Greater Edwards Aquifer Alliance

Member Organizations

Alamo, Austin, and Lone Star chapters of the Sierra Club
Bexar Audubon Society
Austin, Bexar and Travis Green Parties
Bexar Grotto
Boerne Together
Bulverde Neighborhood Alliance
Bulverde Neighbors for Clean Water
Cibolo Center for Conservation
Citizens for the Protection of Cibolo Creek
Comal County Conservation Alliance
Environment Texas
First Universalist Unitarian Church of SA
Friends of Canyon Lake
Friends of Dry Comal Creek
Friends of Government Canyon
Fuerza Unida
Green Society of UTSA
Guadalupe River Road Alliance
Guardians of Lick Creek
Headwaters at Incarnate Word
Helotes Heritage Association
Hill Country Alliance
Kendall County Well Owners Association
Kinney County Ground Zero
Leon Springs Business Association
Native Plant Society of Texas – SA
Northwest Interstate Coalition of Neighborhoods
Pedernales River Alliance – Gillespie Co.
Preserve Castroville
Preserve Lake Dunlop Association
Preserve Our Hill Country Environment
RiverAid San Antonio
San Antonio Audubon Society
San Antonio Conservation Society
San Geronimo Valley Alliance
San Marcos Greenbelt Alliance
San Marcos River Foundation
Save Barton Creek Association
Save Our Springs Alliance
Scenic Loop/Boerne Stage Alliance
Securing a Future Environment
SEED Coalition
Signal Hill Area Alliance
Sisters of the Divine Providence
Solar San Antonio
Texas Cave Management Association
Trinity Edwards Spring Protection Assoc.
Water Aid – Texas State University
Wildlife Rescue & Rehabilitation
Wimberley Valley Watershed Association

PO Box 15618
San Antonio, Texas 78212
(210) 320-6294

January 4, 2024

Laurie Gharis, Chief Clerk
Office of the Chief Clerk, MC 105
Texas Commission on Environmental Quality
PO Box 13087
Austin, TX 78711-3087

Submitted electronically at https://www14.tceq.texas.gov/epic/eComment/

Re: Comments and Contest Case Hearing Request Regarding the Application of Gram Vikas, Inc. for TPDES Permit No. WQ WQ0016281001

Please accept the attached comments on behalf of the fifty-seven member groups of the Greater Edwards Aquifer Alliance.

1. **Background.** Gram Vikas Partners, Inc., 1141 N Loop 1604 E 105-605, San Antonio, Texas 78232, has applied to the Texas Commission on Environmental Quality (TCEQ) for a new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016281001, to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 300,000 gallons per day.

The facility will be located approximately 0.2 miles west of the intersection of County Road 341 and County Road 442, in Medina County, Texas 78861. The treated effluent will be discharged directly to Hondo Creek, Segment No. 2114, of the Nueces River Basin. The designated uses for Segment No. 2114 are primary contact recreation, public water supply, aquifer protection, and high aquatic life use.

2. **Greater Edwards Aquifer Alliance (GEAA).** GEAA submits the following comments on behalf of our fifty-seven member organizations and requests a contested case hearing regarding this permit application. GEAA also requests that our organization be recognized as an affected party with standing to represent our members who are adjacent landowners. GEAA is a 501(c)(3) nonprofit organization that promotes effective broad-based advocacy for protecting and preserving the Edwards and Trinity Aquifers, their springs, watersheds, and the Texas Hill Country lands that sustain them. GEAA has multiple members who would be adversely affected by the proposed application of Gram Vikas Partners, Inc.

GEAA's members have serious concerns regarding the permit application and draft permit, and regarding the degradation of Hondo Creek that will occur with the increased discharge of treated sewage. GEAA and its members' specific areas of concern are summarized in the following section of this letter.

3. **Comments on the application.** As noted in the combined Notice of Public Meeting, Notice of Receipt of Application and Intent to Obtain Water Quality Permit (NORI), and Notice of Application and Preliminary Decision for Water Quality Land Application Permit for Municipal Wastewater, the discharge route is directly to Hondo Creek, Segment No. 2114, of the Nueces River Basin. There are several areas of concern with the current application:

A. Effluent Discharge Levels: The effluent discharge levels in the draft permit currently depict a phased approach for effluent discharge levels as the construction of the Hondo Creek Farms Wastewater Treatment Plant (WWTP) occurs, with the applicant being granted effluent discharge level limits of 5 mg/l biochemical oxygen demand (BOD_5), 5 mg/l total suspended solids (TSS), 2 mg/l ammonia-nitrogen (NH_3-N), and 0.5 mg/l for total phosphorus (TP).

GEAA acknowledges TCEQ for applying a lower total phosphorus limit for the Hondo Creek Farms WWTP draft permit when compared to the permit application; however, the receiving waterbody for this permit – Hondo Creek – meets the criteria to be designated as a "pristine stream" in Texas due to its naturally existing very low levels of phosphorus. The addition of even highly treated domestic wastewater effluent carries levels of phosphorus and other nutrients that far exceed the natural levels found in pristine streams across Texas. Research conducted by several water quality experts across Texas concluded that the level of naturally occurring phosphorus in these pristine streams is closer to 0.01 mg/l, a level that is 50 times lower than what TCEQ is asking Gram Vikas Partners, Inc. to meet for their permitted total phosphorus requirement.

Hondo Creek is one of only 22 stream segments across Texas that meet the pristine stream designation. Phosphorus is a "limiting nutrient" in ecosystems, meaning the quantity of this nutrient controls the pace of algal and aquatic plant production. Excess quantities of phosphorus, even in small amounts, can lead to eutrophication and harmful algal growth in a waterbody. GEAA strongly encourages the adoption of a more stringent total phosphorus level that ensures the protection of Hondo Creek's pristine water quality.

B. Impacts to Surrounding Wells: According to the Texas Water Development Board (TWDB), 29 water wells were found to be within a 1.5-mile distance of the Hondo Creek Farms WWTP's discharge point, with 10 wells found to be within a mile distance of the Hondo Creek Farms WWTP's discharge point (Figure 1). Water well data was pulled from three TWDB groundwater databases; TWDB Groundwater Database (GWDB) reporting 16 wells in the 1.5-mile distance area, Submitted Drillers Reports (SDR) Database reporting 13 wells in the 1.5-mile distance area, and Brackish Resources Aquifer Characterization System (BRACS) Database reporting zero well in the 1.5-mile distance area[1].

[1] Texas Water Development Board. *Groundwater Data Viewer*, 2022, https://www3.twdb.texas.gov/apps/WaterDataInteractive/GroundwaterDataViewer/?map=sdr. Accessed 1 Nov. 2022.

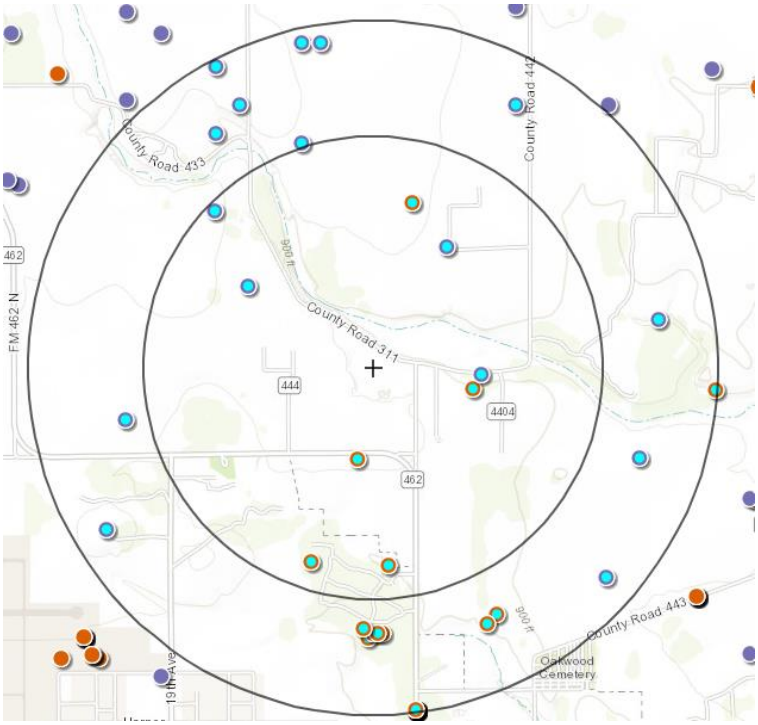

Figure 1: Location of Groundwater Wells from Hondo Creek Farms WWTP Discharge Point.
Note: Inner Circle: One-mile distance, Outer Circle: 1.5-mile distance.
All impacted wells are highlighted in Light Blue
Orange Circle: SDR Wells, Purple Circle: TWDB GWDB Well, Green Circle: BRACS Well

Further examining the stated water well data, 14 out of the 29 wells were noted to be used for domestic (household) purposes. The volume of wells located in this proximity to the discharge point and route poses a serious concern of cross-contamination with the local groundwater supply that these well owners rely on to meet their needs. Further, many of these wells are not required to regularly test the water quality of their wells, subjecting them to potential public health concerns that result from the cross-contamination of the Hondo Creek Farms WWTP's effluent and local groundwater supply.

C. Disinfectant Method: The application indicates that Gram Vikas Partners, Inc. will be utilizing chlorine contact chambers as a means of disinfectant to further treat the effluent from the Hondo Creek Farms WWTP. GEAA urges the disinfectant method to be changed to an ultraviolet light disinfectant. Ultraviolet light disinfectant treatment requires less space and is a physical process (rather than a chemical process) that has no residual effect that could harm humans or aquatic life.

All forms of chlorine are highly corrosive and toxic, and chlorine residuals could cause negative impacts on aquatic life. Further, chlorine residuals are unstable in the presence of high concentrations of chlorine-demanding materials (BOD). This would require wastewater with high BOD concentrations to be treated with high chlorine doses for adequate disinfection, increasing the likelihood of hazardous compounds such as trihalomethanes.

D. Incorporation of Beneficial Reuse: Examining the application paperwork, the Gram Vikas Partners, Inc. application does not include any capacity to conduct beneficial reuse, which would reduce the risk

of promoting environmental harm to Hondo Creek and the surrounding watershed areas. Accordingly, GEAA urges Gram Vikas Partners, Inc. to utilize a “One Water” approach for their wastewater treatment system, incorporating beneficial reuse of effluent (to the extent possible), thereby eliminating the need to discharge effluent into Hondo Creek. If Gram Vikas Partners, Inc. is unable to reuse all the wastewater generated, GEAA recommends that the remaining amounts be land applied, with Gram Vikas Partners, Inc. purchasing the necessary land for such and obtaining the requisite Texas Land Application Permit (TLAP) from TCEQ.

The TCEQ has previously stated that in evaluating wastewater permits, they consider baseline conditions in the receiving stream, the physical and hydrological characteristics of the stream, waterbody uses, and the associated water quality standards that protect those uses. We trust that the TCEQ will consider the stated factors when implementing Gram Vikas Partners, Inc. TPDES application and will adopt standards that are in line with others in Central Texas.

Thank you for the opportunity to submit these comments.

Sincerely,

Annalisa Peace
Executive Director
Greater Edwards Aquifer Alliance

Nathan Glavy
Technical Director
Greater Edwards Aquifer Alliance