ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

R02663

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Certified Mailer #: P 367 604 374

May 8, 1991

Mr. Tim Hoppen, Executive Vice President,
Doric Development, Inc.
1141 Harbor Bay Parkway
Alameda, Ca 94501

Re: **Island City Gun Club, 500 Maitland Drive, Alameda**

Dear Mr. Hoppen:

We have reviewed the following documents pertaining to the above site:

> Phase I Environmental Assessment Report, Island City Gun Club, 500 Maitland Drive, Alameda, California, May 17, 1990, Kleinfelder
>
> Review of Environmental Site Assessment Conducted at Island City Gun Club, 500 Maitland Drive, Alameda, California, August 28, 1990, Exceltech

These reports indicate the above 5-acre site has been used as a rifle range for about the past 60 years. When the range first opened in 1926, the site was under water during the non-summer months. Progressive filling begun in the 1960s brought the site to its current elevation. Soil analysis has revealed the presence of copper and lead above TTLC levels and the presence of other metals above background levels. These elevated metals levels are due to the presence of slugs, shot, ammunition casings, and, possibly, clay pigeon scrap on site. Because of the site history, such debris is not limited to surface soils but is present through out the soil strata from the current site surface to below the water table.

We understand the site is not currently in use and that the planned future uses of the property consist of paving the northern site area and converting it into an RV storage lot and a mini-warehouse/U-store-it lot.

Based on these reports and information, and on discussions with the State Department of Health Services (DHS) and the San Francisco Bay Regional Water Quality Control Board (SFRWQCB), we require the following items be done:

1) Submit any environmental documents relating to the site not listed above.

2) Characterize the broken clay pigeons on the site. The May 17, 1990 document reported that the surface of the trap range was littered with several inches of clay pigeons. As rifle range target scrap has been known to have hazardous levels of polynuclear aromatics (PNAs), the clay pigeon scrap must be analyzed for PNAs (EPA Method 8250 for semi-volatiles) and for TTLC, STLC and TCLP metals levels.

3) Conduct additional soil sampling to characterize the site and determine the extent of contamination. Shot and slugs, metal ammunition casings (described as lying in the gravel east of the concrete covered walkway), and clay pigeon scrap are of concern. Characterization must extend from current site elevation levels to below ground water. EPA SW846 procedures must be used to determine the appropriate number of samples to be collected. Special attention must be paid to the berms and the trap shooting area.

   Soil samples must be analyzed for metals (TTLC, STLC and TCLP levels) and for any contaminants detected in the clay pigeons.

4) Install and sample a minimum of three ground water monitoring wells on site to determine ground water quality.

   Survey all wells to mean sea level through an established bench mark; the survey must be accurate to 0.01 foot.

   Determine if ground water is tidally influenced by measuring well water levels over a 24 hour period. If ground water levels are not tidally influenced, ground water level measurements are to be made frequently enough to establish ground water gradient. In either case, ground water level measurements shall be made quarterly at a minimum (at the same time as ground water samples are drawn, see below). A gradient map shall be developed for every water level data set.

   Sample all wells quarterly (include water level measurements). Samples must be analyzed for metals, for other contaminants identified per items 2 and 3 above, and for salinity (total dissolved solids).

   Install and sample an off-site well or sample an existing off-site well to obtain "background" water quality data. The "background" sample must be analyzed for the same constituents for which on-site wells are analyzed.

5) Submit quarterly reports which present and interpret the information generated per items 1 through 4 above. Include a description of all field work and observations, a description of soil and ground water sampling procedures, figures showing depths and locations of all soil samples, figures showing well locations, tabulations of soil and ground water analyses, water level data, documentation of tidal influence on the site, gradient maps, well and boring logs, signed laboratory sheets, and chain of custody records.

Please note that all well and soil borings must be permitted through the Alameda County Flood Control and Water Conservation District, Zone 7.

All sample analyses must be done by a California State certified laboratory. **Correct holding times must be observed for all samples.** In several cases, the sample holding times for the May 1990 report had been exceeded.

All reports must be signed by a California certified engineering geologist, California registered geologist, or a California registered civil engineer. **Send reports and analytical results to our office and to Lester Feldman c/o San Francisco Bay Regional Water Quality Control Board, 2101 Webster Street, Room 500, Oakland, CA 94612.** Lester's phone number is (415) 464-1255

Once the above work has begun and additional site characterization data is obtained, it may be appropriate to conduct an environmental and health risk assessment or to prepare a remediation plan. The assessment or plan will have to address risks related to or remediation of contaminants and contaminant sources discovered in the course of site characterization. We will be in contact with you about these requirements.

The following information is provided to address the general concept of scrap metal exemptions presented in the August 28, 1990 document.

The bullet fragments (shot and slugs) and the casings in the soil at the Island city Gun Club might indeed be classified as scrap metal per Title 22, Chapter 30, Section 66189.5. Hence, per Title 22, Chapter 30, Section 66804(a)(2) they may be exempt from regulation as a hazardous waste under Chapter 30 (Sections 66001 et. seq.).

However, exemption of the bullet fragments from regulation under Title 22 Chapter 30 only means the fragments would not have to be handled, treated or disposed of as a hazardous waste (e.g a permit

would not be needed for "treating" the fragments themselves). The exemption does not mean the Island City Gun Club property does not have to be cleaned up. The need for clean up of a site is determined by whether or not the site poses a threat to human health or the environment. Thus, defining the bullet fragments as scrap metal does not at all affect the need for clean up of the Island City Gun Club property; defining the bullet fragments as scrap metal only affects how those clean-up wastes must be handled and disposed of.

For bullet fragments to receive this exemption, the bullet fragments must be greater than 100 µm (Bob Hoffman, DHS PASD, May 7, 1991). In addition, per Title 22, Chapter 30, Section 66189.5 (b)(6), fine powders and sludges that are hazardous waste are specifically excluded from the scrap metal definition. Thus, the soil remaining after removal of the bullet fragments would be a hazardous waste if the hazardous waste criteria are met by the soil. Based on the analysis presented in the May 17, 1990 document, at least some of the soil on the site is hazardous even after the bullet fragments were removed.

If you have any questions, please feel free to contact me at 415/271-4320.

Sincerely,

Katherine A. Chesick

Katherine A. Chesick,
Senior Hazardous Materials Specialist

KAC:kac

cc: Daniel F. Reidy, Attorney, Project Manager
Mr. Robert Warnick, Director, City of Alameda Public Works Department
Mr. Dick Rudloff, City of Alameda Public Works Department
Captain Helms, Alameda Fire Department
Lester Feldman, San Francisco Bay Regional Water Quality Control Board
Howard Hatayama, State Department of Health Services
Bob Hoffman, Attorney, State Department of Health Services, PASD, Sacramento Office
Gil Jensen, Alameda County District Attorney, Consumer and Environmental Protection Division
Rafat A. Shahid, Alameda County Environmental Health Department
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