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September 18, 2018

Texas Commission on Environmental Quality  
Office of the Chief Clerk  
MC-105  
P.O. Box 13087  
Austin, Texas 78711-3087

**RE: PUBLIC COMMENT concerning the Silesia Properties, L.P., Texas Pollutant Discharge Elimination System (TPDES) permit application, #WQ0015688001 in Comal County, Texas.**

Dear Chief Clerk:

The Meadows Center for Water and the Environment (“The Meadows Center”) files these comments in response to Silesia Properties, L.P., TPDES application No. WQ0015688001, which would authorize the discharge of up to 500,000 gallons per day from the plant site via pipe to a dry tributary; thence to Honey Creek; thence to the Guadalupe River.

As a vital part of Texas State University, The Meadows Center faculty and staff provide multi-disciplinary expertise to complex, real-world, water-related challenges. Since 2002, The Meadows Center has brought together departments and research centers to both engage in scholarly inquiry and to provide practical science-based solutions to these challenges. Our future depends on water. As such, the Meadows Center’s mission is *inspiring research and leadership that ensures clean, abundant water for the environment and all humanity.*

The Meadows Center fulfills its mission by integrating activities across four pillars of action in powerful ways. Our work in each of these pillars begins at Spring Lake – one of the largest artesian springs in the world – and ripples outward across Texas and beyond. Our fourth pillar, Leadership: Transforming Knowledge into Action, states:

“The Meadows Center supports responsible natural resource and water policy in Texas and convenes stakeholders to address critical water and natural resource concerns and the grand challenges that we will face in the decades to come... *The Meadows Center also lends its expertise to build the capacity of local communities so that they can protect and manage their own water and natural resources.*”

It is on this statement of commitment and support to local communities that we wish to comment on this application by Silesia Properties, L.P..



**THE MEADOWS CENTER**  
FOR WATER AND THE ENVIRONMENT

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The Meadows Center recognizes and encourages the value of local, stakeholder-led decision making as communities across the Texas Hill Country face the immense challenge of maintaining long-term economic sustainability while also protecting the scenic views, distinctive culture, clean air and clear water that give the Hill Country its unique identity. One small but vital component of the Texas Hill Country's historic, cultural and ecological identity is Honey Creek, located on the western edge of Comal County, one of the fastest growing regions in the United States.

"Pristine" is the word used by most who have visited the area to describe Honey Creek. The 1.5-mile spring-fed stream, which now represents the proposed receiving waters for up to 500,000 GPD of permitted effluent disposal, flows from one of the most intricate and expansive underground cave systems in Texas and supports a uniquely diverse ecology found only in the Honey Creek State Natural Area. This system has been protected by long-term investments from local landowners, the Texas Parks and Wildlife Department and others due to its value as an educational resource, bio-reservoir and ecotourism driver for the region. To protect the sensitive ecosystems that make up the preserve, the Honey Creek State Natural Area is only accessible through a weekly guided tour, from which, even pets are prohibited so as not to disturb the native flora and fauna.

Without a thorough hydrologic assessment, the detrimental effects of permitted effluent disposal into Honey Creek are unknown and may result in significant water quality and aquatic habitat degradation. The introduction of permitted pollutants and unregulated constituents such as nitrates and hormone disrupting agents (ex. personal care products, pharmaceuticals, etc.) found commonly in treated wastewater have been demonstrated by numerous studies to have adverse effects on aquatic health including endocrine disruption in fish ([Vajda and others, 2008](#); [Schoenfuss and others, 2008](#); [Blazer and others, 2007](#); [Ripley and others, 2008](#)).

Further, due to the high potential for groundwater interaction, the Meadows Center recommends that TCEQ and/or the permittee conduct a quality assured hydrologic analysis and supporting field study to determine risk of contamination to potential drinking water sources by contact with permitted effluent entering system. Case law and statute recognize that Hill Country rivers and streams including tributaries of the Guadalupe River recharge both the Trinity and the Edwards Aquifers. State law prohibits the discharge of effluent on the Edwards Recharge Zone to protect the drinking water of millions of Central Texans from contamination.

Through our experience and engagement in watershed protection planning efforts to improve water quality across the state, The Meadows Center encourages watershed-scale collaboration to meet the needs and desires of local communities with a shared vision for the land and the water future generations will inherit. The Meadows Center encourages Silesia Properties, L.P., TCEQ, local landowners, businesses, agriculture producers, NGOs, neighboring communities and other valued stakeholders to work together to develop solutions that encourage "smart growth" for Comal County and the Texas Hill Country.



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**The Meadows Center would highly value a partnership with Comal County and Silesia Properties, L.P., to develop a One Water approach that considers integrated water management as a cost-effective solution for balancing long term economic sustainability while maintaining the hydrologic and ecologic integrity of the complex systems that make up the Guadalupe River Basin including the Honey Creek watershed and underlying aquifers.**

A One Water approach for the Texas Hill Country means using the right water for the right use. As the development of new potable water supplies for one-time use, partial treatment and disposal becomes the more expensive and less sustainable alternative, beneficial reuse of treated effluent to satisfy current and future demands should be considered a critical component of *One Water for the Hill Country*. Other proven technologies, from decentralized wastewater systems to artificial wetlands for enhanced water quality, that consider the value of ecosystem services and support water resources conservation could also be employed in a One Water approach to realizing long term cost savings and enhanced quality of life for local taxpayers. One Water strategies can and should encourage local economic development goals and reduce negative impacts on existing water resources.

The Meadow Center encourages the Silesia Properties, L.P., TCEQ and key stakeholders to look beyond "off the shelf" wastewater technologies that have reached their twilight and look forward with a clear vision of a *One Water for the Hill Country* approach that demonstrates the values of leadership and cooperation to ensure the preservation of natural treasures like Honey Creek and the Honey Creek State Natural Area.

We look forward to any opportunity afforded by the Silesia Properties, L.P. to share with them our experience, expertise and love for this magnificent region we call the Texas Hill Country. Let's work together to empower more Texas communities to seek better solutions to the water challenges of tomorrow.

Thank you for your consideration.

Sincerely,



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Executive Director  
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Cc: Dr. Robert Mace, Emily Warren, Dr. Thomas Hardy, Nick Dornak



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