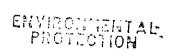


July 21, 1997



A Share and a

97 JUL 22 PM L: 05

Mr. Lance Bryant City of Alameda 1616 Fortmann Way Alameda, CA 94501

RE: Monitoring Well Destruction Letter Report

Fire Station #2, 635 Pacific Avenue, Alameda, California

ACC Project No. 96-6209-008.01

Dear Mr. Bryant:

ACC Environmental Consultants, Inc., (ACC) presents this letter report summarizing the destruction of three monitoring wells at Fire Station #2, 635 Pacific Avenue, Alameda, California (Figure 1).

BACKGROUND

Mr. Rafat A. Shalid of the Alameda County Health Care Services Agency (ACHCSA) stated that no further action was required at Fire Station #2 in a letter dated February 28, 1994. Therefore, groundwater monitoring wells are no longer warranted at the site. Four 2-inch-diameter monitoring wells were reported to exist at the site. Monitoring well MW-1 was reportedly removed during parking slab replacement prior to 1996.

WELL DESTRUCTION PROCEDURES

As required by the Occupational Health and Safety Administration, 29 Code of Federal Regulations 1910.120, ACC prepared a site specific Health and Safety Plan for the proposed work.

During field procedures on July 10, 1997, only three wells were located. No evidence of well MW-1 was observed during field work. Three 2-inch-diameter monitoring wells, each with a total depth of 20 feet, were abandoned by grout by Gregg Drilling & Testing, Martinez, California, (license C57-485165) on July 10, 1997. Permit #97WR009 for well destruction was obtained from the Alameda County Public Works Agency, formerly provided by Zone 7 Water Resources Management, prior to performing field activities and is attached.

Well Completion Report Numbers 525482 through 525484 for the decommissioned wells are attached and appropriate copies will be mailed to the Department of Water Resources.

Mr. Lance Bryant July 21, 1997 Page 2

The following procedures were followed for each well to be destroyed.

- The monitoring wells to be abandoned were investigated prior to destruction. The depth, casing diameter, and construction and sealing design of the wells were ascertained. The wells were sounded immediately before destruction to determine whether there were obstructions within each wellbore that would interfere with grouting.
- Each monitoring well was destroyed by pressure grouting. A volume of cement grout at least
 equal to the pore space in the annular sandpack and the inside diameter of the well was
 introduced into each well. The top one foot of each wellbore was filled with concrete to
 surface grade and finished to match the existing surface.
- Each wellbore accepted the grout slurry and the grout settled uniformly. ACC believes the annular sandpack accepted the grout evenly and the grout volume introduced was equal to or greater than the annular pore space plus the well volume.
- Well casings were trimmed approximately one foot below grade.
- The surface was topped with approximately one foot of quick drying cement after ACC had observed that no grout settling had occurred in the well casing during a 30-minute interval.

No soil cuttings were generated by pressure grouting.

If you have any questions regarding this letter report, please call me at (510) 638-8400.

Sincerely,

Misty Kaltreider

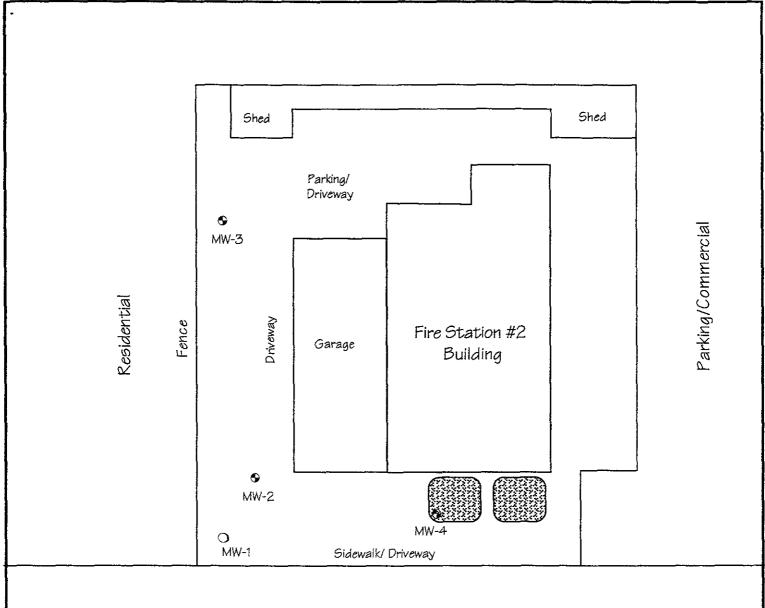
Senior Project Geologist

/clm:mck

Attachments

cc: Ms. Juliet Shin, ACHCSA

Mr. Alvin Kan, Alameda County Public Works Agency



Pacific Avenue

Legend

MW-2 **ூ**

Groundwater Monitoring Well (destroyed 7/10/97)

MW-1 O

Presumed Destroyed Monitoring Well Location

Landscape

Site Plan
Fire Station #2
635 Pacific Avenue
Alameda, California

| Figure Number: | 1.0 | Scale: | None |
|----------------|-----|--------|---------|
| Drawn By: CL | М | Date: | 7/17/97 |

Project Number: 6209-008.01

ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, California 94621

(510) 638-8400 Fax: (510) 638-8404

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FOR OFFICE USE



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE | PLEASANTON, CALIFORNIA 94588 | DRILLING PERMIT APPLICATION

(415) 484-2600

FOR APPLICANT TO COMPLETE

permit and Alameda County Ordinance No. 73-68.

| CCATION OF PROJECT Fire Station No. 2 | PERMIT NUMBER 97 WP-009 LOCATION NUMBER |
|---|---|
| Alameda, CA | |
| Name City of Alameda Address 1616 Fortmann Wathone 748-4520 City Alameda Zip 94501 | PERMIT CONDITIONS Circled Permit Requirements Apply |
| APPLICANT Name ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Address Phone 638-8400 Zip 94621 TYPE OF PROJECT Well Construction General Water Supply Contamination Monitoring Well Destruction 4 PROPOSED WATER SUPPLY WELL USE Domestic Industrial Other Municipal Irrigation DRILLING METHOD: Mud Rotary Air Rotary Auger Cable Other Pressure Grout | GENERAL 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date. 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Weil Drillers Report of equivalent for well projects, or drilling logs and location sketch for geotechnical projects. 3. Permit is void if project not begun within 36 days of approval date. 8. WATER WELLS, INCLUDING PIEZOMETERS 1. Minimum surface seal thickness is two inches of coment grout placed by tremie. 2. Minimum seel depth is 50 feet for municipal and industrial walls or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for |
| Cable Other Pressure Grout DRILLER'S LICENSE NO. 485165 WELL PROJECTS Drill Hote Diemeter 8 in. Maximum Casing Diemeter 2 in. Depth 20ft. Surface Seel Depth ft. Number 4 GEOYECHNICAL PROJECTS Number of Borings Hole Diemeter in. Depth ft. | monitoring wells is the maximum depth practicable or 20 feet. C. GEOTECHNICAL. Backfill bore hole with compacted cut tings 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. D. CATHODIC. Fill hole above anode zone with concrete placed by tremie. E. WELL DESTRUCTION. See attached. |
| ESTIMATED STARTING DATE 7/7/97-7/11/97 ESTIMATED COMPLETION DATE Same | Approved |
| I hereby agree to comply with all requirements of th | 15 |

519



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651

PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262

(510) 670-5248 ALVIN KAN

WATER RESOURCES SECTION GROUNDWATER PROTECTION ORDINANCE

FIRE STATION # 2 635 PACIFIC AVE
ALAMEDA
PERMIT NO. 97 WR 009

Destruction Requirements:

- 1. Remove from the well any pump, appurtenances, debris, or other materials to a depth of 22 feet below the finished grade or original ground, whichever is the lower elevation.
- 2. Sound the well as deeply as practicable and record for your report.
- 3. Fill well below 22 feet with pea gravel as necessary. Neat cement, cement grout or concrete may be substituted for pea gravel, if desired.
- 4. Remove any casing(s) and annular seal to 2 feet below finished grade of original ground, whichever is the lower elevation.
- 5. Fill the remaining 20 foot length of casing with neat cement, cement grout or concrete. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.
- 6. After the seal has set, backfill the remaining hole with compacted material.



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION 951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (51
(510) 670-5248 ALVIN KAN FAX (510) 670-5262

| Name CAROLYN MULVIH | <u>ጥ</u> ட |] | Date July 8. 1997 |
|---|---|---|-------------------|
| Name CAROLYN MULVIH Company ACC ENVIRONMENT Address . 7977 CAPLAGLE DE | | - | |
| City/State/Zip OAKLAND C | | - | |
| Dear CARRY MULVI | | | |
| Enclosed are drilling permit number(s) | 97WR009 | for | |
| a geotechnical investigation a contamination investigation a monitoring well construction at | project d th | water supply well construct cathodic protection well pro e destruction of well(s) | oject |
| for your client CITY OF ALAN | sp. fr. D. A. | | |
| Please note that permit condition: The report should include: | A-1 requests that a your proposed A-2 requires that a submitted after permit number drilling and compl location sketch date of destruction a description of me | well (construction) (destruction) (destruction of the work. | ction) report be |

Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact Alvin Kan at (510) 670-5248 or myself at (510) 670-5575.

Sincerely,

Andrew Godfing Andreas Godfrey Engineer-Scientist

CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

REMOVED