

California Regional Water Quality Control Board
Santa Ana Region

Staff Report

March 27, 2009

ITEM: *7

SUBJECT: Appeal of Staff's Denial of an Exemption from the Minimum Lot Size Requirement for the Use of Alternative Subsurface Disposal Systems – Mohammad Ali dba Lake Mathews Square, LLC, Southwest Corner of Cajalco Expressway and Gustin Road, Perris, Riverside County – APN 285-210-003

DISCUSSION:

On October 21, 2008, Ramcam Engineering Group, Inc., on behalf of Mohammad Ali dba Lake Mathews, LLC, owner 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 Cajalco Expressway and Gustin Road in the Perris area of Riverside County. Lake Mathews Square, LLC proposes to divide a 3.28-acre lot into 3 individual lots for commercial development. There is no sewer currently available to serve this lot. The commercial development will include the following:

Parcel No.	Lot Size (acreage net)	Septic Tank Size (gallons)	Proposed Usage
1	1.46	5,000	3 retail stores, 1 convenience (grocery store with pizza pick up restaurant) and 1 sandwich shop
2	0.58	12,000	1 restaurant (fast food)
3	0.48	6,000	Gasoline station with convenience store
Dedication	0.76	NA	Easement dedication

The soils percolation report indicates that the groundwater depth at the site is approximately 23 feet below existing ground surface. The Regional Board's 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. The proposed project 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 establish 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 October 21, 2008 submittal, Board staff determined that the total fixture unit count for the facility would not comply with the minimum lot size requirements. Since the proposed project does not meet the Board's minimum lot size requirements, staff denied the request to use conventional septic tank systems for wastewater disposal.

On November 19, 2008, Regional Board staff met with Riverside County staff and Lake Mathews Square, LLC's consultant, Ramcam Engineering Group, Inc., to discuss concerns regarding the project. The concerns raised were the proposed lot sizes, fixture unit count, projected flows and the expected high nitrate concentration of the wastewater discharges from the proposed developments. To address these concerns, Lake Mathews Square, LLC proposed to utilize alternative treatment systems with UV disinfection to serve each parcel. Lake Mathews Square, LLC also indicated that once sewer is available to serve the developments they would connect these developments to the sewer.

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.

Project plans were submitted proposing the use of alternative disposal systems (Oreco AdvanTex with AX100 textile filters, UV tertiary treatment, denitrification tank and a recirculation/blend tank) utilizing seepage pits. Use of these alternative systems is expected to result in effluent nitrate-N quality of 10 mg/L or less. The maximum contaminant level specified by the California Department of Public Health for nitrate-nitrogen is 10 mg/L. The site location does not overlie any designated groundwater management zone (GMZ).

Staff advised the project proponent that Regional Board consideration of the project was necessary in accordance with the minimum lot size exemption criterion pertaining to alternative treatment systems. Regional Board approval of the proposed use of alternative systems is required for Riverside County Environmental Health Department consideration of approval of the system.

Riverside County requires the recordation of alternative systems with the property deed, providing additional assurance that disclosure to buyers is provided. Alternative systems are permitted by the County for the life of the system. These permits 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) In the event that sewer becomes available, Lake Mathews Square, LLC or new owners shall connect all domestic wastewater lines serving the developments to the sewer within six months of sewer availability; (2) Lake Mathews Square, LLC or new owners shall enter into an agreement with a qualified engineer for the operation and maintenance of the alternative systems. A copy of the agreement shall be submitted to the Regional Board; (3) Lake Mathews Square, LLC or new owners 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) Lake Mathews Square, LLC or new owners shall operate the alternative treatment systems so as to assure consistent compliance with 10 mg/L nitrate as nitrogen; (5) Lake Mathews Square, LLC or new owners shall obtain an annual permit from the Riverside County Health Department for the operation of the alternative systems; and, (6) Lake Mathews, LLC. must enter into an Agreement of Restriction, which shall become a part of the Chain of Title, that the alternative disposal systems must be removed and or properly abandoned within 6 months of availability of sewer to the property; (7) should Lake Mathews Square, LLC 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. Lake Mathews Square, LLC shall 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/John Watkins
Riverside County Building and Safety – Steve Dondalski
RAMCAM Engineering Group, Inc. – Alex Irshaid
BioSolutions, Inc. – Steve Braband