

September 18, 2020

Bridget Bohac
Chief Clerk's Office (MC-105)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

RE: Request for Contested Case Hearing on Silesia L.P. Application for Texas Land Application Permit

Dear Ms. Bohac:

I am writing on behalf of Greater Edwards Aquifer Alliance ("GEAA") and several individuals (collectively, "Requestors"), to request a contested case hearing with regard to the Application of the Silesia, L.P. for TLAP Permit No. WQ0015835001. These requests for a contested case hearing are cumulative of any prior request for contested case hearing submitted by any of the Requestors. GEAA may be contacted through me Sarah Faust, Law Office of Sarah B. Faust, PLLC, 2324 Westrock Drive, Austin, TX 78704, (512) 415-7781, sarah.b.faust@gmail.com.

Requestors are "Affected Persons"

GEAA is a 501(c)(3) non-profit corporation organized to conserve and protect the natural and cultural resources of the Edwards Aquifer, its associated river basins and the Texas Hill Country. GEAA's purposes include protecting the health and safety of the residents and landowners in rural Hill Country areas as they may be affected by degradation of natural resources. GEAA is dedicated to preservation of water quality of the Edwards and Trinity Aquifers, and watersheds contributing recharge to these highly vulnerable karst formations. The interests GEAA seeks to protect by requesting a contested case hearing on the Silesia L.P. draft permit are the interests of our members in surface and groundwater including Honey Creek, the Honey Creek Cave System, the Guadalupe River, the Edwards and Trinity Aquifers; the Honey Creek State Natural Area and the Guadalupe River State Park as natural resources providing drinking water supply and recreational, wildlife, scientific, religious, artistic and spiritual experiences; and the interests of residents and landowners in use and enjoyment of their property, their financial investments in their property and the enjoyment of the natural resources on their own property for recreational, wildlife, livestock, scientific, religious, cultural and artistic experiences. As described below, GEAA members' interests in surface water and groundwater for drinking water supply, for use and enjoyment of their property, and their interests in recreational, scientific, artistic and spiritual experiences facilitated by these natural resources will all be injured by treatment and disposal of wastewater as proposed to be authorized in the draft permit. Timely comments were submitted by GEAA on multiple occasions by Annalisa Peace and Sarah B. Faust.

Honey Creek and the Honey Creek Cave System, the Guadalupe River, and the Trinity and Edwards Aquifers are unique and invaluable natural resources of the Texas Hill Country that are threatened by approval of the Silesia L.P. draft permit. The Honey Creek Cave System is the

longest explored cave in Texas, is water filled and includes recharge features that funnel water directly from the surface to the aquifers. The Honey Creek State Natural Area was purchased by the Texas Nature Conservancy and transferred to the State of Texas to preserve and protect Honey Creek and the natural resources of the area. Under the proposed draft permit the headwaters of Honey Creek will be surrounded by subsurface effluent irrigation areas and the wastewater treatment plant will be located very close to Honey Creek, threatening these resources from plant upsets, transmission line upsets, lift station upsets, and effluent migration.

GEAA members that would have standing in their own right in this matter include the individuals listed below.

Susan Diane Wyatt
103 Woodland Ranch Road
Boerne, TX 78015
Affected landowners #1, 2, and 3

Agnes B. Roca & Greg T. Elmendorf
P.O. Box 4066
Bergheim, TX 78004
Affected landowners #14, 21, and 22

Dennis E & Joanne Dawson
1 Double D Lane
Spring Branch, TX 78070
Affected landowner #24

Joyce Moore
P.O. Box 558
Harper, TX 78631-0058

Ms. Moore was not identified on the affected landowner map but should have been; her property, the Honey Creek Springs Ranch is within 1.14 miles of the proposed facilities. Ms. Moore's property interests include the opening of Honey Creek Cave system.

The individuals listed above each have a personal, justiciable interest different from the general public that are imminently threatened by issuance of the draft permit because each individual relies on groundwater as the source of drinking water, livestock water and all other purposes on their property. The personal health and safety of these individuals is threatened if the permit is granted. These individuals homes are located near the wastewater treatment plant and effluent irrigation facilities and their use and enjoyment of their property and the natural resources of their property is threatened from effluent migration into water sources, storage overflow, plant failures and upsets, line breaks, noise, odor and other impacts. Ms. Joyce Moore has interests in the integrity of the water in the Honey Creek Cave System and the Honey Creek Springs for recreational, scientific, protection of wildlife, and cultural purposes. These individuals will all be impacted by increased flooding, erosion, and changes to local ecology and geology from the housing development on the property to be served by the Silesia, L.P. and the construction and operation of the wastewater treatment plant itself. In addition to the individuals listed above GEAA

members that are groups or associations interested in this matter include the Texas Cave Management Association and the Bulverde Neighbors for Clean Water.

The Executive Director Did Not Sufficiently Address Issues Raised by Requestors

Requestors provided timely comments on many issues, and find none of the Executive Director's responses to be satisfactory and that all issues raised in their comments remain in dispute. Requestors seek a contested case hearing on the disputed issues identified below. Requestors have attempted to group comments into general categories of issues below and provides these explanations as to why the comments have not been addressed satisfactorily, without waiving any issues raised with more particularity in their comments:

- The approval of this permit and the related development will have a negative impact on water quality and the permit is not sufficiently protective of groundwater. Groundwater and water produced by groundwater wells may be contaminated by the effluent.¹ Groundwater in the Lower Glen Rose Aquifer, the Edwards Aquifer and the Honey Creek Cave complex will be not sufficiently protected from contamination by wastewater effluent. Honey Creek Cave is Texas' longest cave with approximately 21 miles of aquifer streamways known so far, and more remains unexplored and unmapped. Honey Creek Cave is adjacent to the subsurface area drip fields and the cave complex has clearly demonstrated rapid, unfiltered flow for miles through the aquifer. Karst expert George Veni has identified a significant flowpath that branches from Honey Creek Cave, flows under the Proposed Honey Creek Ranch site and southeast into the Edwards Aquifer. Karst experts have identified recharge to the Edwards Aquifer occurring from this site. This is in addition to recharge to the Edwards Aquifer through Honey Creek flows into the Guadalupe River as wells as subsurface Trinity Aquifer contributions. The proposed setbacks from karst features are too small to prevent water and undesirable chemicals from migrating too them. Additionally, mapped wetlands adjacent to or downstream from proposed effluent areas are not protected. ‘
- The permit is not adequately protective of surface water. The draft permit will result in a wastewater treatment plant being built in a highly-sensitive site and effluent migration into the nearby tributaries could all result in surface water contamination. The draft permit will result in effluent containing bacteria, nutrients, emerging contaminants, and oxygen demanding constituents being introduced into the soil and water systems. The draft permit will result in nutrient rich effluent migration and constituents from the effluent migrating to surface water causing algae growth and nuisance conditions in surface water.
- The proposed effluent limits are too high to protect downstream surface water and aquifer quality and additional effluent limits which should be included in the

¹ Response to Comment 9, 18. Many of the issues raised in the comments prepared by Dr. Lauren Ross and filed by Annalisa Peace regarding well and groundwater contamination are not addressed in the RTC.

permit are not.² Applicant proposed a phosphorous limit which was rejected by TCEQ. Because of thin soils, inadequate irrigation area and inadequate storage, phosphorous will not be completely absorbed by plants and will create algae growth in surface water.³ The draft permit fails to limit nitrate which is a key nutrient with human health effects. Emerging contaminants, which are not typically removed in wastewater treatment processes are a significant matter of concern. Ongoing monitoring by the Edwards Aquifer Authority indicates that emerging contaminants are being detected on a regular basis in the flows from Comal and Hueco Springs (Attachment 3).

- The proposed effluent disposal area and storage volume are too small to prevent system overflows and irrigation during saturated soil conditions. Soil saturation and capacity have not been adequately calculated and applied. Although irrigation is prohibited on saturated soils during the permit, with insufficient storage the permittee will be forced to irrigate during saturated soil conditions putting groundwater and surface water at risk of contamination.⁴ The planned 365,000 gallons per day of effluent irrigation is 23 inches of water per year more than Comal County receives in an average year. During extended rain periods onsite soils would be saturated for many consecutive days.
- The soils and vegetation in the subsurface drip irrigation area, even with amended soil as required, are insufficient to absorb the treated effluent and prevent rapid saturation of the soil with effluent flowing down into Honey Creek and or/down fractures and karst features into the Lower Glen Rose Aquifer. Inadequately identified soils, inadequate soil depth and soil importation standards as well as slopes will contribute to the failure of the soils to adequately absorb the applied effluent.
- Faults and unmapped fractures in the proposed subsurface disposal areas will result in higher permeabilities and make those locations more vulnerable to polluting the underlying aquifer.
- The proposed soil, seep and spring monitoring provisions are inadequate to protect the Honey Creek tributary.⁵ Special provision 31 of the draft permit requires the permittee to submit a Springs and Seeps monitoring plan but as the details of that permit are not known at the time of the permit issuance the permit is inadequate.
- Evaluations of newly discovered karst features for sensitivity is insufficient and these features should be presumed to be sensitive as noted in international scientific

² Response to Comment 17.

³ Response to Comment 7.

⁴ Response to Comment did not specifically address storage and irrigation area.

⁵ Response to Comment 18 refers to karst protections and Response to Comment 19 refers to a Springs and Seeps monitoring plan.

karst literature; 50 foot setbacks from the 3 known karst features are insufficient as no supporting justification for this size of setback is provided.⁶

- Chlorine disinfection is inappropriate for disinfection as it is introducing chlorine to the ecosystem and natural water sources and will destroy soil health and bacteria necessary to process land disposed effluent.⁷ Response to Comment 10 compares extremely clean natural groundwater to treated water used to water lawns in justifying inclusion of chlorine disinfection. UV disinfection can achieve the same disinfection goals without introducing chlorine into the effluent which will enter the groundwater system when the effluent migrates beyond the root zone.
- Wildlife and species including the Texas Blind Salamander could be affected by changes to water chemistry due to introduction of wastewater effluent into the sensitive Honey Creek Cave ecosystem through subsurface drip irrigation.⁸ Multiple at-risk species have been identified within the Honey Creek Cave System. Many of these species are very sensitive to water chemistry and will not survive changes caused by effluent migration.
- Potential flooding and runoff because of introduction of 300,000 gallons per day of effluent water added to this area will cause erosion and degradation of the surface water, groundwater and cave systems.⁹
- The Applicant has not demonstrated that the appropriate average water use per home unit has been accounted for in the draft permit.
- The density of development planned to be served by the wastewater treatment plant and effluent irrigation facilities will cause degradation of groundwater, surface water and the karst aquifers.
- The affected landowner map did not properly identified all landowners and provide mailed notice as required.
- The proposed permit will interfere with the use and enjoyment of property owned by adjacent and downstream landowners.
- The proposed permit is not sufficiently protective of human health and the environment.

In addition, GEAA identifies the following comments which were timely provided but are not recognized in the Executive Director's Response to Comment Attachment:

⁶ Response to Comment 18.

⁷ Response to Comment 10.

⁸ Response to Comment 2; Response to Comment 6.

⁹ Response to Comment 3.

- The effluent migrating to waters used for recreational use may cause negative impacts to recreational use of caves, the Guadalupe River and the Guadalupe State Park.
- The Applicant did not demonstrate need as required by Texas Water Code 26.082. The Applicant did not provide information regarding the size of the development, the number of lots, nor construction start dates and number of houses per year. The Applicant has not demonstrated sufficient need.
- The Applicant has not demonstrated that sufficient irrigation area will be available when the restrictions on public or private use of the irrigation areas are applied.

Conclusion

Based on the above and its previous comments and filings in this matter, GEAA requests a contested case hearing because its members would have standing to request a hearing in their own right, the interests it seeks to protect are germane to the organization's purpose, neither the claim asserted or relief requested requires participation of individual members. Based on the above, GEAA requests reconsideration by the Executive Director, a contested case hearing and denial of the permit application.

Based on the above and their previous filings in this matter, each individual listed (Susan Diane Wyatt, Agnes B. Roca & Greg T. Elmendorf, Dennis E & Joanne Dawson, and Joyce Moore) requests a contested case hearing, request reconsideration by the Executive Director and denial of the permit application.

Thank you for your consideration.

Sincerely,

/Sarah B. Faust/