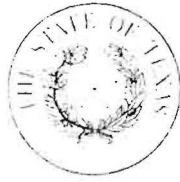


Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Zak Covar, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 9, 2014

Mr. Tom Yantis
Mosaic Land Development, LLC
1802 NW Military, Suite 100
San Antonio, Texas 78213

RECEIVED

JUL 18 2014

COUNTY ENGINEER

Re: Edwards Aquifer, Bexar County

NAME OF PROJECT: **Vickery Grove PUD**; Located 0.5 miles northeast from the Prue Road and South Hausman Road intersection; San Antonio, Texas

TYPE OF PLAN: Request for Approval of a Modification of an Approved **Water Pollution Abatement Plan (WPAP)**; 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Investigation No. 1165076; Regulated Entity No. RN106974835; Additional ID No. 13-14041601

Dear Mr. Yantis:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification for the above-referenced project submitted to the San Antonio Regional Office by KFW Engineers, Inc. on behalf of Mosaic Land Development, LLC on April 16, 2014. Final review of the WPAP was completed after additional material was received on June 11 and July 1, 2014. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. 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 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 Edwards Aquifer Protection 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 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

On February 18, 2014, the TCEQ approved a project to construct 83 single-family residences over 25.80 acres. The impervious cover amounted to 7.662 acres (29.7 percent). This WPAP modification reduces total acreage, impervious cover acreage, and the size of the partial sedimentation/filtration basin.

PROJECT DESCRIPTION

The proposed residential project will have an area of approximately 22.80 acres. It will include 83 single-family residences, driveways, roads, and utility infrastructure. The impervious cover will be 6.826 acres (29.94 percent). Project wastewater will be disposed of by conveyance to the existing Leon Creek Water Recycling Center owned by the San Antonio Water System.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, two grassy swales, one vegetative filter strip (VFS), and one sedimentation/filtration basin, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required (and provided) total suspended solids (TSS) treatment for this project is 5,570 pounds of TSS generated from the 6.826 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

Grassy swale A will extend 147 linear feet (114.98 linear feet required), and grassy swale B will extend 114 linear feet (100.84 linear feet required). Both swales will have a slope of at least 0.5% and no greater than 2.5%, at least 80% vegetated cover, and side slopes no steeper than 3:1. Grassy swale A will remove 859 pounds of TSS from 2.22 acres total (1.166 acres impervious) and grassy swale B will remove 275 pounds of TSS from 0.89 acres total (0.370 acres impervious).

The fifty foot natural VFS shall have a uniform slope of less than 10 percent and shall extend along the entire length of the contributing area. The natural VFS will remove 251 pounds of TSS from 0.97 acres total (0.307 acres impervious).

The partial sedimentation/filtration basin is designed with a capture volume of 61,023 cubic feet (55,407 cubic feet required); a concrete liner and an ultraviolet resistant geomembrane liner which is a minimum of 30 mils thick; and underdrain piping covered with a minimum two inch gravel layer, filter fabric, and an 18" thick sand filter media layer meeting ASTM C-33 specifications which spans 4,249 square feet (3,941 square feet required). The partial sedimentation/filtration basin will remove 4,185 pounds of TSS from 9.25 acres total (4.539 acres impervious). The basin has been sized to accommodate removal of 362 pounds of TSS from 9.47 acres total on-site (0.444 acres impervious) that is uncaptured.

GEOLOGY

According to the geologic assessment included with the application, the site is located on the Alluvium, the Georgetown Formation, and the Person Formation. Six manmade features (two water wells and three utility trenches) and five geologic features were identified. All were assessed to be non-sensitive with the exception of the two water wells. A site assessment was not conducted by the San Antonio Regional Office.

SPECIAL CONDITIONS

- I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated February 18, 2014.
- II. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.

JUL 18 2014

- III. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable. COUNTY ENGINEER

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.
2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.
3. 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.

Prior to Commencement of Construction:

4. 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 deed record the approved WPAP is enclosed.
5. 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 WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
6. Modification to the activities described in the referenced WPAP 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.
7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation 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 date on which the regulated activity will commence; the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, 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.
9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

10. During the course of regulated activities related to this project, the applicant or 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.
11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
13. Two wells exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. 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 reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
16. 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.
17. 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.

After Completion of Construction:

18. 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.
19. 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. The regulated entity shall then be responsible for maintenance until another entity assumes such

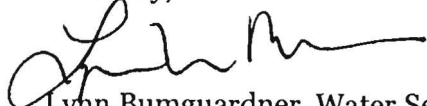
Mr. Tom Yantis
Page 5
July 9, 2014

obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection 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.
21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection 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.
22. 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.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Michael Isley, P.E. of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4057.

Sincerely,



Lynn Bumgardner, Water Section Manager
San Antonio Region Office
Texas Commission on Environmental Quality

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JUL 18 2014

COUNTY ENGINEER

LMB/MI/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625
Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Burt Wellmann, P.E., KFW Engineers
Mr. Scott Halty, San Antonio Water System
Mr. Roland Ruiz, Edwards Aquifer Authority
Ms. Renee Green, P.E., Bexar County Public Works
Mr. George Wissman, Trinity-Glen Rose Groundwater Conservation District
TCEQ Central Records, Building F, MC 212