

California Regional Water Quality Control Board
Santa Ana Region

Staff Report

March 27, 2009

ITEM: *8

SUBJECT: Appeal of Staff's Denial of an Exemption from the Minimum Lot Size Requirement for Subsurface Disposal System Use – Mustafa Abdelkarim and Attalah Abugherir, Center Highgrove Plaza, 323 Iowa Avenue, Highgrove area, Riverside County – APN 247-081-026 and 027

DISCUSSION:

On December 22, 2008, Ramcam Engineering Group, Inc., on behalf of Mustafa Abdelkarim and Attalah Abugherir, owners of the above referenced property, submitted an application for the use of septic tank-subsurface disposal systems for the disposal of waste from a proposed commercial development at 323 Iowa Avenue within the Highgrove area of Riverside County. The project development includes a 3,942 square foot service station with a convenience store and fast food restaurant. The lot size is approximately 0.52 acres. There is no sewer currently available to serve this lot.

The soils percolation report indicates that groundwater depth at the site is 62 feet below existing ground surface. The Regional Board Guidelines for Sewage Disposal from Land Developments specify a depth of soil between ground surface and anticipated high groundwater in the disposal area of not less than 10 feet. This project as proposed complies with these guidelines.

The Regional Board has adopted minimum lot size criteria for septic tank-subsurface disposal system use that are contained in the Water Quality Control Plan (Basin Plan) for the Santa Ana Region. These criteria established a one-half acre minimum lot size requirement for new developments proposing the use of on-site septic tank-subsurface leaching/percolation systems. The Board found that it was necessary to limit the density of new subsurface disposal systems to control the nitrate quality problems found in the groundwaters of the Region. The minimum lot size requirements specify that the wastewater flow for each one-half acre of land may not exceed that from a three-bedroom two-bath house as specified in the Uniform Plumbing Code. This is equivalent to 300 gallons per day (gpd) or 20 fixture units per one-half acre of land for commercial projects.

Based on the information provided in the applicant's December 22, 2008 submittal, Board staff determined that the total fixture unit count and projected flows from the facility would not comply with the minimum lot size requirements. Since the Board's minimum lot size requirements were not met by the proposed project, staff denied the request to use conventional septic tank systems for wastewater disposal. In addition, due to septic system failures in the area, Riverside County also denied the use of conventional septic systems for this project.

Regional Board staff met with Riverside County staff and the consultant, Ramcam Engineering Group, Inc., to discuss concerns regarding the project. The concerns raised were the projected flows and the expected high nitrate concentration of the wastewater discharges from the proposed development. To address these concerns, the proponents are proposing the use of an alternative treatment system. They also indicated that the use of the alternative treatment system is on a temporary basis only and that as soon as sewer is available to serve the development, the development will be connected to the sewer. It is worth noting that the City of Riverside, through an agreement with Riverside County, is actively working to sewer the Highgrove area.

Pursuant to the minimum lot size exemption criteria specified in the Basin Plan, project proponents may propose an alternative treatment system as the basis for an exemption from the minimum lot size requirements. Each such request must be reviewed on a case-by-case basis and submitted to the Regional Board for consideration.

Plans were submitted proposing the use of an alternative disposal system (Oreco AdvanTex with AX100 textile filters, denitrification tank and a recirculation/blend tank) for the project. Use of this alternative system is expected to result in effluent nitrate-N quality of 10 mg/L or less, which is lower than the total inorganic nitrogen water quality objectives for the Riverside F Groundwater Management Zone, which underlies the project site.

Staff advised the project proponent that Regional Board consideration of the revised project was necessary in accordance with the minimum lot size exemption criterion pertaining to alternative treatment system, and that it would also be necessary to attain compliance with Riverside County Environmental Health requirements. Riverside County requires the recordation of an alternative system with the property deed, providing additional assurance that disclosure to buyers is provided. Alternative systems are then permitted by the County for the life of the system and the permit must be renewed annually by the property owner.

RECOMMENDATION:

Board staff recommends approval of the request for an exemption from the minimum lot size requirements subject to the following conditions:

(1) Mr. Abdelkarim and Mr. Abugherir shall connect all domestic wastewater lines serving the facility to the sewer within six months of the availability of a sewer line that could serve the site; (2) Mr. Abdelkarim and Mr. Abugherir shall enter into an agreement with a qualified engineer for the operation and maintenance of the alternative system. A copy of this agreement shall be submitted to the Regional Board; (3) Mr. Abdelkarim and Mr. Abugherir shall conduct quarterly sampling for one year to determine the nitrate (as N) concentration in the effluent and submit those analyses to the Regional Board office within 30 days after such sampling and analysis has occurred; (4) Mr. Abdelkarim and Mr. Abugherir shall operate the alternative treatment system so as to assure consistent compliance with no more than 10 mg/L nitrate as nitrogen concentration of the discharged effluent; (5) Mr. Abdelkarim and Mr. Abugherir shall obtain an annual permit from the Riverside County Environmental Health for the operation of the alternative system; (6) Mr. Abdelkarim and Mr. Abugherir must enter into an Agreement of Restriction, which shall become a part of the Chain of Title, that the alternative disposal must be removed and or properly abandoned within 6 months of availability of sewer to the property; and, (7) Should Mr. Abdelkarim and Mr. Abugherir sell this property prior to the availability of sewer, they are required to disclose all of the conditions of approval stipulated in 1 through 5, above, to the new property owner(s) and the Agreement of Restriction must be revised to reflect the change in ownership and be part of the deed transfer. Mr. Abdelkarim and Mr. Abugherir shall also advise the Regional Board and Riverside County Environmental Health in writing of new ownership and confirm that the disclosures identified above have been made.

Comments were solicited from the following agencies:

Riverside County Environmental Health – Matt Riha/Mike Mistica
Riverside County Building and Safety – Steve Dondalski
BioSolutions, Inc. – Steve Braband
RAMCAM Engineering Group, Inc. – Alex Irshaid