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MCAS EL TORO  
SSIC # 5090.3  
L. REX EHLING, M.D.  
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PUBLIC HEALTH  
ENVIRONMENTAL HEALTH

March 14, 1988

Ernest Cerini  
Officer in Charge of Construction, Southwest  
1220 Pacific Highway, Building 131  
San Diego, California 92132-5190

Subject: Verification Step Plan of Action for the Confirmation Study  
Marine Corps Air Stations, Tustin and El Toro, California.

Dear Mr. Cerini:

This Agency has reviewed the Verification Step Plan of Action for the Confirmation Study Marine Corps Air Stations, Tusin and El Toro, California. Per your request, we have included our questions and comments pertaining to the study.

At a number of sites, groundwater monitoring wells are used to determine migration of contaminants through the saturated and unsaturated zones. Wells are located up gradient and down gradient of the sites to verify that all contaminants are resulting from the suspected sources. Monitoring wells are located so triangulation can be used to more accurately estimate the groundwater flow direction. Given the geohydrology of the areas, can the hydraulic gradient at each site be accurately identified by a three point problem solution or are vertical components of flow significant enough to necessitate four points, allowing the separate solution of four, three-point solutions?

2.2.1 Site 1 - EOD Range

The study does not show soil sampling in the area of the berm or pond. Is it possible that contaminants migrated to the north of the disposal site?

2.2.6 Site 7 - Drop tank drainage area no. 2

A sample of the point where the catch basin dumps into the channel would identify possible contamination down stream of the basin.

2.3.3 Site 5 - Drainage No. 1

If the underground storm drain pipe joints are not watertight, they could

Ernest Cerini

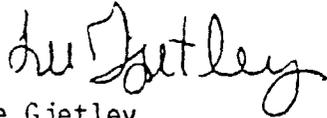
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provide another source of contamination. Information regarding the type of storm drain piping may warrant further sampling to identify extent of contamination.

I will be attending the TRC meeting on April 27, 1988. If you have any questions regarding our comments and questions please feel free to call me at (714) 834-8181.

Very truly yours,

A handwritten signature in cursive script that reads "Lee Gjetley".

Lee Gjetley  
Hazardous Waste Specialist  
Waste Management Section  
Environmental Health

LG:cr

RESPONSE TO  
COUNTY OF ORANGE HEALTH CARE AGENCY  
COMMENTS

Response to General Comments:

There are no pumping wells near any of the sites which will locally influence water table elevations, thus the regional groundwater gradients will prevail. Although 3 wells per site are proposed, a total of 25 monitoring wells will be installed throughout MCAS El Toro. These wells will be more than adequate to define the groundwater flow direction.

Response to Specific Comments:

2.2.1 Site 1 - EOD Range

1. The detonation has taken place in trenches, where no migration to the north (hydrologically and topographically upgradient) is anticipated.

2.2.6 Site 7

2. The point in question is buried underground.

2.3.3 Site 5

3. The makeup of the pipe will further be investigated during field activities. The soil gas samples proposed for this site will likely identify areas where potential contaminants may have leaked from the pipe.