

ENVIRONMENTAL
PROTECTION

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LOP 608 / 805

November 15, 1999

Ms. Susan Hugo, Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: Workplan for Additional Investigation and Preparation of Risk Assessment for
✓ **ONE Color Communications, 1001 42nd St., Oakland, California, and**
Former Dunne Paints 1007 41st Street, Emeryville, California

↳ LOP 608

Dear Ms. Hugo:

Block Environmental Services (BES) is pleased to provide the following workplan on behalf of ONE Color Communications (ONE) and the former Dunne Paints facility. The purpose of the proposed work is to satisfy the requirements for obtaining a No Further Action finding for the two properties. The tasks outlined herein were discussed and agreed upon at our meeting with yourself and Chuck Headlee of the San Francisco Regional Water Quality Control Board (RWQCB) on October 13, 1999, as well as a site inspection conducted on November 10. This workplan covers the collection of additional groundwater sampling data, subsurface characterization of the former Dunne Paints property, air emissions data, and other tasks necessary to complete a human health risk assessment in order to obtain closure for the subject properties. It was agreed upon at the October 13 meeting that the California Linen property would be excluded from the proposed closure plan and that BES would no longer investigate contaminants from the California Linen property.

SCOPE OF WORK

Groundwater Investigation

BES will measure depth to groundwater and sample from the seven remaining monitoring wells adjacent to the subject properties (MW-B2, MW-B3, MW-B4, MW-D1, MW-D2, MW-LD4, BES-1) as shown on the attached site map. In addition, BES will employ direct-push (a.k.a. hydropunch) drilling methods to install four temporary monitoring wells and collect groundwater samples from locations on Adeline Street and on the former Dunne Paints property. Use of the direct-push method will minimize the generation of soil cuttings. As indicated on the attached site map, the temporary well locations have been chosen to determine whether TPH-mineral spirits contamination has migrated downgradient to Adeline Street and thus could impact residences offsite. The temporary well location on the former Dunne Paints property is intended to determine whether groundwater beneath the property has been impacted by past or current

operations on the property.

Prior to drilling the temporary monitoring wells, BES will perform a utility check and secure permits from Alameda County. The procedure for installing the temporary wells will consist of inserting a clean, one-inch diameter, schedule 40 PVC pipe with flush-threaded joints into each boring after the completion of direct push drilling. The lower portion of the casing will be screened across the water table with 0.02-inch slots, while the remainder of the casing will consist of blank pipe.

Before sample collection, the depth to groundwater will be measured and the volume of water in each well casing will be calculated. A centrifugal pump and hose will be used to purge the wells of at least three well casing volumes. Well purge water will be placed in drums on-site until receipt of analytical test results. The groundwater samples will be collected using a new disposable polyethylene bailer and nylon twine for each well. The samples will be poured into appropriate containers, labeled, placed in a cooler filled with ice, and transported to a California Department of Health Services accredited analytical laboratory in accordance with chain-of-custody protocol. Samples will be analyzed according to EPA Method 8015M for TPH as mineral spirits. Exact protocols for groundwater sampling are attached.

Once the temporary monitoring wells have been sampled, the well casings will be removed and each will be grouted to the surface with cement using a tremie pipe or similar method.

Borings at Former Dunne Paints

The former varnish production portion of the former Dunne Paints property (located in the center of its southern edge) currently houses a furniture restoration business operating under the name Topcoat. In the site visit on November 10, staining was evident around a storm drain adjacent to one of the former varnish kettles. One-gallon cans of lacquer and lacquer thinner were stacked adjacent to the drain. BES will research local agency files to determine whether agency inspections of the facility have noted this condition previously, whether the operation holds an industrial discharge permit, and whether the practice has been permitted.

Given the evident pouring or spillage of such chemicals into this drain, BES will drill a boring immediately adjacent to the drain to determine whether the drain sump and piping have maintained their integrity. In order to access the soil beneath the building's concrete floor, BES will contract with a concrete corer. Soil samples will be collected at three-foot intervals, with the first taken at the soil surface, using a hand auger assembly fitted with a split spoon sampler. Samples will be collected in clean, two-inch diameter, six-inch long brass liners. The boring will be drilled to groundwater unless obstruction is encountered, in which case drilling will be terminated. If groundwater is reached, the depth to groundwater will be measured and a grab groundwater sample will be collected. The boring will then be grouted to surface with concrete.

In another portion of the former Dunne Paints varnish production area, also adjacent to the former varnish kettles, a rectangular patch of soil with approximate dimensions of 2 by 3 feet will

be investigated. BES will collect a soil sample in clean 2-inch diameter brass liners both at the surface and at a depth of 2 feet bgs in order to determine whether chemicals or pigments may have been spilled in this area. BES will use a hand auger fitted with a split spoon sampler to collect the soil samples. Because of its shallow depth, the boring will be backfilled with the drilling cuttings.

Each of the soil samples and the groundwater sample (if collected) will be sealed and labeled, placed in an ice-filled cooler, and transported to a California Department of Health Services accredited analytical laboratory under strict chain-of-custody procedures. Each soil sample will be analyzed for metals (EPA Method 6010), volatile organic compounds (VOCs) (8260), semi-volatile organic compounds (8270), and TPH as mineral spirits (8015).

Air Emissions Sampling

BES will conduct emission flux chamber air sampling in order to provide data for use in the risk assessment concerning the emission of vapors from soil and groundwater into air on the two properties. VOCs emitted from the soil surfaces can potentially be inhaled or become trapped in confined spaces (e.g., basements, indoor rooms). Such indoor emissions represent a potential contaminant exposure pathway for humans.

Emission isolation flux chamber sampling is an EPA method for measuring volatile soil gas emissions (flux) from contaminated soil sources (EPA 1990). Flux is a measurement of the rate at which a gas escapes from a fixed surface area and has units of mass per unit volume and surface area. Samples are collected in stainless steel canisters placed on the soil surface, and then transferred into evacuated Summa[®] canisters for transport to the analytical laboratory (see attached figure).

Prior to sampling, the chamber will be purged with inert, nitrogen gas. During sampling, soil gas emissions enter the open bottom of the chamber where they mix with the nitrogen gas. Following equilibration to steady state conditions (approximately six hours), a 6-liter aliquot is collected in a certified clean Summa[®] canister provided by the laboratory. Any loose material will be removed from floor surfaces prior to placing a sampling chamber. Each chamber will be sealed to the floor with a gasket.

One representative location (based on observations and judgement at the time of sampling) inside a building on each property will be sampled for soil gas emission vapors. In the ONE building this will be a basement room nearest to the contaminated area. In the former Dunne Paints building, the location will be in the former solvent mixing area, where pitting of the concrete floor, possibly caused by solvent spillage, is present. A background sample will be collected from an area located to the north of the ONE property, taking into account security and tampering considerations. Samples will be analyzed for VOCs using EPA Toxic Organic (TO) 14. All soil samples will be transferred under chain-of-custody documentation to Air Toxics Ltd. in Sacramento in shock resistant packaging (no ice).


Sampling Report and Risk Assessment Conceptual Model

A report will be prepared for Alameda County presenting the groundwater, soil, and air sampling data and the conceptual model for the human health risk assessment. The report will include sampling methods and results, data interpretation, an iso-concentration map as well as diagrams illustrating contaminant concentration versus time and distance, groundwater elevation data and hydraulic gradient results, and a survey of land uses and wells existing in the site vicinity. The conceptual model will incorporate all potential contaminant exposure pathways taking into account current and projected future uses (i.e. live/work development of the former Dunne Paints property) and a determination of appropriate surrogate chemicals for use in the risk assessment.

A Risk Management Plan will be developed as part of the risk assessment. It is understood that a determination of No Further Action based on the risk assessment will require a deed restriction for both properties concerning use of the site's groundwater.

Please contact us if you have any questions or comments.

Very truly yours,
BLOCK ENVIRONMENTAL SERVICES, INC.

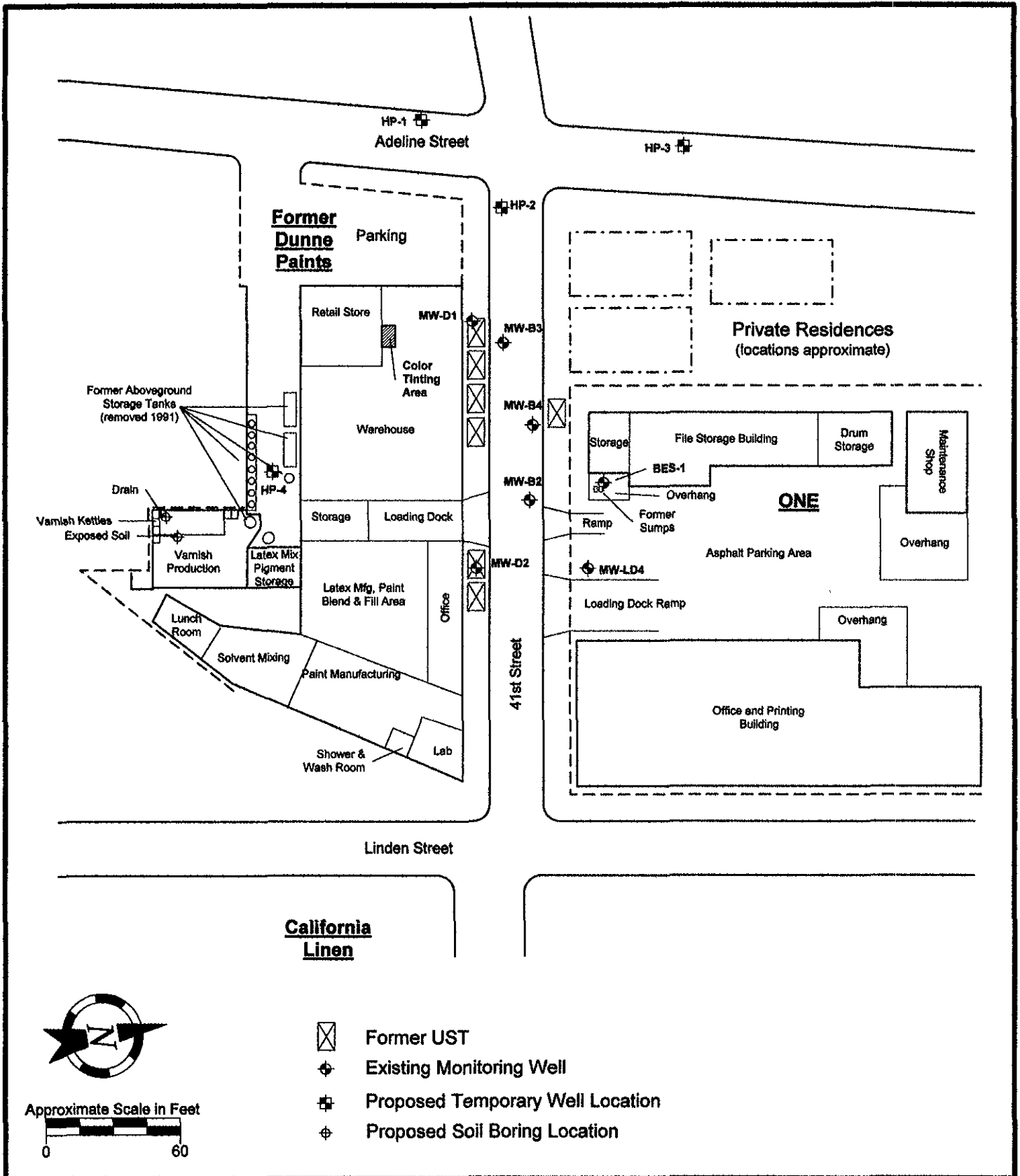


for
Ronald M. Block, Ph.D.
President

RMB:pd

Attachments: Site Maps, Flux Chamber Sampler Diagram, Soil/Groundwater Sampling Protocol

cc: L. Randolph Harris, Harris & Harris
Kimberly Croft, ONE



BES

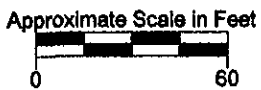
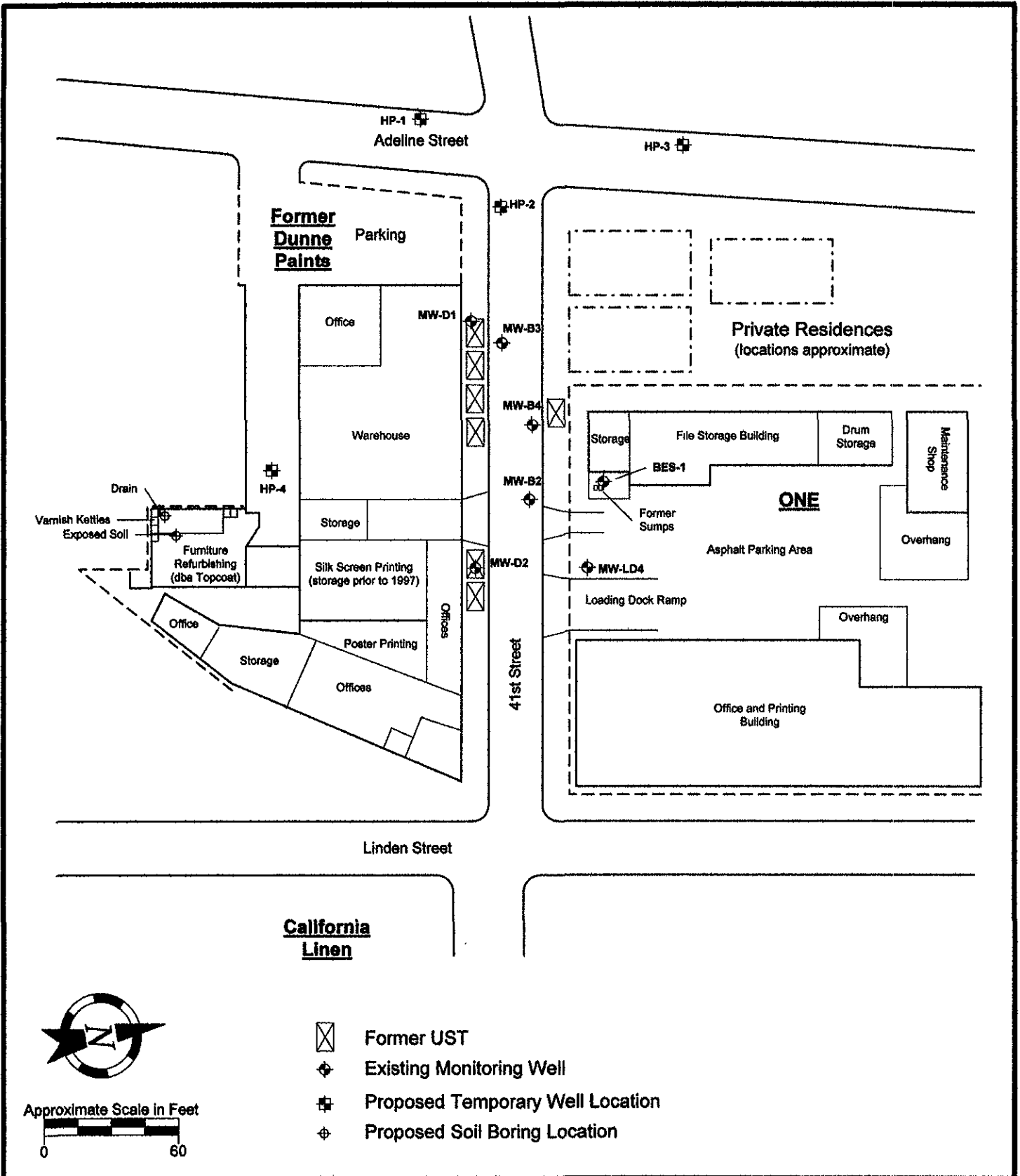
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**Site Map
 With Historic Property Use and
 Proposed Well and Boring
 Locations**

ONE/Former Dunne Paints
 41st Street at Adeline and Linden
 Oakland/Emerville, California

Project No. 9813

November, 1999



- ⊠ Former UST
- ⊕ Existing Monitoring Well
- ⊕ Proposed Temporary Well Location
- ⊕ Proposed Soil Boring Location

<p>BES Block Environmental Services, Inc. 2451 Estand Way Pleasant Hill, CA 94523 (925) 682-7200 Fax: 686-0399</p>	<p>Site Map With Property Use Since 1991</p>	<p>ONE/Former Dunne Paints 41st Street at Adeline and Linden Oakland/Emerville, California</p>
		<p>Project No. 9813 November, 1999</p>

Flux Chamber Sampling Apparatus

