two and seven feet. Analysis by Earth Metrics suggests that Test Pit 7 is along the isopleth of maximum concentration of total petroleum hydrocarbons (TPH as oil and grease) found at the Nielson Site.

- A third sample of the asphalt-like material will be collected in the immediate vicinity of the previously placed Soil Boring EM2. The boring log for EM2 indicates a layer of "heavy tar and wood" between depths of two and four feet. Analysis by Earth Metrics suggests that the "relatively pure" asphalt-like material at this location is likely to contain the highest TPH levels to be found at the Marketplace Site.

- A fourth sample of the asphalt-like material will be collected from the vicinity of previously placed Soil Boring EM4. The analysis by Earth Metrics indicates that the "oily/tarry" material found at a depth of two to three feet at this location is representative of fractions of this asphalt-like substance mixed with the soil matrix.

The four samples will represent various concentrated forms of the asphalt-like material. The sampling locations are also representative of the apparent distribution of this substance on the Nielson and Marketplace sites.

Sampling will be performed as soon as possible following Alameda County approval of the Plan. The specific sampling locations will be identified by Earth Metrics personnel. Individual samples will be collected by ATT personnel. The sample from Well 5 will be collected from the groundwater surface with a teflon bailer. The asphalt-like material in soil at locations from Test Pit 7 and soil borings EM2 and EM4 will be uncovered with a backhoe. Samples will be collected with a Teflon coated spatula. A sufficient sample volume will be collected to fill an 8-ounce glass sampling containers for chemical and physical analyses and a 4-ounce glass sampling container for bioassay testing. The sample

containers will be precleaned according to EPA specifications and will have Teflon lined closures. Samples will be stored and transported on ice and will be accompanied with the appropriate chain of custody documentation.

**Task 2 - Analysis of Hazardous Waste Characteristics of Samples of Asphalt-like Material.**

Each of the four samples will be analyzed for the hazardous waste characteristics listed in Title 22 of the CCR Sections 66680 et seq. Specific analyses will include:

- Volatile organic chemicals with library search (EPA Method 8240)
- Semivolatile organic chemicals with library search (EPA Method 8270)
- CCR 17 heavy metals by inductively couple argon plasma spectrometry (EPA Method 6010) and atomic absorption graphite furnace (EPA 7000 series)
- Polychlorinated biphenyls (EPA Method 8080)
- Ignitability (according to the method described in CCR Title 22, Section 66702)
- Corrosivity (according to the method described in CCR Title 22, Section 66708)
- Aquatic bioassay (according to the method described in CCR Title 22, Section 66696)

The asphalt-like material is not unstable and does not react violently with water, or form explosive mixtures with water or appear to generate toxic gases, vapors, or fumes, when mixed with water. The material is also not explosive. Therefore, the reactivity of the asphalt-like material will not be determined because in our judgement the material does not meet any of the criteria listed on Section 66705 of Title 22.

The chemical analyses and bioassay testing will be conducted by laboratories certified by the State of California Department of Health Services for hazardous waste analyses. Samples will be retained by the laboratories in case further analysis is required. Due diligence will be applied to obtain laboratory results within three weeks of the analytical requests.

**Task 3 - Report of Results and Waste Characteristics Evaluation.**

A report will be prepared by ATT which summarizes analytical and bioassay results and presents the analytical data sheets. Results will be evaluated according to the waste characteristics and hazardous criteria described in Article 11 of Title 22. The report will be submitted to Alameda County Hazardous Materials Unit within one week of the receipt of analytical data.

If the proposed plan meets the Alameda County Hazardous Materials Unit approval, ATT and Earth Metric are prepared to immediately undertake the waste characterization to expedite disposition of this matter.

Sincerely,

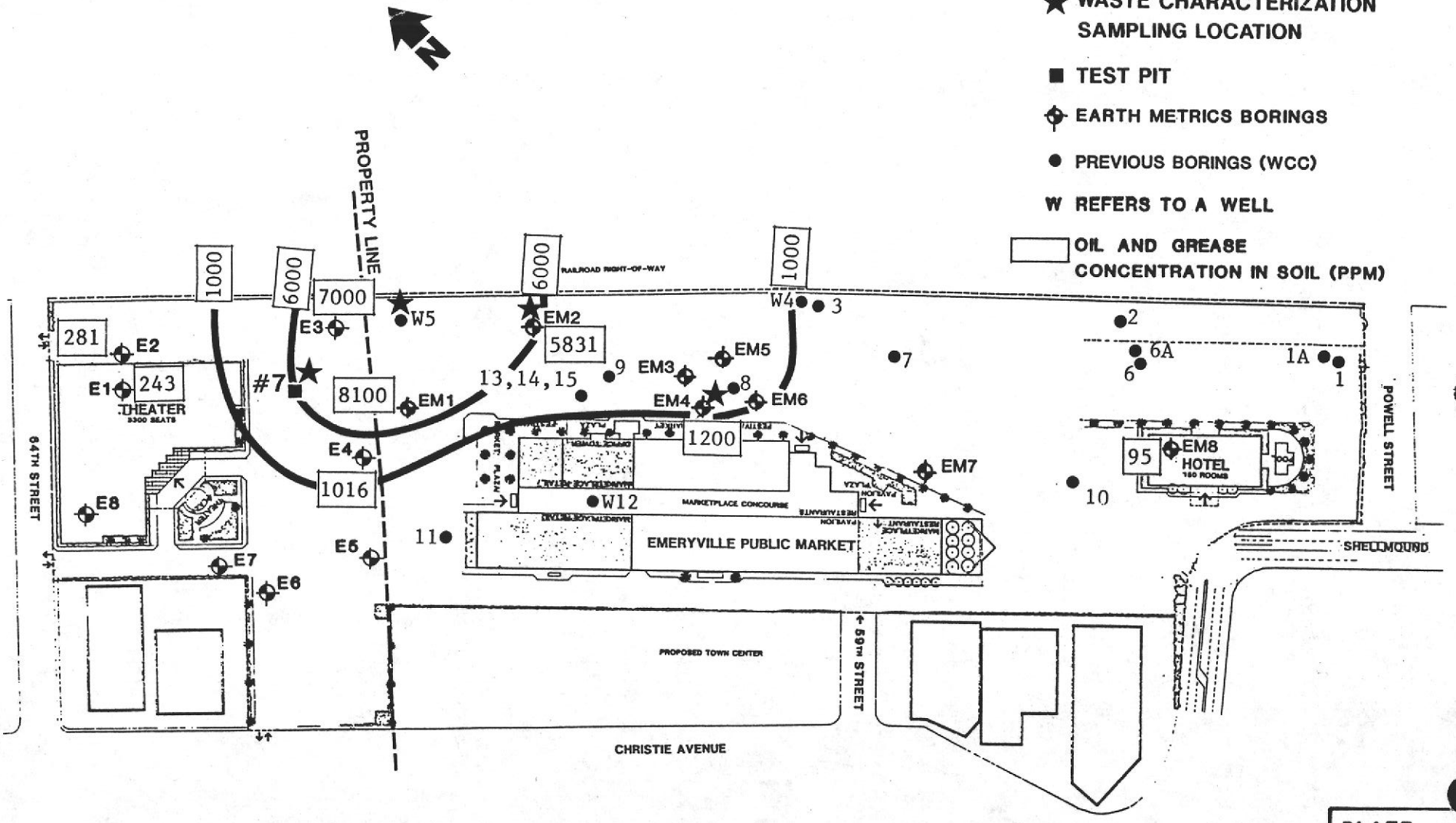
AQUA TERRA TECHNOLOGIES, INC.

Patrick J. Sheehan, Ph.D.
Environmental Toxicologist

PJS/pd

Attachment

cc: Mr. Tom Gram
Mr. Robert Wyatt
Mr. Marc Papineau




source: Earth Metrics March 11,1988

PLATE 1

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| ATT Aqua Terra Technologies Consulting Engineers & Scientists | WASTE CHARACTERIZATION SAMPLING LOCATION | THE MARTIN COMPANY<br>JOB NUMBER 834<br>DATE 5/20/88 |