Barry R. McBee, Chairman R. B. "Ralph" Marquez, Commissioner John M. Baker, Commissioner Dan Pearson, Executive Director



# TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

May 24, 1996

Dr. Salvador Ortiz Murcia Development Co. 1208 South Main Boerne, TX 78006

Re:

EDWARDS AQUIFER, Comal County

PROJECT:

Terrigal Park Estates Subdivision, Located 2.3 Miles East of FM 3351 on

South Side of Amman Road, Comal County, Texas.

TYPE:

Request for Approval of Water Pollution Abatement Plan (WPAP); 30

Texas Administrative Code (TAC) §313.4; Edwards Aquifer Protection

Program.

Dear Dr. Ortiz:

The Texas Natural Resource Conservation Commission (TNRCC) has completed their review of the WPAP application for the referenced project that was submitted on behalf of Murcia Development Co. by Sumac engineering Services and received by the San Antonio office on February 23, 1996. Final review was completed after additional material was received on April 19, 1996.

#### PROJECT DESCRIPTION

The proposed 300 acre Terrigal Park Estates Subdivision is to be developed as a residential project and will consist of 164 residential lots and one (1) lot reserved for a water plant and recreational area. The portion of the project to be located on the Edwards Aquifer Recharge Zone (EARZ) is 38.7 acres comprising portions of twelve (12) residential lots and the 5.434 acre water plant/recreational area. The site is located within the City of San Antonio's extraterritorial jurisdiction, and will conform with applicable codes and requirements of the City of San Antonio. For lots located on the EARZ, the normal population of the development is estimated to be 45 persons. 2,257 gallons per day of domestic wastewater is to be generated by this project. Wastewater for each residence will be treated by a private on-site septic system. According to a February 13, 1996 letter signed by Monica Wallace, Comal County Sanitarian, "Based on the information submitted by the engineer the above referenced project site should be suitable for engineer designed on site sewerage facilities for single family residences."

REPLY TO: REGION 13 • 140 HEIMER RD., SUITE 360 • SAN ANTONIO, TEXAS 78232-5042 • AREA CODE 210/490-3096

Dr. Salvador Ortiz May 24, 1996 Page 2

An exception to the requirement of a water pollution abatement plan for the 13 lots which are partially located on the EARZ has been requested. This request references "equivalent protection" but is not specific. An exception to the requirement of a water pollution abatement plan for the remaining lots (150) which are not located on the EARZ has also been requested. This request is based on their not being located on the EARZ.

The proposed impervious cover for the development, approximately 0.83 acres (5%), includes roof tops, driveways, and streets.

#### **GEOLOGY ON SITE**

The site investigation of February 21, 1996, performed by the San Antonio office, revealed that the portion of the project not located on the EARZ is located upgradient of the EARZ. Any drainage or spillage from this portion of the project would flow onto the EARZ. The majority of the site contains porous, vuggy, and fractured limestone with some spotty soil cover. In the area which is located on the EARZ there appears to be thicker soil with less outcropping of limestone. The drainage draws contain some porous limestone covered with some soil plus abundant coarse soil and organic material.

On April 19, 1996, a potential recharge feature was reported within the proposed road right of way near Lot #128. This location is upgradient and off of the EARZ. The site investigation conducted on April 19, 1996 revealed that an approximately 10' by 20' by 14' deep solution enhanced, fracture controlled, closed depression was present. An area of five (5) acres was estimated to be draining to the feature.

## GEOLOGY DOWNGRADIENT OF SITE

A geologic assessment for the project was not submitted. If the request for exception to the WPAP for the entire 300 acre site is approved for the 13 lots on the EARZ would not require a Geologic Assessment.

### POLLUTION ABATEMENT

# I. During Construction:

The following measures will be taken to prevent pollution of stormwater originating on-site or upgradient from the project site and potentially flowing across and off the site during construction:

A. Stabilized construction entrances shall be installed at all sites of ingress and egress prior to initiation of any other regulated activity.

B. Temporary erosion and sedimentation controls (silt fences and rock berms) shall be installed prior to initiation of any other regulated activity.

### II. After Construction:

The following measures will be taken to prevent pollution of stormwater originating on-site or upgradient from the project site and potentially flowing across and off the site after construction:

- A. Naturally existing vegetated areas will remain.
- B. Best management practices literature for fertilizer and pesticide use, as furnished by the Edwards Underground Water District, will be furnished to all buyers of lots in the development.

## III. Recharge Features:

No measures are proposed to prevent pollutants from entering recharge features while maintaining or enhancing the quantity of water entering any recharge features.

#### APPROVAL

The plan for this project has been reviewed for compliance with 30 TAC §313.4 which sets forth pollution abatement criteria for any development on the recharge zone of the Edwards Aquifer. The proposed water pollution abatement plan is in general agreement with 30 TAC §313.4; therefore, approval of the plan is hereby granted subject to the specific conditions listed below.

Failure to comply with any of the following conditions, the deed recordation requirement, or any other specific conditions of approval is a violation of these rules. Pursuant to \$26.136 of the Texas Water Code, any violations of the Edwards Aquifer Rules may result in administrative penalties of up to \$10,000 for each act of violation and for each day of violation.

### SPECIAL CONDITIONS OF APPROVAL

- 1. If any potential recharge features are encountered during construction, a geologist shall evaluate the significance of the features. The evaluation shall include representative photographs and a description of the feature forwarded to the San Antonio office. Construction in the vicinity of the features may only continue with written approval from the TNRCC.
- 2. Placement of hydrocarbon or hazardous substance storage facilities regulated pursuant to 313.10 and 313.11, requires submittal of all appropriate applications with appropriate fees and must receive prior approval from the TNRCC.

- 3. The request for exception to the WPAP for the 150 lots located off of the EARZ has been reviewed for compliance with 30 TAC §313.4, and the TNRCC's Guidance Document dated August 4, 1994. Your request is hereby denied. A geologic assessment of the project site shall not be required at this time. Deed recordation, however, shall be required. Due to the very porous nature of the outcropping rocks, on-site wastewater treatment facilities shall be designed and installed as if they were located on the EARZ.
- 4. A plan for protection of water quality of stormwater runoff potentially entering the closed depression within the proposed road right of way near Lot #128 shall require approval from the TNRCC prior to any construction activity near the feature.
- 5. The proposed water plant/recreation area to be located on Lot #165 shall require a separate WPAP and approval because it is not a residential lot, and is considered a utility regulated pursuant to 30 TAC 313.3 ("Regulated Development"). The application should include temporary and permanent stormwater pollution abatement measures, type and volume of hydrocarbons or hazardous substances to be used, pollution abatement measures to be taken for disposal of any backflush water, and a site plan showing the proposed well and all associated surface facilities.

# STANDARD CONDITIONS OF APPROVAL

- 1. Please be reminded that 30 TAC §313(c) requires the owner/developer to: (1) record in the county deed records that this property is subject to the approved WPAP; and (2) submit to the Executive Director through the San Antonio office, within 30 days of receiving this written notice of approval of the water pollution abatement plan and prior to commencing construction, proof of application for recordation of notice in the county deed records. Enclosed is a suggested format you may use to deed record your approved WPAP.
- 2. Prior to commencing construction, the applicant/agent shall submit to the San Antonio office copies of any changes made to the plans and specifications for this project which have been required by the TNRCC review and/or all other permitting authorities.
- 3. Please note, following this approval of the regulated activities described in the referenced WPAP submittal, any amendment to these activities required by some other regulating authority or desired by the applicant will require the submittal of a WPAP application to amend this approval. And, as indicated in 30 TAC §313.4 and 30 TAC §313.27, an application to amend any approved regulated activity shall include payment of appropriate fees and all information necessary for its review and Executive Director approval.

- 4. Additionally, all contractors conducting regulated activities associated with this proposed regulated project shall be provided with copies of this approval letter and the entire contents of the submitted WPAP so as to convey to the contractors the specific conditions of this approval. During the course of these regulated activities, the contractors shall be required to keep on-site copies of the WPAP and this approval letter.
- 5. The temporary erosion and sedimentation (E&S) controls for the entire project shall be installed prior to beginning any other construction work on this project.
- 6. The appropriate E&S control(s) that shall be used during the construction of the project should be determined as follows: (1) Silt fences should be used when the drainage area is less than 2 acres and the slope is less than 10%. (2) Rock berms with filtration should be used when the drainage areas are greater than two acres or when the slopes are in excess of 10%. The bottom edge of the filter fabric must be buried a minimum of 6 inches below grade.
- 7. The TNRCC may monitor stormwater discharges from the site to evaluate the adequacy of the temporary and permanent erosion and sedimentation control measures. Additional protection may be necessary if excessive solids or other contaminants are being discharged from the site.
- 8. Also, 30 TAC §313.4(d)(2) requires that if any significant recharge features, such as solution openings or sinkholes, are discovered during construction, all regulated activities near the significant recharge feature must be suspended immediately and may not be resumed until the Executive Director has reviewed and approved the methods proposed to protect the aquifer from any potential adverse impacts. Upon discovery of the significant recharge features, the developer shall immediately notify the San Antonio office.
- 9. Upon completion of the project, the applicant shall reseed or sod all areas disturbed during construction.
- 10. If any abandoned wells exist on the site or are found during construction of the proposed development, they shall be plugged in accordance with the local underground water conservation district's plugging procedures, if applicable, or 30 TAC §287.50(a) of this title (relating to Standards for Plugging Wells that Penetrate Undesirable Water Zones), or an equivalent method, as approved by the Executive Director. Pursuant to 30 TAC §287.48(e), the person that plugs such a well shall, within 30 days after plugging is complete, submit a Water Well Completion and Plugging Report to the Executive Director, through the San Antonio office and to the Edwards Underground Water District.

Any drill holes resulting from core sampling on-site or down-gradient of the site shall be plugged with cement slurry, from the bottom of the hole to the top of the hole, so as to not allow water or contaminants to enter the subsurface environment.

- 11. No waste-disposal wells, new confined animal feeding operations, land disposal of Class I wastes, or use of sewage holding tanks as parts of organized collection systems shall be allowed on the recharge zone of this regulated development.
- 12. During the course of the construction related to the referenced regulated project, the owner/developer shall comply with all applicable provisions of 30 TAC §313.4. Construction which is initiated and abandoned, or not completed, shall be returned to a permanent condition such that groundwater in the Edwards Aquifer is protected from potential contamination. Additionally, the applicant, Marcia Development Co., shall remain responsible for the provisions and special conditions of this approval until such responsibility is legally transferred to another person or entity, upon which that person or entity shall assume responsibility for all provisions and specific conditions of this approval.
- 13. Pursuant to 30 TAC §313.4(d)(1) and prior to commencing regulated activities, the applicant must provide the San Antonio office with the date on which the regulated activity will commence.
- 14. Please note that 30 TAC §313.4(g) states that this approval expires two years from this date unless, prior to the expiration date, construction has commenced on the regulated project.
- 15. Approval of the design of the sewage collection system for this proposed subdivision shall be obtained from the Texas Natural Resources Conservation Commission prior to the commencement of construction of any sewage collection system, the design of which shall be in accordance with 30 TAC §313.5 and 30 TAC §317.
- 16. The developer shall ensure that construction debris, such as but not limited to scrap wood, bricks, paint, adhesives, containers, paper, etc. is disposed of properly at an authorized landfill off of the Edwards Aquifer Recharge Zone.
- 17. If asphaltic materials such as "seal coat", emulsion or other asphaltic products used for paving, roofing, etc. wash off or leave the project site the developer shall notify the TNRCC immediately and commence clean-up.
- 18. Each purchaser or occupant of an individual lot within this development shall be informed in writing about best management practices of pesticide and fertilizer application. The applicant may use Preventing Groundwater Pollution, A Practical Guide to Pest Control, available from the Edwards Underground Water District (210/222-2204), or equivalent

Dr. Salvador Ortiz May 24, 1996 Page 7

information produced by recognized authorities such as the Soil Conservation Service, Texas Dept. of Agriculture, U.S. Dept. of Agriculture, etc. The applicant may develop their own educational information (with review by the TNRCC prior to use).

- 19. During residential construction on the individual lots in this development, temporary E&S controls shall be installed. The E&S controls shall be inspected periodically during construction and following any significant rainfall occurrences. Necessary repairs to the E&S controls shall be made as soon as possible.
- 20. Each purchaser of a single-family residential lot shall be informed in writing that this subdivision is located on the Edwards Aquifer Recharge Zone.

Should clarification of this letter be desired or if we may be of any other assistance, please contact John Mauser of our San Antonio office at 210/490-3096.

Sincerely,

Dan Pearson,

Executive Director

DP/jkm/eg

Enclosure:

Deed Recordation Form

cc:

Mac McCoy, Sumac Engineering Services Rebecca Cedillo, San Antonio Water System

Tom Hornseth, P.E., Comal County

Rick Illgner, Edwards Underground Water District

TNRCC Field Operations, Austin