SECOR
International Incorporated

#4008

December 14, 1995

Mr. Barney Chan
Hazardous Materials Specialist
Alameda County Department
of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

95 DEC 15 AM 9:51
ENVIRONMENTAL HEALTH

WORK PLAN FOR SITE INVESTIGATION, 580 JULIE ANN WAY, OAKLAND, CALIFORNIA, St ID #4008, FOR SAN FRANCISCO FRENCH BREAD COMPANY

Dear Mr. Chan:

SECOR International Incorporated (*SECOR*) is pleased to submit this Work Plan for a Site investigation at 580 Julie Ann Way in Oakland, California (the Site, see Figure 1, Site Location Map). *SECOR* is submitting this document on behalf of the San Francisco French Bread Company (SFFBC) in response to a letter from the Alameda County Department of Environmental Health (ACDEH) dated November 7, 1995 requiring a Work Plan to be submitted no later than December 8, 1995. *SECOR* requested an extension of this deadline to December 15, 1995 that was granted by Mr. Chan of the ACDEH.

The Site is located in a mixed commercial/industrial area and consists of a large warehouse/bakery and an open asphalt parking/work area (Figure 2). The Site is used by the SFFBC to prepare and distribute baked food products. The Site formerly operated one 8,000-gallon capacity gasoline underground storage tank (UST) and one 10,000-gallon capacity diesel UST. Previous subsurface investigations conducted by Groundwater Technology, Inc. (GTI) in June 1991 and *SECOR* in November 1993 indicated the presence of total petroleum hydrocarbons as gasoline (TPHg) and TPH as diesel (TPHd) in most of the soil samples collected in the immediate vicinity of the USTs. At soil boring locations further away from the USTs, low to nondetectable concentrations of TPHg and TPHd were reported. However, relatively high concentrations of high-boiling point hydrocarbons (total oil and grease/total recoverable petroleum hydrocarbons) were reported at all boring locations where analyzed. The excavation and removal of the two USTs was supervised by *SECOR* during September 1995. Petroleum hydrocarbon-impacted soil and groundwater was observed during UST removal activities that included TPHg, TPHd, and high-boiling hydrocarbons. Based on the apparent composition of these high-boiling point hydrocarbons and their pervasive presence in fill soil underlying the Site, the source of these hydrocarbons does not appear to be related to the USTs.

FILE REVIEW - HYDROGEOLOGIC CONDITIONS

Based on the previous investigations and the UST removal activities conducted at the Site, groundwater beneath the Site and vicinity is at approximately 7 to 8 feet below ground surface (bgs). To assess the groundwater flow conditions in the Site vicinity, *SECOR* gathered hydrogeologic information from nearby properties. Hydrogeologic data was obtained from the Yandell Truckaway property, located at 563 Julie Ann Way, directly across the street from the Site. Groundwater beneath this property occurs at

approximately 6 to 7 feet bgs and groundwater elevation data collected from three wells in November 1995 indicates that groundwater flow is towards the east to southeast towards the San Francisco Bay. Hydrogeologic data was also obtained from the Malibu Grand Prix property, located at 8000 South Coliseum Way, approximately one mile south of the Site. Groundwater beneath this property in December 1993 ranged from approximately 6 to 10 feet bgs with a general groundwater flow direction to the east and southeast.

PRELIMINARY FIELD ACTIVITIES

Prior to initiation of field activities, *SECOR* will prepare a Site-specific Health and Safety Plan (HASP) to address the proposed scope of work and obtain a well construction permit from the Alameda County Flood Control and Water Conservation District (Zone 7). The proposed well location will be cleared with respect to underground utilities and other obstructions using a professional utility locator and Underground Service Alert (USA) will be notified.

FIELD ACTIVITIES

Drilling and Soil Sampling

SECOR will supervise the installation of a groundwater monitoring well at the location shown on Figure 2. The borehole will be advanced utilizing a truck-mounted drill rig equipped with 8-inch diameter hollow-stem augers to approximately 10 feet below the first encountered groundwater. Relatively undisturbed soil samples will be collected for lithologic description and possible chemical analysis at a minimum of 5-foot intervals using a California-modified split spoon sampler lined with three 6-inch long brass tubes.

A *SECOR* geologist will describe the soil encountered according to the Unified Soil Classification System (USCS) and will maintain a boring log of these descriptions. A representative soil sample from each sample interval will be screened in the field for the presence of volatile organic compounds (VOCs) using a Photoionization Detector (PID). Screening results will be documented on the boring log. *SECOR* will select two soil samples for chemical analysis, one from the vadose zone and one from directly above the first encountered groundwater.

The ends of the brass tubes containing the soil samples will be covered with teflon sheeting, capped with plastic end caps, labeled, sealed in plastic bags, and stored in an ice-filled cooler. The samples selected for chemical analysis will be delivered to a California state-certified analytical laboratory with a completed chain-of-custody record.

Monitoring Well Installation

The borehole will be converted to a groundwater monitoring well upon reaching the desired well completion depth of approximately 10 feet below the first encountered groundwater. The well will be completed with 10 to 15 feet of capped, flush threaded, 4-inch diameter Schedule 40 PVC 0.020-inch machine slotted well screen from the base of the borehole and completed with blank casing to the surface. Filter sand will be placed in the annular space between the wall of the borehole and casing, to a height

of one foot above the screened interval. One foot of bentonite pellets will be placed above the sand and hydrated. A cement grout mixture (5% bentonite) will then be place into the remaining annular space to ground surface. A flush-mounted, protective water-tight monument cover will then be grouted slightly above ground surface to complete the well installation. The well will also be fitted with a locking water-tight well cap.

Monitoring Well Development and Sampling

The cement grout surface seal will be allowed to set for a minimum of 48 hours prior to monitoring well development. The well will be developed by alternately bailing and surging. Well development will continue until the groundwater is reasonably free of sediment. During well development, measurements and observations of pH, electrical conductivity, temperature, color, and turbidity will be recorded. A minimum of ten casing volumes of water will be removed during well development.

Following well development, *SECOR* will collect a groundwater sample from the newly-installed monitoring well for chemical analysis. Prior to sampling the well will be allowed to recover to 80% of the initial water level prior to development. A groundwater sample will be collected using a disposable PVC bailer and decanted directly into laboratory-supplied sample containers. Each of the sample containers will be labeled, sealed in plastic bags, and placed in an ice-filled cooler. The samples will be submitted to a California state-certified analytical laboratory along with a completed chain-of-custody record.

LABORATORY ANALYSIS

Soil and groundwater samples collected during the investigation will be analyzed for total petroleum hydrocarbons as gasoline (TPHg), TPH as diesel (TPHd), TPH as motor oil (TPHmo), and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Methods 8015, modified and 8020, respectively. *SECOR* anticipates submitting and requesting analysis for two soil samples and one groundwater sample (per well) to a California-state certified analytical laboratory under chain-of-custody records.

REPORTING

SECOR will compile and interpret the information collected from the field investigation and laboratory analysis described above. *SECOR* will then prepare a Summary Report presenting the methodology and findings of the investigation. The Summary Report will include an assessment of the soil and groundwater conditions beneath the Site and provide recommendations for additional investigative work, monitoring, and/or remedial measures, if warranted.

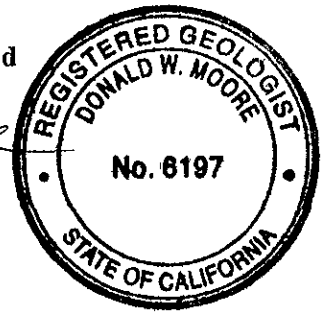
SCHEDULE

SECOR is prepared to begin work immediately upon approval of this Work Plan from the ACDEH. The preliminary field activities will require approximately one week to complete. Drilling, soil sampling, well installation, development and sampling will require one week to complete. Laboratory analyses will require two weeks from the sample submittal time. A Summary Report will be submitted to the ACDEH within four week of receipt of all analytical data from the laboratory.

If you have any questions or comments, please do not hesitate to contact us at (415) 882-1548.

Sincerely,

SECOR International Incorporated



Donald W. Moore, R.G.
Project Manager

Bruce E. Scarbrough, R.G.
Principal Geologist

cc: Mr. Peter Sher, San Francisco French Bread Company

Attachments:
Figure 1 - Site Location Map
Figure 2 - Site Plan with Proposed Monitoring Well Location

SOURCE: BASE MAP FROM U.S.G.S. OAKLAND EAST AND SAN LEANDRO CA QUADRANGLES. 7.5 MINUTE SERIES TOPOGRAPHIC MAP, PHOTOREVISED 1980.

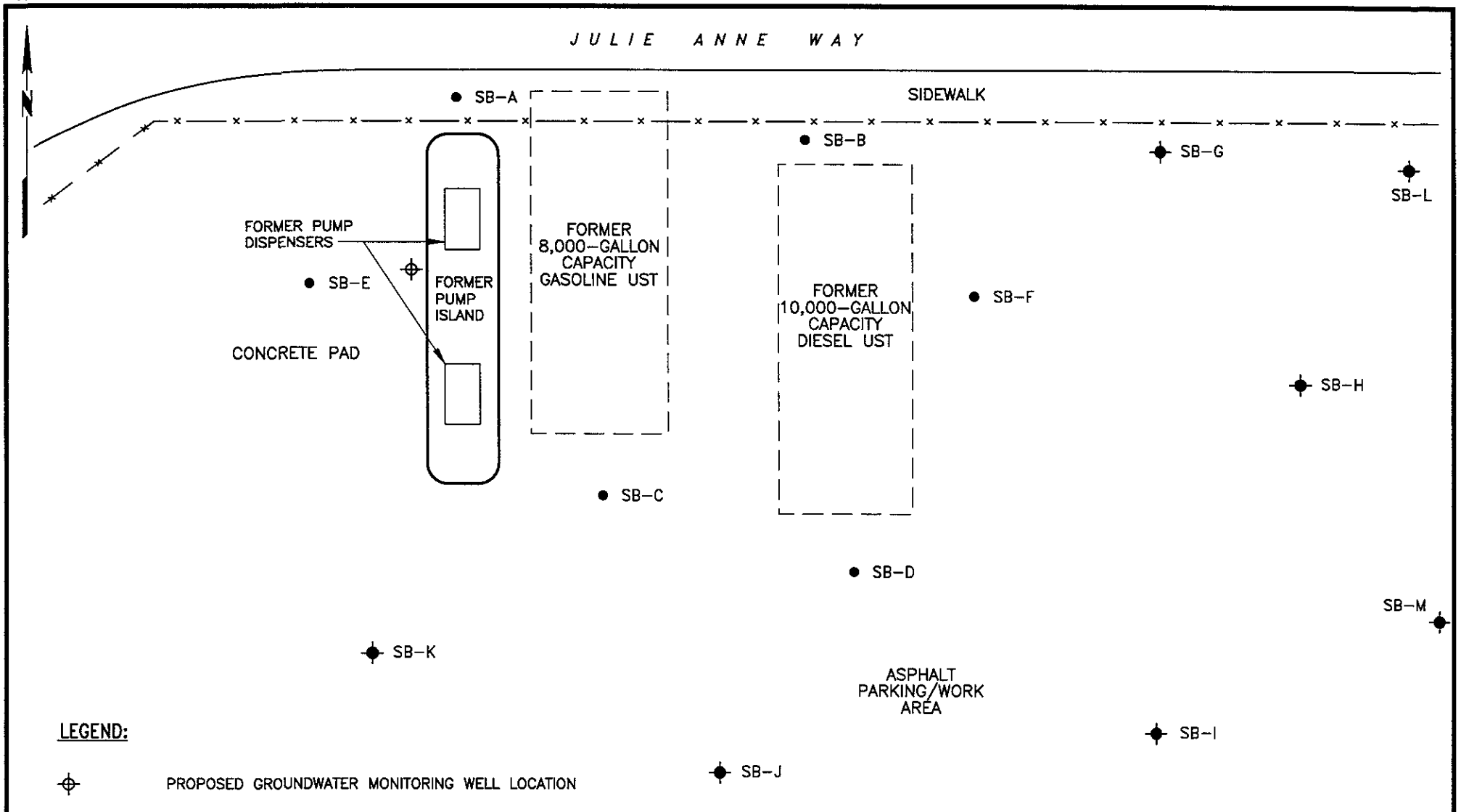
NORTH

0 2000 4000
SCALE FEET

SECOR INTERNATIONAL INCORPORATED	DRAWN CCR		FIGURE 1 SAN FRANCISCO FRENCH BREAD 580 JULIE ANN WAY OAKLAND, CALIFORNIA **SITE LOCATION MAP**
	APPR DWM		
	DATE 12OCT95		
	JOB NO. 70007-001-01		

199510.171511 X:\SF-BREAD\JULIE\SITEPLAN

199512.121944 X:\SF-BREAD\JULIE\JULIE02



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DRAWN	CCR
APPR	DWM
DATE	12DEC95
JOB NO.	50090-009-02

FIGURE 2
SAN FRANCISCO FRENCH BREAD
580 JULIE ANN WAY
OAKLAND, CALIFORNIA

SITE PLAN WITH PROPOSED MONITORING WELL LOCATION