SCS ENGINEERS

June 27, 2008 Project No. 01203087.04

Mr. Jerry Wickham Alameda County Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502 Phone (510) 567-6791 Fax (510) 337-9335

RECEIVED

1:14 pm, Jun 30, 2008

Alameda County Environmental Health

Subject: Groundwater Monitoring Well Destruction Report

Freisman Ranch Property (SLIC Case No. RO0002484)

1600 Freisman Road Livermore, California

Dear Mr. Wickham:

INTRODUCTION

SCS Engineers (SCS) was retained by the Children's Hospital and Research Center Foundation to perform groundwater monitoring well destruction activities at the Freisman Ranch Property located at 1600 Freisman Road, Livermore, California (the "Property"). This work was conducted to complete "Spill, Leaks, Investigation, and Cleanups" (SLIC) case closure requirements for the Property in accordance with our recent discussions and your May 16, 2008 email.

Groundwater monitoring wells (KMW-1 through KMW-8) were destroyed on June 11 and 12, 2008 in accordance with Zone 7 Water Agency (Zone 7) Permit No 28020, dated February 19, 2008. A copy of the Well Destruction Permit is provided in Attachment A.

WELL DESTRUCTIONS

USA Notification

Underground Service Alert (USA) was notified a minimum of 48 hours prior to well destruction activities as required by law.

Permitting

As indicated above, prior to well destruction activities Well Destruction Permit No. 28020 was acquired from Zone 7. Well destructions were conducted in accordance with the permit.

Well Destructions

HEW Drilling of East Palo Alto, California, a C-57 licensed well driller, used a CME-75 drill rig to destroy wells KMW-1 through KMW-8 under SCS direction. Prior to destruction each well was sounded with a weighted tape measure to confirm its total depth. The total depths of wells KMW-1 through KMW-6 were approximately 24 feet below ground surface (bgs) and the total depths of wells KMW-7 and KMW-8 were approximately 25 feet bgs. The wells were destroyed by "overdrilling," a process by which the 4-inch diameter PVC casings were extracted intact after material within the wells' annular space (sand, grout, and bentonite) was removed using 8-inch hollow stem augers. Each well was overdrilled to its total depth. Following overdrilling, Portland cement grout (neat cement) was placed into the boreholes via tremie pipe to ground surface.

All drill cuttings produced during well destruction activities were placed into 55-gallon drums, which were sealed, labeled, and left on-site. Samples were collected during drilling and analyzed for characterization purposes. SCS is currently coordinating their proper removal and disposal.

Original California Department of Water Resources (DWR) Well Destruction Reports will be submitted to Zone 7. Copies of the reports should be forwarded to the DWR by the Zone 7.

CLOSING

"We declare, under penalty of perjury, that the information and recommendations contained in this report are true and correct to the best of our knowledge."

Please contact Steve Clements at (925) 240-5152 x24 if you have any questions or comments regarding this submittal.

Sincerely,

Ted Sison, R.E.A Project Scientist

SCS Engineers

Steve Clements, P.G., R.E.A.

Project Manager

SCS Engineers

Attachment A – Well Destruction Permit

cc: Stefanie Yurus – Children's Hospital and Research Center Foundation Tom Terrill – The Terrill Company

ATTACHMENT A WELL DESTRUCTION PERMIT

ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306 E-MAIL whong@zone7water.com

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT 1600 Freisman fond	PERMIT NUMBER 28020
	WELL NUMBER 3S/1E-2L9 to 3S/1E-2L16
Livermore, California	APN904-0001-001-10
California Coordinates Sourceft. Accuracy•ft. CCNft. CCEft. APN904 = 0007 = 007 = 70	PERMIT CONDITIONS
APN 904-0001-001-10	(Circled Permit Requirements Apply)
CLIENT Name Children's 1 to Spital Address 2221 Gradeay, Stac Phone (510) 428-3/19 City Californ's Zip 946/2 APPLICANT Name XS Engineers (Atta: Ted Sison, REA) Email 15:500 (2 Scongwers Confex 425 426 070 7 Addressible Killenter May Subject Phone 925 426 0080 City Pleasanter Zip 945-66 TYPE OF PROJECT: Well Construction Geotechnical Investigation Well Destruction Other SEE Enclosed Proposal PROPOSED WELL USE: Irrigation	2. Submit to 2one 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects. 3. Permit is void if project not begun within 90 days of approval date. B. WATER SUPPLY WELLS 1. Minimum surface seal diameter is four inches greater than the well casing diameter. 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. 3. Grout placed by tremie. 4. An access port at least 0.5 inches in diameter is required.
Municipal • Remediation • Industrial • Groundwater Monitoring • Other •	 on the wellhead for water level measurements. A sample port is required on the discharge pipe near the wellhead.
DRILLING METHOD: Mud Rotary · Air Rotary · Hollow Stem Auger · Cable Tool · Direct Push · Other DRILLING COMPANY HEW Dulling Co DRILLER'S LICENSE NO. 694987	 C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS 1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter. 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. 3. Grout placed by tremie.
WELL SPECIFICATIONS: Drill Hole Diameter in. Maximum Casing Diameter in. Depth ft. Surface Seal Depth ft. Number	D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
SOIL BORINGS: Number of Borings Maximum Hole Diarneter in. Depth ft.	E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.
ESTIMATED STARTING DATE	WELL DESTRUCTION. See attached. SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after completion of permitted work the well installation report including all soil and water laboratory analysis results.
hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68. PPLICANTS	Approved Wyman Hong Date 2/19/08
TTACH SITE PLAN OR SKETCH	