TCEQ DOCKET NO. _____

IN THE MATTER OF THE APPLICATION OF H. L. ZUMWALT CONSTRUCTION, INC. FOR APPROVAL OF AN EDWARDS AQUIFER WATER POLLUTION ABATEMENT PLAN; ID No. 2897.00.	§ § § § §	BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MOTION FOR RECONSIDERATION

Comes now Ranchland Oaks Home Owners' Association ("Ranchland Oaks" or "Ranchland Oaks HOA"), and moves for reconsideration of the decision of the Executive Director to approve the Edwards Aquifer Protection Plan of H.L. Zumwalt Construction, Inc.

About Ranchland Oaks: Ranchland Oaks subdivision adjoins the Zumwalt site on its west side. Ranchland Oaks HOA is a membership organization that has among its objectives the preservation of the qualities of the natural environment that make the properties of its members desirable.

About the Project: The Water Pollution Abatement Plan ("WPAP") is for a proposed limestone quarry that would be constructed on 30 acres of a 113 acre ranch, approximately 5 miles west of the FM 471 and SH 211 intersection near Mico, Medina County, Texas on the recharge zone of the Edwards Aquifer. H.L. Zumwalt's operation would include activities such as: rock mining, crushing and hauling, with continued ranching and agricultural use. The proposed rock crushing practice will be dry with no wash ponds, and the quarry is to be operated within earthen berms assembled from overburden top soil. A generator located close to the rock crushing plant will serve as a power source for the rock crusher, conveyors and screens; a 300 gallon diesel tank will be mounted on the mobile generator trailer in the quarry pit.

History of this Application: On November 2, 2009, H.L. Zumwalt submitted a Water Pollution Abatement Plan ("WPAP") for a proposed limestone quarry operation of approximately 30 acres on a site located on the north side of FM 1283 located near Mico in Medina County, Texas. A fax transmittal from the Texas Commission on Environmental Quality ("TCEQ"), dated December 16, 2009, pointed out 11 matters in Applicant's WPAP that needed to be addressed or further examined. Following this notice from TCEQ, on January 5, 2010, Applicant filed its WPAP Modification with the Agency. Soon after, the Executive Director approved the Plan in a letter dated February 4, 2010.

Reasons for Reconsideration: In support of this Motion, Ranchland Oaks attaches the letter from Dr. Lauren Ross, Ph.D., P.E., who has reviewed the Water Pollution Abatement Plan of H.L. Zumwalt and its related documents.

Prayer: For the reasons discussed in the enclosed letter, Protestant Ranchland Oaks HOA respectfully requests that the Commission grant this Motion and reverse the Executive Director's decision to approve Applicant H.L. Zumwalt's Edwards Aquifer Protection Plan.

Respectfully submitted,

David O. Frederick w/permission by MP

LOWERRE, FREDERICK, PERALES,
ALLMON & ROCKWELL by:

David O. Frederick, SBT # 07412300

707 Rio Grande, Suite 200
Austin, Texas 78701
(512) 469-6000
(512) 482-9346 facsimile

COUNSEL FOR RANCHLAND OAKS
HOME OWNERS' ASSOCIATION

GLENROSE
ENGINEERING INC.

P. O. Box 1948
Austin, Texas 78767-1948
Phone: 512-326-8880
Fax: 512-326-8881
writer's e-mail: lauren@glenrose.com

March 1, 2010

Mr. David Frederick, Attorney
707 Rio Grande Street; Suite 200
Austin, Texas 78701

Subject: **Zumwalt Quarry Water Pollution Abatement Plan**

Dear Mr. Frederick:

At your request I have reviewed the following documents relating to the Water Pollution Abatement Plan submitted to the Texas Commission on Environmental Quality by Zumwalt Construction, Inc. for the FM 1283 Ranch Quarry in Medina County:

- Water Pollution Abatement Plan; H. L. Zumwalt Construction, Inc., FM 1283 submitted to Texas Commission on Environmental Quality, Region 13 by Westward Environmental, Inc., November 2009;
- Central Records MC213 EDAQ; Medina FM 1283 Ranch Quarry dated November 6, 2009;
- Fax Transmittal from Charly Fritz, TCEQ to Gary Nicholls, P. E. on December 16, 2009;
- Letter from Gary Nicholls, P. E., Westward Environmental, Inc. to Ms. Charly Fritz, Texas Commission on Environmental Quality, Region 13, dated January 5, 2010;
- Letter to Henry Zumwalt from Mark Vickery, Executive Director, Texas Commission on Environmental Quality to Mr. Henry Zumwalt, H. I. Zumwalt Construction, Inc., dated February 4, 2010.

The proposed quarry would be constructed on 30 acres of the recharge zone of the Edwards Aquifer. The site is part of a 113-acre ranch. Rock mining, crushing, and hauling would

occur simultaneously with ranching and agricultural activities. Rock crushing will be dry, requiring no wash ponds. The quarry is proposed to operate within earthen berms constructed from overburden top soil.

I have identified the following issues associated with possible water quality degradation from the proposed rock mining and processing operations.

Hydrologic and Hydraulic Analysis of Berms

The applicant proposes to divert storm runoff around the rock mining operation by constructing berms upgradient and downgradient from the mining pit using on-site top soil and overburden (Westward Environmental, Inc., January 4, 2010). These storm runoff diversion berms are proposed without calculations of the contributing area size, or of the expected storm runoff flow rates.

Without information regarding the contributing area size and expected flow rates, it isn't possible to determine whether the flow concentration that occurs from berm placement can be accommodated without a designed runoff channel. Furthermore, the applicant has not addressed erosion and water quality degradation that would result from overland flow diversion by the proposed berms.

A revegetation plan should be included in the permit to assure rapid stabilization of properly-sized berms.

On-Site Electrical Generation

The applicant proposes to operate the rock crusher, conveyors, and screens with electricity from a diesel-powered mobile generator. The diesel tank would hold 300 gallons of fuel. The tank and mobile generator trailer would eventually be located inside the quarry pit.

On-site fuel storage and electrical generation represent a potential for water quality degradation that off-site electrical generation would not pose. The proposed location of these operations inside the quarry pit presents a further danger of water contamination, either

directly into the underlying karst Edwards Limestone, or as part of any mining pit dewatering activities. More protective options include use of off-site electricity, or placing the mobile generator and fuel storage outside the mining pit area.

Stormwater Discharge Standards

The applicant assumes (page 7) that stormwater in the quarry pit will largely evaporate. There is, however, no analysis to demonstrate that evaporation is more likely than subsurface infiltration.

The applicant proposes to dewater the pit, if necessary, under the provisions of TPDES General Permit No. TXR050000 under Sector J for Mineral Mining and Dressing Facilities. Under the provisions of this general permit, stormwater effluent could be discharged provided suspended solids concentrations are not higher than 45 mg/l for a daily maximum and 25 mg/l for a daily average and pH is between 6 and 9 standard units. The required monitoring frequency is once per year.

These TXR050000 standards are not adequate to protect the water quality of Edwards Aquifer recharge. Although the applicant correctly quotes the Edwards Aquifer Technical Guidance Manual (RG-348) background suspended sediment concentration of 80 mg/l for undeveloped areas, that value applies to storm runoff conditions.[1] During baseflow conditions suspended sediment concentrations in streams recharging the Edwards Aquifer are lower. Since base flow conditions are likely to be present during the dewatering process, a more restrictive suspended sediment limit would be appropriate. Baseflow total suspended solids concentrations for Texas Hill Country streams across the Edwards limestone outcrop are typically less than 5 mg/l.[2]

---

[1] Barrett, Michael, Ann Quenzer, and David Maidment, *Water Quality and Quantity Inputs for the Urban Creeks Future Needs Assessment,* Center for Research in Water Resources, University of Texas at Austin, January 15, 1998, page 10.

[2] City of Austin, *The Barton Creek Report,* April 1997, pages 164, 213, 214.

The permit approval from the TCEQ fails to require even the inadequate stormwater discharge standards proposed by the applicant. Special Conditions V only states: *"Intentional discharges of sediment laden water from regulated activities are not allowed. If dewatering becomes necessary, appropriate measures must be taken."*[3]

Sensitive Features/Geological Assessment Standards

The geologic assessment for this site identified no sensitive or significant features. In my experience of geologic assessments, however, significant or sensitive Edwards karst features are often not identified even when present. I recommend that an independent geologic assessment be performed to confirm the absence of significant or sensitive features.

The applicant has committed that there will be no temporary seal for naturally-occurring sensitive features (page 23, item 8). With respect to features discovered during mining, however, page 35 of the application states: *"If the feature is determined to be sensitive in accordance with TAC 213 rules, the TCEQ will be notified and an appropriate method for addressing the feature will be formulated and submitted for TCEQ approval."* Whether or not an *"appropriate method for addressing the feature"* could include sealing should be clarified.

Potential for Subsurface Contamination

The applicant proposes to excavate a rock mine pit 135 feet below grade to a final floor elevation of 995 feet mean sea level. The application and the proposed approval fail to address potential water quality degradation associated with stormwater migrating through the bottom of the pit and into underlying karst formations. The applicant's proposal to address identified sensitive or significant features does not encompass protection for smaller or unidentified features providing connectivity to subsurface flow.

---

[3] Letter from Mark Vickery to Henry Zumwalt, February 4, 2010, page 2.

The absence of an identified Edwards Aquifer water table in the subsurface flow regime does not eliminate the potential for subsurface migration and contamination.

Spill Response Action

The Spill Response Action section is very general and does not provide clear and specific guidance. Examples of the lack of specificity include:

- *"Be aware that different materials pollute in different amounts."* A useful guide would review the materials to be used and define amounts that constitute a significant spill.
- *"Hold regular meetings. . ."* does not identify how frequently meetings should be held.
- *"Place a stockpile of spill clean-up materials where it will be readily accessible."* This statement fails to identify what types of clean-up materials will be stockpiled, fails to identify the quantity of materials to be stockpiled, and fails to identify locations that would be readily accessible.
- *"Designate responsible individuals to oversee and enforce control measures."* This statement fails to identify the job title or the authority of those with cleanup and control oversight.
- *"Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs."* This statement is ambiguous in that it does not identify the provisions in applicable BMPs.

Without clear guidance on spill response there is no assurance of an adequate program to protect water quality in the event of a spill.

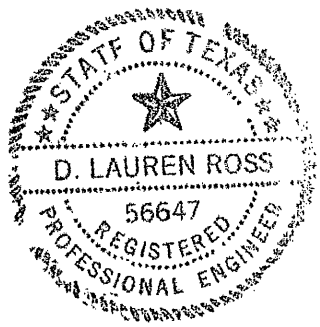
Post-Mining Plans for Stormwater

Once the rock mining operation has ceased, there is no proposed plan for site restoration or to address any long-term water quality impacts from the presence of the open rock pit penetrating the Edwards formation.

Please let me know if I can provide further review or additional information.

Sincerely,

D. Lauren Ross, Ph. D., P. E.
Registered Texas Engineer Number 56647
Glenrose Engineering, Inc.
Texas Board of Professional Engineers Number F4092



1 March 2010