

DEPARTMENT OF TOXIC SUBSTANCES CONTROL *M60050.001155*

Region 4
145 West Broadway, Suite 350
San Diego, CA 90802-4444

August 27, 1993

Mr. Andy Piszkin
Department of the Navy
Southwest Division
Naval Facilities Engineering Command
Environmental Division
1220 Pacific Highway, Code 1811
San Diego, California 92132-5181

Dear Mr. Piszkin:

MARINE CORPS AIR STATION (MCAS) EL TORO

SUBJECTS: 1) SCHEDULE EXTENSION REQUEST FOR DRAFT PHASE II WORK PLAN (OPERABLE UNITS 2 AND 3)
2) COMMENTS ON GROUNDWATER SAMPLING PROCEDURES (ROUND TWO OF PHASE I)
3) INVESTIGATION OF NEWLY IDENTIFIED POTENTIALLY CONTAMINATED AREAS

1) *SCHEDULE EXTENSION REQUEST FOR DRAFT PHASE II WORK PLAN (OPERABLE UNITS 2 AND 3)*

The California Department of Toxic Substances Control (Department) hereby concurs with the Navy's schedule extension request dated July 26, 1993. The request extends the due date for the Draft Phase II Remedial Investigation (RI) Work Plan from August 9 to November 9, 1993. No other Federal Facilities Agreement (FFA) milestone dates are affected by this request. The U.S. Environmental Protection Agency (U.S. EPA) transmitted their concurrence with the schedule extension in a letter dated August 4, 1993.

2) *COMMENTS ON GROUNDWATER SAMPLING PROCEDURES (ROUND TWO OF PHASE I)*

During July 1993, the Department surveyed sampling procedures conducted at MCAS El Toro for the second round of the Phase I RI groundwater investigation. The Department recommends the following:

- a) use of field blanks as a check on ambient airborne contamination for those wells located at or near tarmacs with significant jet traffic. Field blanks should consist of purified water that is taken into the field (during sampling and at the specific well location) and transferred from the



water container to the individual sample vial(s);
and

- b) closing the purge line valve during actual sampling of wells equipped with Grundfos Rediflow 2-inch diameter variable-speed pumps. Closing the purge line valve will prohibit the remaining head in the elevated purge line from siphoning back into the riser tee and possibly entering the sample line when the flow is controlled to approximately 100 ml/min.

Furthermore, the Department requests a correction in the sampling procedures for 5-inch wells equipped with 4-inch constant speed Grundfos pumps (both 5-gpm and 10-gpm pumps). It was observed that in an effort to reduce the flow rates on these pumps during actual sampling, the purge line valve was restricted resulting in aeration of the sample. Wisps of water vapor were also observed emanating from the sample line when the purge line valve was restricted. Such a condition significantly compromises the validity of the sample, especially for volatile organic compounds (VOCs).

In Phase I RI Report comments with a transmittal letter dated July 8, 1993, the U.S. EPA also indicated some concerns about the types of pumps chosen for VOC sampling (see page 7). The U.S. EPA comments focused on the use of bladder pumps or bailers vs. submersible pumps. However, some studies conclude that the use of submersible pumps is a reliable method of obtaining statistically equivalent VOC concentrations as compared to bladder pumps or bailers.

At a minimum, the purge line valve should remain open during actual sampling of wells equipped with the constant speed pumps. Nevertheless, the Department requests that the constant speed pumps be replaced with variable speed pumps capable of achieving a 100 ml/min sampling flow rate. An option to replacement is a site-specific comparison to determine the degree of variation in VOC concentration between sampling with variable speed pumps at a flow rate of approximately 100 ml/min and constant speed pumps (flow rate of 5- to 10-gpm).

The correction in the sampling procedures for the 5-inch wells equipped with constant speed pumps should be performed before the next round of groundwater sampling. Based upon the review of the second round groundwater sampling results, the Department may request that sampling for the 5-inch wells equipped with constant speed pumps be

repeated after a correction is made in a timely manner.

3) ***INVESTIGATION OF NEWLY IDENTIFIED POTENTIALLY CONTAMINATED AREAS***

The Department believes additional effort should be expended to identify potentially contaminated areas at MCAS El Toro. In a recent visit to MCAS El Toro in which the Department reviewed historic plans, the locations of at least two former plating shops were identified in Buildings 296 and 297. Previously it was apparently thought that the locations of the former plating shops were unknown. The former plating shop locations were not investigated in the Phase I RI. Groundwater results from round one of the Phase I RI indicate a 10 ppb concentration of cadmium in a monitoring well located approximately 700-feet downgradient from the former plating shop in Building 297; MCAS El Toro plans indicate that a cadmium plating tank was inside the plating shop. The Department requests a complete description of the former plating shops in both Buildings 296 and 297 as well as all other plating shops, including information obtained from reviewing plans such as the locations of specific units (e.g., degreaser, alkali, acid and plating tanks). This information, if applicable, should be provided as part of the site description for Site 7 or new Site 24.

In addition to the former plating shops, the site description for Site 7 or new Site 24 should include the former "refurbishing or rework" operations at Buildings 295, 296, 297 and all other applicable buildings. The site description should also include the former engine overhaul operations at Building 324; apparently a former degreaser tank was located inside. For new Site 25, the Department recommends that a complete description of potential VOC source areas upgradient of Site 8 be provided; this description should include current and former uses of the Motor Pool area.

Furthermore, the Department recommends a review of the plans and all other pertinent information for all of the RI sites. For example, review of the plans coupled with aerial photograph information will provide the layout of former sewage treatment plant units at Site 12. The Department also recommends that current and/or former personnel associated with the "refurbishing or rework" and plating operations be interviewed to obtain information on historic waste handling practices, including those for solvent wastes.

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The Department also has concerns about the following areas:

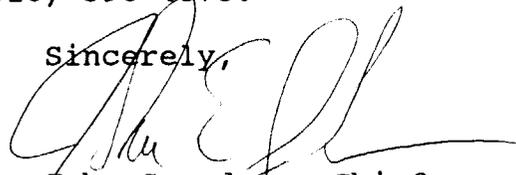
- a) the Aircraft Maintenance Department in Buildings 288 and 289. Operations at these buildings generated waste fuels, oils and solvents;
- b) the former Heavy Duty Maintenance Shop in Building 1589 at Site 10. This building apparently included at least two-500 gallon tanks used for the storage of waste oils and solvents and a paint booth where paint sludges were drained onto the ground; and
- c) the Light Duty Maintenance Shop in Building 298. This building included a caustic tank and two parts dip tanks. The parts dip tank solvent was apparently changed every six weeks and through the mid-1960s was used to clean the cement decks. One parts dip tank was disposed of in October 1984 due to a leak from corrosion. Neutralized battery acid was apparently poured down a floor drain located in the west end of Building 298.

The Phase II RI contract task order (CTO) for investigation and characterization of newly identified areas should incorporate flexibility and contingencies so that these areas will be evaluated completely.

Please provide a response to Subjects 2 and 3 above. In your response to Subject 3, please indicate if the identified areas were investigated in the Phase I RI or in the RCRA Facility Assessment (RFA). For example, the Department is aware that a possible former hazardous waste storage area (Solid Waste Management Unit/Area of Concern 95) near the southwestern corner of Building 324 was investigated in the RFA. However, this area is apparently upgradient of any engine overhaul/degreasing activities that may have taken place at Building 324.

If have any questions concerning these matters, please contact Joe J. Zarnoch at (310) 590-4878.

Sincerely,



John Scandura, Chief
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