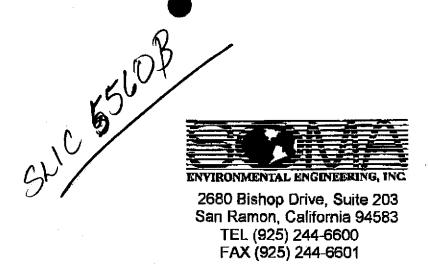
MAY. 8.2000 2:08PM P 1 MINE NO. : 510 244 6601



# **FAX TRANSMITTAL**

DATE: 5/8/2000 FAX # 5/0 - 337 - 9335
TO: Susan Hugo
COMPANY: Alameda County
FROM: Mansour
SUBJECT: (BS - Site Emergrille
NUMBER OF PAGES INCLUDING COVER: 5
MESSAGE:
Sugan:

ONE NO. : 510 **24**4 6601

#### MEMORANDUM

TO:

MR. RICH ROBBINS AND DAN NOURSE, WAREHAM DEVELOPMENT

FROM:

BILL BOSAN, TOXICOLOGIST, SOMA ENVIRONMENTAL ENGINEERING, INC.

SUBJECT: SITE INSPECTION AND ADDITIONAL HEALTH AND SAFETY

RECOMMENDATIONS

DATE:

5/8/00

CC:

GORDON TAYLOR, CBS CORPORATION

Following the discovery of high levels of PCBs in soil and the detection of an objectionable odor at the Emerystation II (Emerystation North) construction site (Site) on May 2, 2000, workers ceased all activities until the situation could be evaluated and appropriate health and safety precautions implemented to ensure adequate protection of all workers at the Site. On May 3, 2000, SOMA Environmental Engineering, Inc. (SOMA) sent its Certified Industrial Hygienist (CIH), Philip Burnala, to the Site to evaluate current health and safety precautions. In order to investigate the source of the objectionable odor, air samples were collected using two Suma canisters. These air samples will be analyzed for volatile organic compounds (VOCs) and the results will be available by 12:00 pm on May 4, 2000. Based on an evaluation of Site conditions, the following additional health and safety precautions will be implemented at the Site:

- 1. Per the Sitewide Health and Safety Plan, an Exclusion Zone or contaminated zone will be established around the excavation where the high levels of PCBs were detected in soil and the objectionable odor was detected. The exclusion zone is based on the amount of area required to perform the intended work safely. This includes all loading operations, open excavations, contaminated soil stockpiles, swing radii for equipment, remediation operations, cleaning operations and loading operations of bulk soils. Within the exclusion zone, Level-D or higher PPE must be worn by all workers and visitors. The appropriate level of protection for each phase of construction will be established by the SSO. The zones will be set at the beginning of the day and changed as required by activities. The exclusion zone will be marked with warning tape and signs.
- 2. Until the cessation of work, all workers were in Level-D protection. As defined in the Sitewide Health and Safety Plan, Level-D Protection is:

#### **Level-D Protection**

- Steel-toed/shanked boots
- Uncoated Tyvek coveralls or work overalls
- Nitrile/Neoprene gloves with latex undergloves (if necessary)
- Safety glasses/goggles (as necessary)
- Ear plugs

Because of the high levels of PCBs and objectionable odor, worker protection within the Exclusion Zone will be Upgraded to Level-C, defined as follows:

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## Level-C Protection

- Air-purifying respirator (e.g., half-face) with appropriate cartridges/filters
- Steel-toed/shanked boots with latex overboots or steel-toed rubber boots
- Tyvek coveralls taped over boots (disposable light chemical
- Neoprene gloves (taped at wrist) with latex undergloves
- Safety glasses/goggles
- Ear plugs
- 3. The contamination reduction zone (CRZ) will be established between the Exclusion Zone and uncontaminated areas. The zone boundaries will be established by the SSO based on air monitoring results. Personnel and equipment decontamination will occur within the CRZ. This zone will prevent or minimize the transfer of potentially hazardous materials from the exclusion zone. The CRZ will be delineated with warning tape and signs.
- 4. Decontamination and removal of any contaminated PPE will take place at the perimeter of the exclusion zone. The contaminated items and rinsate will be contained in lined drums for proper disposal. All personnel should shower as soon as possible after leaving the site. On-site cleaning equipment will include washbasins, plastic drop cloths, highphosphate detergent, rinse water, scrub brushes, benches or stools, and towels.
- 5. Based on the results of the air sampling conducted on 5/3/2000, chemical-specific respirator cartridges may be required. This determination will be made on 5/4/2000 and the results discussed at the health and safety tailgate on 5/5/2000.

The Site evaluation, air sampling results and the above recommendations will be summarized in a new Addendum to the Sitewide Health and Safety Plan. This Addendum will be distributed to all workers and discussed in detail at the 5/5/2000 health and safety tailgate. I hope this information satisfies your needs. If you have any questions or require additional information, please do not hesitate to call me or Dr. Bill Bosan, Principal Toxicologist, at (925) 244-6600.

HONE NO. : 510 244 6601

# **MEMORANDUM**

TO:

RICH ROBBOINS AND DAN NOURSE WAREHAM DEVELOPMENT

FROM:

BILL BOSAN, PRICIPAL TOXICOLOGIST, SOMA ENVIRONMENTAL

SUBJECT: EVALUATION OF AIR MONITORING RESULTS FOR VOCS

DATE:

5/8/00

CC:

GORDON TAYLOR, CBS

Table-1 summarizes the results of the VOC air sampling conducted on 5/3/2000 and compares the maximum reported air concentration of each chemical to its published air guideline.

TABLE 1 Comparison of Maximum Reported Air Concentrations of Chemicals

## To Their Respective Air Guidelines

	MAXIMUM REPORTED AIR CONCENTRATION	OSHA PERMISSIBLE EXPOSURE LIMIT (PEL)	ACGIH TLV FOR OCCUPATIONAL EXPOSURE
CHEMICAL	MG/M3 (PPM)	MG/M3 (PPM)	MG/M3 (PPM)
Benzene	0.42 (0.13)	3.2 (1)	32 (10)
Chlorobenzene	6.8 (1.5)	350 (75)	46 (10)
Cyclohexane	0.34 (0.1)	1015 (300)	1030 (300)
1,3-Dichlorobenzene	0.15 (0.02)	300 (50)	300 (50)
1,4-Dichlorobenzene	0.21 (0.03)	450 (75)	450 (75)
1,2-Dichlorobenzene	0.036 (0.01)	300 (50)	300 (50)
1,2,4- Trichlorobenzene	0.43 (0.06)	NR	37 (5)
m,p-Xylene	0.023 (0.01)	435 (100)	435 (100)
1,2,4- Trimethylbenzene	0.053 (0.01)	NR	123 (25)

NR Not Reported

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Based on the results presented in Table 1, all reported chemicals in air collected from the excavation area are well below their respective air concentration guidelines for an 8-hour workday exposure. Therefore, only air purifying respirator cartridges are required to control objectionable odors.