MEMORANDUM

TO: Gloria Conti  
Project Manager  
Southern California Cleanup Operations Branch

FROM: Frank Gonzales, C.Hg.  
Engineering Geologist  
Geological Services Unit

REVIEWER: Theodore R. Johnson III, C.E.G., C.Hg.  
Senior Engineering Geologist  
Geological Services Unit

DATE: DRAFT

SUBJECT: MW-20 PILOT PROGRAM SUMMARY REPORT, DEL AMO  
STUDY AREA, LOS ANGELES, CALIFORNIA

PCA: 11050 SITE: 400048-00 REQUEST: 20037027

As requested, the Cypress Geological Services Unit (GSU) of the Department of Toxic Substances Control (DTSC) reviewed the MW-20 Pilot Program Summary Report (the Report), dated June 30, 2003. The Report was prepared by URS.

BACKGROUND

The monitoring well MW-20 area was initially identified as a source of light non-aqueous phase liquid (LNAPL).

The purpose of the pilot program was to: continue removal of LNAPL from the vicinity of MW-20; evaluate LNAPL mobility and the effectiveness of LNAPL removal by hydraulic extraction; and collect site-specific data necessary to further evaluate the applicability and effectiveness of other LNAPL removal technologies. Additionally, the pilot program was designed to evaluate whether the designed pumping well field achieves hydraulic capture of the dissolved-phase plume emanating from the residual LNAPL.

GENERAL COMMENTS

All engineering or geologic work shall be performed or supervised by a registered professional in compliance with the requirements of the Professional Engineers Act, Business and Professions Code sections 6700-6799 and section 7838 and the Geologist and Geophysicists Act, Business and Professions Code sections 7800-7887.
Reports including geological, engineering geological or hydrogeological interpretation, conclusions, or recommendations must be stamped, signed, and dated (with the license number and expiration date) by a California licensed geologist [Registered Geologist (RG), Certified Engineering Geologist (CEG), or Certified Hydrogeologist (Chg)].

SPECIFIC COMMENTS

1. Volume IV, Section 1.0 Introduction. This section indicates the submerged LNAPL is a result of a rising groundwater table.

Data supporting a consistently rising water table was not provided. No additional water level measurements were included since the MW-20 pilot program in 1996, and it is unclear if more recent data was collected to support current conditions relating to this conclusion.

We recommend a program be established for water level gauging and evaluating LNAPL accumulation in MW-20 area monitoring wells.

2. Volume V, Section 3.1.2.3 Removal Efficiency. The amount of removal efficiency and amount of time needed for natural attenuation of LNAPL is a concern, especially since LNAPL is trapped and hydraulic extraction or LNAPL recovery methods appear limited.

Based on the long term nature of this technology any benefit would be difficult to quantify over the short term. LNAPL smeared and trapped below the water table would act as a continuing source to groundwater in the MW-20 area. Additionally, evaluating the effectiveness of this remedy would involve a comprehensive knowledge of the extent of groundwater contamination, and establishing a point of compliance that is downgradient of the known groundwater plume to conduct performance monitoring.

Natural attenuation may have a wide range of applications and meanings, which should conform to acceptable industry and governmental guidance for monitored natural attenuation (MNA) including, but not limited to: establishing an appropriate monitoring well network, developing an appropriate sampling and analysis plan, providing a schedule for routine and frequent monitoring event, data reporting and agency review, and development of a contingency plan. Additionally, MNA have several potential advantages and disadvantages, which should be considered during the evaluation of remedial technologies before selecting MNA as the remedial alternative. These factors may effect cost estimates and monitoring and contingency plans that may not have been included in this section.

We recommend the natural attenuation section is revised to reflect the above mentioned components and the title of section 3.0 be retitled to “monitored
natural attenuation." Additionally, we recommend any MNA program be consistent with the Final OSWER Directive “Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites” (OSWER Directive Number 9200.4-17P).

If you have questions, please contact Frank Gonzales at 714.484.5410.

cc: Celsa Sanchez
Scott Warren, C.E.G., C.Hg.
File
Here are Frank's comments. I have not gotten Amit's. I probably should put all of them into a letter & send it on to you. Why don't you keep Frank's comments as unofficial for now.

----- Message from "Frank Gonzales" <FGonzal1@dtsc.ca.gov> on Wed, 27 Aug 2003 16:17:27 -0700 -----

To: "Gloria Conti" <GConti@dtsc.ca.gov>
Subject: del amo

hi gloria,

i hope the rest of your meeting went well.

attached are my revised draft comments per our discussion.

please feel free to pass them on to dante.

frank.

dam20rpt.wpd