Mora, Pedro

From: Rogge, Erdmann, Env.Health <Erdmann.Rogge@acgov.org>
Sent: Wednesday, July 9, 2025 10:48 AM
To: Jeremy Scott; Patterson, Monty
Cc: Roe, Dilan, Env. Health; Mora, Pedro; Randall Barbour; Harry Torrano; Javier Canseco; Curtis Conti; Joe Zilles; Jim Finegan; Oberoi, Varinder, Env. Health
Subject: RO0003666 - Alameda High School Swim Center - Approval of Dewatering Plan

Follow Up Flag: Follow up
Flag Status: Flagged

Good morning, Monty and Jeremy,

Alameda County Environmental Health Department (ACEHD) has reviewed the following submitted documents prepared by Kleinfelder on your behalf:

1. *Revised Hydrogeologic Assessment* dated July 2, 2025 (Tech Memo).
2. *Dewatering Plan, Alameda High School Swim Center Project, 200 Central Avenue, Alameda, CA* dated June 30,2025 (Dewatering Plan).

Summary of Submittals:

The Tech Memo provides a summary of the two-dimensional drawdown model using AQTESOLV based on a pump test conducted at the Site and includes the following statements:

1. The goal of the modeling was to determine conceptual pump rates, the radius of influence of pumping activities and the well distribution.

2. Four wells were installed as part of the pump test conducted at the Site, one dewatering well installed to 35 feet (ft) below ground surface (bgs) and three observation wells installed to 8 to 35 ft bgs.

3. The pump test consisted of a step-drawdown test to evaluate pumping rate first and was followed by a 10-hour pumping test at a constant rate of approximately 4 gallons per minute (gpm). Drawdown and recovery for two of the three observation wells were used to assess aquifer parameters. The calculated transmissivity values ranged from 328 to 418 square-feet per day (ft^2/d) and the storativity values ranged from 0.001 to 0.009.

4. The model assumed unconfined conditions, calculated hydraulic parameters using the Theis Method and included the following model parameters:
    a. Ground Surface Elevation of 31.64 ft above mean sea level (amsl).
    b. Depth to Water at the Site of 5.25 ft bgs.
    c. Dewatering target elevation of 14.06 ft amsl, i.e., 3 ft below construction depth.
    d. Dewatering column of 12.33 ft.
    e. Hydraulic gradient of 0.003 ft/ft to the west-northwest.
    f. Hydraulic conductivity of 8 feet per day (ft/d) based on pump test.
    g. Aquifer thickness of 50 ft.
    h. Storage coefficient of 0.1.
    i. Transmissivity of 400 ft^2/d.

j. Extraction rate of 3 to 8 gallons per minute (gpm).

5. Model simulations were conducted for 13 wells at the Site, of which:
    a. Three wells are located around the shallow pool and pump at a rate of 3 gpm.
    b. Nine wells are located around the deep pool, of which
        i. Two wells pump at a rate of 5 gpm.
        ii. Two wells pump at a rate of 6 gpm.
        iii. Two wells pump at a rate of 7 gpm.
        iv. Three wells along the western side of the deep pool pump at a rate of 8 gpm.
    c. One well is located in the northeast corner of the Swim Center and pumps at a rate of 5 gpm.

6. The combined pumping rate modeled for all wells at the Site is 74 gpm. A steady state dewatering rate was calculated to range from 79 to 121 gpm. Pumping rates are assumed to get reduced over time as the desired drawdown is achieved.

7. The radius of influence of pumping activities presented on Figure 5 is expected to be 1,000 ft. The figure includes the location of nearby active and closed environmental cases as listed on the State Water Resources Control Board's GeoTracker website. The simulated particle pathway indicates that after approximately 90 days of dewatering activities groundwater from the nearest environmental case site may be drawn to the property boundary.

8. Water collected from dewatering activities will be pre-treated prior to discharge to sewer. The maximum discharge allowed according to the permit issued by the East Bay Municipal Utilities District (EBMUD) is 145 gpm. The groundwater treatment system design is presented on Sheet 4 of the Dewatering Plan and includes an influent and effluent sampling ports. To ensure that the dewatering activities are not pulling in contaminated groundwater, a sample will be collected from the influent sampling port at the on-Site temporary groundwater treatment system within two days of the start of dewatering activities. Additional sampling at the influent sampling port is recommended to be collected every 15 days for the first 45 days. Sampling frequency can be reassessed thereafter. Samples will be analyzed for total petroleum hydrocarbons (TPH) as diesel, TPH as motor oil, TPH gasoline, volatile organic compounds, and metals.

9. Settlement at the Site will be monitored by Alten Construction to 1/1000 of a foot. Six monitoring locations were identified.

ACEHD Findings:

Based on ACEHD's review of the submitted documents, ACEHD concurs with the findings presented in the submitted documents and has no objection to you proceeding with the proposed scope of work provided the conditions below are met:

1. Samples from the influent sampling port are collected every 15 days following the collection of the first sample after start of dewatering activities.
2. Sample analyses for metals includes analysis for hexavalent chromium.

Please let me know if you have any questions or comments.

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