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## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

April 5, 2007

Mr. David Swain  
Comal Independent School District  
1421 North Business 35  
New Braunfels, Texas, 78130

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: New Startzville Elementary School; Located on the north side of FM 3159, approximately 500 L.F. southwest of the intersection of FM 3159 and FM 2673; Comal County, Texas  
TYPE OF PLAN: Request for Approval of a Modification to a Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213 Subchapter B Edwards Aquifer  
Edwards Aquifer Protection Program File No. 2507.01 Investigation No.: 538880  
Regulated Entity No.: RN104921697

Dear Mr. Swain:

The modification to a Contributing Zone Plan application for the referenced project was submitted to the San Antonio Regional Office by Duane A. Moy of Moy Civil Engineers on behalf of Comal Independent School District on January 24, 2007. Final review of the CZP modification was completed after additional material was received on March 13, 2007 and March 22, 2007. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213 **with the exception of one outstanding technical deficiency that is described below**. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and all the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this modification to a Contributing Zone Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10% of the construction has commenced on the project or an extension of time has been requested.*

### BACKGROUND

The project was originally conditionally approved for site grading activities on July 28, 2006. On August 21, 2006 an approval letter was issued for the project and BMPs as described below. A modification to the previously approved plan was submitted for review on January 24, 2007.

As outlined in the August 21, 2006 approval letter, the total site encompasses 13.6 acres and has 5.39 acres of impervious cover. An exemption to treatment of building rooftop was granted for 2.18 acres of impervious cover, leaving 3.21 acres of impervious cover remaining that required treatment by permanent BMPs.

REPLY TO: REGION 13 • 14250 JUDSON RD. • SAN ANTONIO, TEXAS 78233-4480 • 210-490-3096 • FAX 210-545-4329

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • Internet address: [www.tceq.state.tx.us](http://www.tceq.state.tx.us)

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The project included the construction of an elementary school and associated parking. A drip wastewater onsite sewage facility was also proposed that included a control building, driveway to the building, and septic drain field.

Twenty vegetative filter strips designed to meet the current 2005 edition of the *Edwards Aquifer Technical Guidance Manual* were approved to provide treatment for 1.469 acres of impervious cover.

A vegetative filter strip designed using the previous 1999 *TCEQ Technical Guidance Manual* (TGM) was approved to provide treatment for 0.97 acres of impervious cover, and sized to remove 940 lbs of TSS per year.

The previously approved sedimentation/filtration basin was stated to be designed to remove 710 pounds of TSS. The basin was sized to capture the first 1.5 inches of stormwater runoff from 0.737 acres with 0.698 acres of impervious cover, providing a designed total capture volume of 4,314 cubic feet.

#### MODIFICATION PROJECT DESCRIPTION

The proposed modification includes an enlargement of the wastewater facility building and a decrease in the driveway to the building resulting in a net increase in impervious cover of 0.007 acres, with a total site impervious cover of 5.397 acres. The previously approved 2.18 acres of impervious rooftops exempted from treatment, less the proposed total site impervious cover of 5.397 acres, leaves 3.217 acres of impervious cover requiring treatment.

#### PERMANENT POLLUTION ABATEMENT MEASURES

Technical deficiencies of the original application and inconsistencies in the August 21, 2007 approval letter were identified during the technical review of the referenced modification to a previously approved CZP submitted January 24, 2006. All of the deficiencies were resolved with one exception. The deficiencies, proposed resolutions, and the remaining outstanding deficiency are discussed below.

- The approval letter dated August 21, 2006 states that the 20 vegetative filter strips met the current 2005 edition of the *Edwards Aquifer Technical Guidance Manual*. Deficiencies with respect to the vegetative filter strips were identified during the technical review of the proposed modification plan. Additional material submitted to the TCEQ on March 22, 2007 corrected and resolved said deficiencies.

The modification proposed twenty vegetative filter strips designed in accordance with the *Edwards Aquifer Technical Guidance Manual* (2005) to treat 1.387 acres of impervious cover with a required load to be removed of 1,245 lbs.

- It appears that the previously approved sedimentation/filtration basin was designed to treat 456 pounds of TSS from 0.508 acres of impervious cover (456 pounds of TSS). However, 0.19 acres (170.5 pounds of TSS) of impervious cover (rooftop), originally exempted from treatment, is directed to and treated by the basin. After review, it appears that basin was sized to capture the first 1.5 inches of stormwater runoff from 0.737 acres with 0.698 acres of impervious cover (0.508 acres + 0.19 acres = 0.698 acres). The

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designed capture volume of 4,314 cubic feet will treat 710 pounds of TSS (456 pounds + 170.5 pounds = 710 pounds). See table below for TSS balance.

- A vegetative filter strip designed in accordance with the 1999 edition of the *TCEQ Technical Guidance Manual* was previously approved to provide treatment for 0.97 acres of impervious cover with a minimum load to be removed of 871 pounds of TSS and is designed to remove 940 pounds of TSS.
- The modification identified and quantified 0.3564 acres of impervious cover with a required load to be removed of 320 pounds of TSS that is not proposed to be treated by a permanent BMP.
- The 170.5 pounds of TSS treated by the sedimentation/filtration basin from 0.19 acres of rooftop area exempted from treatment will account for 170.5 pounds of TSS generated by otherwise untreated areas of impervious cover.
- The 69 pounds of over-treatment provided by the vegetative filter strip will account for 69 pounds of TSS from otherwise untreated areas of impervious cover.
- Over-treatment of 69 pounds of TSS by the vegetative filter strip designed using the 1999 edition of the *TCEQ Technical Guidance Manual* and the over-treatment of 170.5 pounds of TSS treated by the sedimentation/filtration basin, compensates for the treatment of 239.5 pounds of TSS from otherwise untreated areas of impervious cover. 80.5 pounds (320 pounds of TSS minus over-treatment of 239.5 pounds of TSS) of TSS from untreated impervious areas remains untreated.
- The sedimentation/filtration basin was proposed to have been oversized to remove 710 pounds of TSS (83 pounds greater than the required 627 pounds) to provide over-treatment for the remaining impervious area not otherwise treated (80.5 pounds of TSS). It could not be confirmed that the basin was appropriately oversized to achieve the over-treatment needed to account for 80.5 pounds of TSS required to be removed for impervious areas otherwise untreated.

The following table summarizes the proposed permanent treatment and TSS accounting.

		Impervious Cover (acres)	Required Load Removed (lbs TSS)	Design Load Removed (lbs TSS)	Over-treatment provided (lbs TSS)	Untreated/unaccounted for TSS (lbs)
Vegetative Filter (1999 TGM)		0.97	871	940	69	Untreated/unaccounted for TSS (lbs) = required load removed (lbs) - design load removed (lbs)
Vegetative Filter A1-A20		1.387	1245	1245	0	
Sand Filter***	Sand Filter	0.508	456	---	---	
	Previously exempted rooftop	(0.19*)	(170.5*)	--	---	
	Total	0.698	627	627	170.5*	
Untreated Area		0.356	320	---	---	Untreated/unaccounted for TSS. 2,892 - 2,812 =>
Total		3.221**	2892.5	2812	239.5	80.5 lbs

* = Over-treatment provided by treatment of 0.19 acres of rooftops previously exempted from treatment.
** = Total impervious cover proposed to receive treatment less the 0.19 acres of rooftop previously exempted from treatment.
*** = Sand filter basin originally designed to capture and remove runoff from 0.698 acres of impervious cover, including 0.19 acres of previously exempted rooftops. Sand filter basin proposed to be oversized to remove 710 lbs of TSS (83 lbs of over-treatment).
Note: Values are approximate.

Upon review of the incorrect statements made in the original approval letter dated August 21, 2006, and because a good faith effort was made to correct deficiencies identified during the technical review, the modification is conditionally approved with the intent and expectation that the special conditions of approval will facilitate the correction and resolution of the deficiency prior to the approval of any future modification for this project.

SPECIAL CONDITIONS

- I. The impervious area of the proposed wastewater facility building and associated sidewalk shall be treated by a permanent BMP that is designed in accordance with the *Edwards Aquifer Technical Guidance Manual*, 2005 edition, and Standard Condition 10 of this letter shall be satisfied, and an updated site plan, and accounting/summary table shall be provided to the TCEQ San Antonio Regional Office prior to the operation of the facility.
- II. Any future modification to this project shall provide treatment by a BMP (designed in accordance with the applicable TCEQ technical guidance document for BMPs at the time of the modification) of the 80.5 pounds of unaccounted for TSS (less the TSS removed by the treatment of the facilities building

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pursuant to Special Condition 1 of this letter) generated by otherwise untreated impervious cover, or will over-treat in another BMP (designed in accordance with the applicable TCEQ technical guidance document for BMPs at the time of the modification) to compensate for the unaccounted for TSS generated by otherwise untreated impervious cover.

- III. All sediment and/or media removed from the sedimentation/filtration basins during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335 as applicable.
- IV. Intentional discharges of sediment laden stormwater are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetative filter strips, sediment traps, rock berms, silt fence rings, filters, etc.
- V. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to record the approval is enclosed.
- VI. For any future modifications to any of the permanent BMPs on this site, the summary/accounting table must be updated and included in the application. It is the responsibility of the applicant to maintain this information and keep it current.
- VII. The applicant shall provide all contractors with a copy of pages 1-35 through 1-60 of TCEQ TGM RG-348 (2005) as a guide for soil stabilization practices and assure that any soil stabilization is performed in accordance with these practices and the approved plan.
- VIII. In addition to the rules of the commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

#### STANDARD CONDITIONS

- 1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

#### Prior to Commencement of Construction:

- 2. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved Contributing Zone Plan and this notice of approval shall be maintained at the project until all regulated activities are completed.
- 3. Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of

appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

4. The applicant must provide written notification of intent to commence construction of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.
5. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

6. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
7. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been significantly reduced. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
8. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
9. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

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After Completion of Construction:

10. Owners of permanent BMPs and measures must insure that the BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.
11. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
12. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Contributing Zone Plan. If the new owner intends to commence any new regulated activity on the site, a new Contributing Zone Plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
13. A Contributing Zone Plan approval or extension will expire and no extension will be granted if more than 50% of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone Plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
14. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

If you have any questions or require additional information, please contact John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4024.

Sincerely,



Glenn Shankle  
Executive Director  
Texas Commission on Environmental Quality

GS/ZCL/eg

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Enclosure(s): Change in Responsibility for Maintenance on Permanent BMPs-Form TCEQ-10263  
Deed Recordation Affidavit, Form TCEQ-0625

fc/cc: Mr. Duane Moy, P.E., Moy Civil Engineers  
Mr. Tom Hornseth, P.E., Comal County  
Mr. Robert J. Potts, Edwards Aquifer Authority  
TCEQ Central Records, Building E, MC 212