

May 1, 1990  
Project 4454/3

Ms. Naoko Ward  
The Plymouth Group  
1616 N. Shoreline Boulevard  
Mountain View, California 94043-1316

Subject: Work Plan to Investigate Endosulfan Finding  
Sunnyside Commons II  
Hayward, California

Dear Ms. Ward:

This Work Plan describes our scope of work for further investigation of shallow ground water quality at the Sunnyside Commons II site. In particular, we will be examining the area immediately surrounding the old supply well (SW-1). Our initial testing found a trace amount (15 parts per billion) of total Endosulfan in the grab water sample from this well (see Terratech Project 4454/3 report, dated February 16, 1990).

There is no established Action Level or Maximum Contaminant Level for Endosulfan in the California Department of Health Service's (DHS's) chemical list for drinking water. The Hayward Fire Department wants documentation regarding the extent of the compound in the ground water based on the broad "non-degradation policy" of the California Regional Water Quality Control Board (RWQCB).

#### SCOPE OF WORK

##### Well Closure

The subject well is open to the atmosphere and has obviously not been used for some time. There is no plan to utilize this well in the proposed residential development. Therefore, we have contacted a licensed well drilling contractor (Garcia Well and Pump, CS7-384167) to provide a bid on the closure of this well. Upon your authorization to proceed, Garcia will be instructed to obtain a well closure permit from the Zone 7 water district and perform their work in accordance with the district's guidelines.

##### Installation of Monitoring Well

As mentioned in our February 1990 report, the Endosulfan finding is believed to be a reflection of pesticide spraying in the general proximity to an open well. Due to stagnant condition of the well and the qualitative nature of a grab sample, the actual impact (or absence of impact) to the ground water needs to be established.

After the well closure we plan to accomplish this task by installing, and testing the water from, a formal monitoring well. The monitoring well will be sited immediately adjacent to the supply well. With an expected gradient direction toward the Bay, the siting priority will be the eastern side of the supply well. The well will be constructed under permit from Zone 7 in a manner satisfactory to their guidelines.

At least 48 hours after construction and well development activities, we will collect duplicate ground water samples and submit each to independent State certified laboratories to be analyzed for chlorinated pesticides using EPA Method 8080. If neither laboratory detects pesticides, we will recommend that a single confirmation analysis be performed three months hence. If pesticides are confirmed, a supplemental workplan will be drafted.

All sampling equipment will be cleaned prior to use to avoid introduction of contamination. Samples will be kept iced or refrigerated for preservation from the time of collection to the time of testing. Standard chain of custody procedures will be followed for sample handling.

#### Reporting

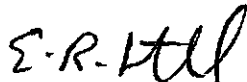
Upon the completion of items described above, we will prepare a report describing the work performed, summarizing the findings, and discussing our conclusions and recommendations.

#### SCHEDULE

We are ready to proceed with the work described herein immediately upon receipt of your written authorization and Work Plan approval from the Hayward Fire Department and Alameda County Health Agency. The well closure can likely be completed within a two to three week schedule (including permitting and scheduling). The monitoring well installation and sampling can be accommodated in the fourth week. Laboratory testing turnaround for the ground water samples will be in accordance with your desire for urgency (range: 48 hours to two weeks). Our report can be completed within about one week of receiving typed laboratory results.

Prepared by,

TERRATECH, INC.



Eric R. Lautenbach, P.E.

cc: Hugh Murphy, Hayward Fire Department  
Pam Evans, Alameda County Health Agency

