



## Central Coast Regional Water Quality Control Board

May 16, 2012

Mr. Sal Akhter
Cordoba Center Project Coordinator
South Valley Islamic Center
P.O. Box 1777
Morgan Hill, CA 95038-1777
Email: sakhter@induswest.com

Dear Mr. Akhter:

## LAND DISPOSAL PROGRAM: CORDOBA CENTER PROJECT, 14065 MONTEREY ROAD, SAN MARTIN, SANTA CLARA COUNTY – SUMMARY OF WATER QUALITY EVALUATION

Central Coast Regional Water Quality Control Board (Central Coast Water Board) staff reviewed all of the available information to determine whether the proposed Cordoba Center project is subject to Central Coast Water Board waste discharge requirements. Based on the information submitted to date, Central Coast Water Board staff has determined that the proposed cemetery and wastewater disposal system for the Cordoba Center project does not pose a threat to water quality if properly installed and operated. Therefore, no Central Coast Water Board waste discharge requirements or associated application fees are required for the proposed Cordoba Center project. However, the Cordoba Center project is still required to obtain all other appropriate local agency permits that are applicable for the project (e.g., County of Santa Clara Planning Office, County of Santa Clara Department of Environmental Health, etc.). Additionally, if construction of your project disturbs one or more acres of soil or if your project disturbs less than one acre but is part of a larger common plan of development that in total disturbs one or more acres, you are required to enroll in the State Water Resources Control Board's "General Permit for Discharges of Storm Water Associated with Construction Activity1."

The Cordoba Center project plans include a cemetery and an individual domestic wastewater disposal system (septic system) for a proposed community and events center. Central Coast Water Board staff requested and reviewed detailed technical information for the proposed cemetery and septic system to evaluate if there are potential water quality impacts from these discharges. We appreciate your responsiveness in supplying the necessary information. Below is the list of reasons for Central Coast Water Board staffs' determination that the proposed Cordoba Center project will not pose a threat to water quality:

 The requirements of the Central Coast Region Basin Plan for the proposed septic system are met by Santa Clara County's on-site disposal systems ordinance for long-term water quality protection (Attachments 1 and 2). Therefore, a permit from the County of Santa

JEFFREY S. YOUNG, CHAIR ( ROGER W. BRIGGS, EXECUTIVE OFFICER

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<sup>&</sup>lt;sup>1</sup> Storm Water Program and "Construction General Permit Order 2009-0009-DWQ" at: <a href="http://www.waterboards.ca.gov/water">http://www.waterboards.ca.gov/water</a> issues/programs/stormwater/construction.shtml

- Clara Department of Environmental Health for the septic system will meet the Central Coast Water Board requirements.
- There are no chemicals or additives involved in the process of preparing and placing deceased human bodies in the cemetery (Attachment 2). Therefore, chemical leaching and potential pollution of those chemicals from the bodies in underlying groundwater is eliminated.
- The required minimum five-foot separation will be maintained between highest anticipated groundwater and 1) the bottom of the grave sites and 2) the bottom of the septic system leach field trenches containing the discharge piping (Attachments 3, 4a, 4b, 4c, and 5). Central Coast Water Board staff corroborated your groundwater elevation data using the long term monitoring data from a) monitoring wells associated with the nearby Olin cleanup project<sup>2</sup>, b) available Santa Clara Valley District groundwater elevation information, and c) the April 2012 data from your on-site well that is currently inactive and planned for abandonment (Attachments 4a, 4b, and 4c).
- The proposed setback distance between the septic system leach-field discharge and cemetery plots is such that the two systems will not interact to adversely affect water quality given the proposed design flow rate to the leach-fields.
- Central Coast Water Board staff have determined from your site-specific soil studies and hydrogeological information that the soil column underneath the burial sites will have absorptive capacity and biological decomposition characteristics similar to those processes of the septic system, and thus staff have determined that the discharge to the cemetery does not pose a threat to groundwater quality. Site-specific information further supporting staffs' determination on water quality is the slow percolation characteristics demonstrated for soil beneath the property (i.e., slower percolation rates allow more time for natural decomposition processes to occur, and increases the travel time of water and liquids moving downward and outward through the underlying soil column) (Attachment 3).
- Groundwater mounding from the proposed discharge to the septic system is minimal underneath the septic system leach fields. To derive this conclusion, Central Coast Water Board staff performed hydraulic numeric modeling of the proposed discharge utilizing a flow rate to the septic system far exceeding the actual design flow (i.e., a "worst case scenario"). Staff used high and low percolation rates (i.e., averages of the anticipated stabilized and adjusted flow rates) obtained from your site-specific testing to approximate potential upper and lower bound effects of the discharge on groundwater elevation (Attachment 3). The results of our model indicated a potential rise in groundwater elevation of only one third of a foot over one year when utilizing a constant flow rate of 2,500 gallons per day<sup>3</sup>; again, this flow rate far exceeds the reported peak design flow rate of 900 gallons per day—a flow rate associated with an anticipated two or three large events per year, with a lower average design flow rate during the rest of the year. Project information also indicates portable toilet facilities will be utilized during the larger events to ensure that the peak design flow rate of 900 gallons per day will not be exceeded. As such, the modeling results demonstrate that the potential effect on groundwater elevation rise due to discharges to the leach field is negligible.

<sup>&</sup>lt;sup>2</sup> Click the "Site Maps / Documents" tab and scroll down to "Monitoring Reports" at: <a href="http://geotracker.waterboards.ca.gov/profile">http://geotracker.waterboards.ca.gov/profile</a> report.asp?global id=SL0608756247

<sup>&</sup>lt;sup>3</sup> The Central Coast Water Board serves as the lead agency for wastewater permitting on proposed sewage disposal projects if the maximum expected wastewater flow exceeds 2,500 gallons per day.

- Supplemental water is available to the project from the West San Martin Water Works, Inc. water purveyor, and we understand that you are planning to properly abandon the existing unused well on the property as part of the proposed project development (Attachment 6).
- The distance to the nearest operational well from the project area is greater than 200 feet, which is more than twice the required setback distance in the Central Coast Region Basin Plan for septic systems and protection of groundwater supply wells<sup>4</sup>. Furthermore, the nearest operational well is sealed from the ground surface to 50 feet below ground surface, providing a protective barrier (i.e., sanitary seal) for groundwater<sup>5</sup>.
- The proposed septic system and cemetery are located well outside the flood zone, which is a strip of land limited to a narrow area along the northern property boundary (Attachment 7 [letter] and Attachment 3 [map]).
- The proposed waste discharges are underground and located approximately 150 feet away from Llagas Creek, which is greater than the Central Coast Water Board Basin Plan required setback of 100 feet<sup>6</sup>. Additionally, a majority of stormwater or surface flow across the property is to the south-southeast, away from the northern property boundary and Llagas Creek (Attachment 3). More specifically, the proposed septic system and cemetery are in an area where stormwater flow is separated from Llagas Creek by a ridge (area of topographically higher elevation) along the northern property boundary (i.e., the ridge separates the septic system and cemetery area from Llagas Creek). Given that the discharges are underground, and in the event runoff or surfacing of water occurs near the septic system and cemetery, the site topography will cause the water to runoff away from Llagas Creek, Central Coast Water Board staff has determined that there is no threats from the septic system and cemetery to surface water from flooding or stormwater runoff flows.

Therefore, based on our evaluation, the Cordoba Center project is not required to obtain waste discharge requirements because the project does not pose a threat to water quality and other local agencies are permitting the septic system in accordance with our requirements. If you have any questions, please contact <a href="mailto:Dan Niles by telephone at (805) 549-3355">Dan Niles by telephone at (805) 549-3355</a> or email at <a href="mailto:dniles@waterboards.ca.gov">dniles@waterboards.ca.gov</a>, or his supervisor Thea Tryon at (805) 542-4776.

Sincerely,

Digitally signed by Thea Tryon
DN: cn=Thea Tryon, o=Central Coast
Water Board, ou=SCP - LD,
email=tryon@waterboards.ca.gov, c=US
Date: 2012.05.16 13:40:16 -07'00'

for Roger W. Briggs

Executive Officer

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## **Enclosures**

Attachment 1 - Central Coast Water Board Letter 03-20-2012

Attachment 2 - Cordoba Center Letter 03-20-2012

<sup>&</sup>lt;sup>4</sup> Water Quality Control Plan for the Central Coast Region, Chapter 4. Implementation Plan, Section VIII.D.3.i.10.

<sup>&</sup>lt;sup>6</sup> Central Coast Water Board staff analysis of confidential domestic well information provided by the Santa Clara Valley Water District upon staffs' written request dated March 20, 2012 (Attachment 8).

<sup>&</sup>lt;sup>6</sup> Water Quality Control Plan for the Central Coast Region, Chapter 4. Implementation Plan, Section VIII.D.3.i.10.