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John M. Baker, *Commissioner*
Jeffrey A. Saitas, *Executive Director*

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

August 26, 1999

RECEIVED
AUG 3 1 1999
COUNTY ENGINEER

Mr. Gene J. Sirizzotti
Gene J. Sirizzotti Builders, Inc.
19049 Bandera Road
San Antonio, TX 78023

Re: EDWARDS AQUIFER, Comal County
PROJECT: Sirizzotti 40 Acre Tract, Project number 1276.00, Located ½ mile east of US Hwy 281 along the north side of Cibolo Creek, Comal County, Texas
TYPE: Request for Approval of Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) §213.5(b); Edwards Aquifer Protection Program

Dear Mr. Sirizotti:

The Texas Natural Resource Conservation Commission (TNRCC) has completed its review of the WPAP application for the referenced project that was submitted by Todd M. Putnam, P. E. of Macina, Bose, Copeland and Associates, Inc. on behalf of Gene J. Sirizzotti Builders, Inc. to the San Antonio Regional Office on April 29, 1999. Final review of the WPAP submittal was completed after additional materials were received on August 2, 1999, and August 25, 1999. The WPAP proposed in the application is in general compliance with 30 TAC § 213.5(b); therefore, approval of the plan is hereby granted subject to applicable state rules and the conditions in this approval letter. *This approval expires two (2) years from the date of this approval unless, prior to the expiration date, construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed project occupies 40 acres and will consist of excavation and fill operations. An existing quarry that spans approximately 2 acres is present on the property. Excavation of the quarry is planned to continue to near the limits of the property boundary at a depth of 20 to 25 feet. The excavation will be filled back to the ground surface with clean, inert fill material until the site is level. The excavation, fill, and leveling process is expected to take 6 to 10 years.

There are no current plans for land development or the implementation of impervious cover for the site. There is a water well and septic tank on the site. Each will be addressed by the owner following

the appropriate TNRCC regulations prior to excavation on the site. The site is located within Comal County, and must conform with applicable codes and requirements of Comal County.

GEOLOGY ON SITE

According to the geologic assessment included with the submittal, there is no limestone outcrop on site and the alluvium thickness is at least 20 feet. There were approximately 10 bore holes that had been back-filled on location. The 100-year flood plain is within the property boundaries. Possibly sensitive man-made features found on location were a quarry (450' x 250') and a well that is currently in use.

The San Antonio Regional Office site inspection of June 29, 1999, revealed no additional geologic or manmade features on the site. Excavation on the north end of the existing quarry had begun without an approved water pollution abatement plan. Municipal solid waste and an old cemetery was noted on the site during the inspection. Additional correspondence provided by Mr. Sirizzotti indicated that the activity on the site was for the expansion of the stock tank (existing quarry) for agricultural purposes.

GEOLOGY DOWNGRADIENT OF SITE

According to the geologic assessment included with the submittal, stormwater runoff will cross a dirt road, travel down a heavily vegetated slope, and follow Cibolo Creek for more than ½ mile. A closed depression that was found in the creek immediately downgradient of the property was classified as having high recharge properties and low sensitivity. The creek bed is filled with limestone gravel which covers any other potential karstic recharge features.

PERMANENT POLLUTION ABATEMENT MEASURES

According to the application, the quarry on the site will be expanded and leveled, extending nearly to the boundaries of the 40 acre property. Stormwater will be allowed to flow across the site throughout the excavation and filling process. The site, while being excavated, will be self contained, and no upgradient flow or flow from on site will leave the site. Since no additional impervious cover is proposed, no permanent measures have been proposed.

SPECIAL CONDITIONS

1. If any potential sensitive 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 213.5(d) and 213.5(e), requires submittal of all appropriate applications with appropriate fees and must receive prior approval from the TNRCC.

3. The temporary and permanent best management practices (BMPs)for the proposed project have been reviewed by the Commission's staff. As presented to the TNRCC, the BMPs were designed by a licensed Texas Professional Engineer to be in accordance with the requirements of 30 TAC §213.5(b). Therefore, based on the licensed Texas Professional Engineer's certification of compliance, the planning materials for construction of the proposed pollution abatement measures are hereby approved.

4. Any use of this commercial property, for activities other than those approved shall require prior approval from the regional office of the TNRCC and may require submittal and approval of a WPAP.

5. The TNRCC may monitor stormwater discharges from the site to evaluate the adequacy of permanent erosion and sedimentation (E&S) control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

6. In order to insure that the fill material being placed in the excavation is clean and inert, the field sampling plan (enclosed) must be followed. All sample results must be reported annually to the San Antonio region office. Additionally, a certification indicating that all material brought to the site from each source is clean, inert fill material must be provided with the sample results. Any material that is rejected should also be noted in the annual report. The first report will be due September 1, 2000, and each report thereafter will be due by September 1.

7. The field sampling plan (enclosed) must be deed recorded with this letter.

STANDARD CONDITIONS

1. 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, upon which that person or entity shall assume responsibility for all provisions and conditions of this approval.

2. Any modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a WPAP to amend this approval, including the payment of appropriate fees and all information necessary for its review and approval.

3. Prior to commencing any regulated activity, the applicant or his agent must notify the San Antonio Regional Office in writing of the date on which the regulated activity will begin.

4. The applicant or his agent shall record this WPAP approval in the county deed records within 30 days of receiving this notice of approval. Proof of deed recordation shall be submitted to the San Antonio Regional Office prior to commencing construction. A suggested format that you may use to deed record the approved WPAP is enclosed.

5. All contractors conducting regulated activities at the 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. 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 TNRCC 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.

7. If any significant recharge feature [sensitive feature] 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 potential adverse impacts to water quality.

8. 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.

9. Approval of the design of the sewage collection system for this proposed project shall be obtained from the TNRCC prior to commencement of construction of any sewage collection system.

10. One well exists on the site. Any additional abandoned wells found on this site shall be plugged in accordance with 16 TAC §76 or an equivalent method, as approved by the Executive Director.

Any drill holes resulting from core sampling on-site or down-gradient of the site shall be plugged with native soil, 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. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC §213 may result in administrative penalties.

Should clarification of this letter be desired or if we may be of any other assistance, please contact Lynn Bumguardner of our San Antonio Regional office at 210/403-4023. Please reference project number 1276.00.

Sincerely,

Jeffrey A. Saitas, P.E.
Executive Director
Texas Natural Resource Conservation Commission

JAS/LMB/ACG/eg

Enclosure: Deed Recordation Affidavit
Field Sampling Plan for Filling and Excavation in the Edwards Aquifer Recharge Zone in the vicinity of U.S. Highway 281 and Cibolo Creek

cc with Enclosure: Todd M. Putnam PE, Macina, Bose, Copeland & Associates, Inc.
Tom Hornseth, Comal County
Greg Ellis, Edwards Aquifer Authority
TNRCC Field Operations, Austin

FIELD SAMPLING PLAN (FSP) FOR FILLING AND EXCAVATION IN THE EDWARDS AQUIFER RECHARGE ZONE IN THE VICINITY OF U.S. HIGHWAY 281 AND CIBOLO CREEK

Prepared For:

Macina·Bose·Copeland·Associates, Inc. (MBC)
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MBC Project 1-7519
CEI Project 2607

August 1999

Prepared By:

Clean Environments, Inc.
Industrial Hygiene & Environmental Engineering Consultants
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FIELD SAMPLING PLAN (FSP) FOR FILLING AND EXCAVATION IN THE EDWARDS AQUIFER RECHARGE ZONE IN THE VICINITY OF U.S. HIGHWAY 281 AND CIBOLO CREEK

FIELD SAMPLING PLAN (FSP) FOR FILLING AND EXCAVATION IN THE EDWARDS AQUIFER RECHARGE ZONE IN THE VICINITY OF U.S. HIGHWAY 281 AND CIBOLO CREEK

1.0 INTRODUCTION

1.1 Purpose and Scope

The purpose of this FSP is to establish a Texas Natural Resource Conservation Commission (TNRCC) approved plan for allowing the client to utilize uncontaminated construction fill and debris from various sites in Bexar County, Texas for filling an excavation in the Edwards Aquifer Recharge Zone in the vicinity of U.S. Hwy 281 and Cibolo Creek.

1.2 Project Description and Background

This project site consists of a 40-acre tract to be utilized for excavation and fill replacement. The client proposes to excavate the project site for construction purposes and subsequently replace the excavated area with fill to be acquired from different sources (to be referred to as **fill material sites**). The fill material sites have not yet been identified at this time. This process will occur over a 6 to 10-year period. The site will be excavated to a depth of approximately 20 to 25 feet and then replaced with fill. There is also a 2 acre man-made quarry on the property. The Client will enlarge this quarry to the limits of his property boundaries. There is also an existing water well onsite, which is currently in use. Prior to excavation, the client will have this water well plugged and abandoned in accordance with TNRCC regulations. In addition, an active onsite septic system will be removed prior to any excavations in accordance with local and TNRCC regulations.

1.3 Project Objectives

1.3.1 Identify uncontaminated sources of fill material from selected fill material sites in Bexar County, Texas to be used as fill material in the Edwards Aquifer Recharge Zone.

1.3.2 Ensure that all fill material, brought from the fill material sites, is evaluated in accordance with this FSP prior to being placed in the excavation site.

1.3.3 Satisfy all project-related regulatory requirements by TNRCC

1.4 Contractors

Macina·Bose·Copeland·Associates, Inc. (MBC) is the prime engineering consultant for this project. Clean Environments, Inc. (CEI) is the subcontracted environmental consultant to MBC.

1.5 Project Organization and Responsibility

1.5.1 MBC will coordinate all engineering-related and surveying activities regarding the filling and excavation activities.

1.5.2 CEI will monitor the progress of the excavation operations at fill material sites, conduct all sampling activities, and conduct all analytical services. CEI will also revise this FSP as necessary to ensure the project objectives are met.

1.5.3 Client will fully cooperate with MBC and CEI to ensure that this FSP is properly implemented.

2.0 FIELD OPERATIONS

2.1 Environmental Site Assessments

Prior to any excavation or stockpiling activities at selected fill material sites, CEI will review any environmental site assessment (ESA) information that may exist on this site. Based on the ESA, only low risk sites will be considered for backfill sites pending the results of confirmation sampling. All other levels of risk (moderate or high) will not be considered as acceptable sites for fill materials. If an ESA does not exist on the fill material site, the client can choose another site or allow CEI to conduct a Phase I ESA.

2.2 Site Reconnaissance, Preparation, and Control Procedures

Prior to any fill material being loaded and hauled to the project site, a site reconnaissance of the fill material sites will be conducted by CEI. The site reconnaissance will assess the environmental condition of the site, coordinate locations of fill material stockpiles with the client, and coordinate the control and access to sampled stockpiles to ensure the integrity of sampled stockpiles are maintained until its deposition is further determined.

2.3 Borehole Construction, Lithologic Sampling, and Logging

Prior to any fill material being placed in to the project site (40-acre tract), CEI will conduct a background level study of the natural soil by performing soil borings (to the planned depth of excavation) at the project site. A lithological profile of each soil boring will be logged and three soil samples per soil boring will be obtained by CEI. Each sample will be analyzed for those constituents listed in paragraph 3.5. The analysis, assuming no TPH contamination is detected, will be used to establish background levels for metals in the natural soil of the project site in accordance with TNRCC's Chapter 335 (Industrial Solid Waste and Municipal Hazardous Waste) of 30 Texas Administrative Code. No groundwater monitoring wells are proposed at the project site.

2.4 Equipment Decontamination and Waste Handling

All sampling equipment will be decontaminated prior to sampling with non-phosphorous detergent and distilled water in accordance with TNRCC requirements. All sampling wastes will be properly disposed of in accordance with TNRCC requirements.

2.5 Field Activities

All field activities will be coordinated between CEI, MBC, and the client to ensure the objectives of this FSP are met.

3.0 ENVIRONMENTAL SAMPLING

3.1 Sampling Procedures

It is anticipated that only soil samples will be taken from selected fill material sites. Such soil samples will be obtained at a frequency of one composite sample per 50 to 250 cubic yards of fill material (depending on the respective ESA). The soil samples will be packed in a sterile 4-ounce glass container and packed in ice containers until delivered to the selected laboratory for analysis (see paragraph 3.5, Sample Analysis Summary). Once selected stockpiles have been sampled, the sample technician will mark-off the stockpile to indicate to the client that the sampled stockpile is not to be disturbed in any way, until analytical results are determined.

3.2 Sample Handling

3.2.1 Once selected stockpiles have been sampled, the sample will mark-off the stockpile to indicate to the client that the sampled stockpile is not to be disturbed in any way, until analytical results are determined.

3.2.2 Samples will be properly labeled and logged on the chain-of-custody to ensure documentation is accurate and complete.

3.3 Sample Custody

A written chain-of-custody will be completed by the sampling technician to ensure the integrity of the soil sample is maintained. The selected laboratory will sign the chain-of-custody form upon receiving the sample in good condition.

3.4 Field Quality Assurance/Quality Control Program

Since the soil samples will be composite samples and intended for screening purposes, no field quality control samples are anticipated. However, the laboratory will implement their own quality assurance program to ensure that laboratory results are accurate and valid.

3.5 Sample Analysis Summary

Each soil sample will be analyzed for the following constituents:

Description (Method)	Acceptable Levels
8 RCRA Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and sliver) (Method EPA 1131)	To be determined by representative background sampling results
Chlordane (SW 3550/SW 8080)	Non-detectable
Total Petroleum Hydrocarbons (Method 418.1 or TX1005)	Non-detectable

4.0 RECORD KEEPING

4.1.1 CEI will maintain all required records for 30 years. Records include this FSP, field notes, all related correspondence, reports, analytical results, chain-of-custody forms, and manifests.

4.1.2 During the duration of the project, CEI will report the progress of the backfilling operations to all interested parties (MBC, the client, and TNRCC) in the form of annual progress reports.

5.0 SITE MANAGEMENT

5.1.1 The Client will be solely responsible for all site management operations. The client understands the importance of not disturbing fill stockpiles once they have been sampled to ensure that no contaminated fill material is dumped into the excavation site. The client further understands if CEI notices any evidence of the sampled stockpiles being disturbed, that CEI must assume that sampled stockpile has been tampered with, thus voiding all analytical results. The client will have the choice of not using the stockpile or re-sampling the stockpile that the client's expense.

5.1.2 Once selected backfill stockpiles are determined to contain acceptable levels of the constituents described in paragraph 3.5, the soil from these stockpiles will be used as backfill at the excavation site.

6.0 REFERENCES

1. Soil and Groundwater Sampling and Analysis, TNRCC Technical Guidance, RG-14, (April 1995)

2. RCRA Sampling Handbook, U.S. Environmental Protection Agency and Jacobs Engineering Group, Inc., (April 1995)

7.0 PROFESSIONAL COMMITMENTS

The signatures below represent the commitment to follow this FSP and to ensure that all objectives in paragraph 1.3 are satisfactorily met.

Company	Authorized Agent and Date
Clean Environments, Inc. (CEI)	8/25/99
Macina Bose Copeland Associates, Inc. (MBC):	8/25/99
Client:	