

## Summary of BSEACD Concerns on the TPDES Permit Application by the City of Dripping Springs

*Approved by the Board of Directors on June 30, 2016*

1. BSEACD is concerned that the application, *as proposed*, will lead to effluent that will substantially impair the water quality of Onion Creek for extended periods of time, degrading the ability of the water (a) to continue to be used as a source of drinking water, (b) to protect property values of downstream landowners, and (c) to support aquatic life.
2. This concern is exacerbated by the exclusion of appropriate measures to mitigate the proposed pollutant loading in the discharge to Onion Creek. The Hays County WCID No. 1 (Belterra) TPDES Permit was the product of a highly contentious contested-case in which a consortium of local government entities collectively negotiated a more protective permit. In that case, the Administrative Law Judge recommended and the TCEQ determined that the proposed discharge, without the additional conditions and limits, would allow degradation of Bear Creek beyond *de minimis* levels in violation of the TCEQ's Antidegradation Policy. The Belterra Permit and its conditions are substantially analogous to the proposed discharge and should serve as the baseline model for minimum permit conditions and effluent limits. Accordingly, a permit for the proposed discharge, as with the Belterra permit, should, at a minimum, include:
  - a. minimum creek-flow as a precondition to the direct discharge,
  - b. more stringent effluent standards that maintain the oligotrophic status on Onion Creek,
  - c. Membrane Bio Reactor (MBR) or comparable treatment technology,
  - d. Requirement to maximize reuse and the associated reduction in discharge volume.
3. In the development of HB 2046 in the 83<sup>rd</sup> legislative session (2013), a consensus of potentially affected parties defined a set of qualitative performance standards for wastewater management that should be achieved in those watersheds contributing recharge to the Trinity and the Edwards, in order to protect surface-water and groundwater quality and to allow for re-use as a viable new water supply. These standards are directly relevant to this matter and would represent a level of effluent that:
  - a. meets the primary and secondary drinking water standards promulgated by the TCEQ;
  - b. does not contribute to adverse toxic effects on aquatic life in the receiving water;
  - c. does not contribute to adverse toxic effects on human health resulting from the consumption of aquatic organisms or water from, or from water recreation in, the receiving water; and

- d. does not alter nutrient concentrations in the receiving water during non-storm conditions beyond *de minimis* levels;

In addition to the minimum Belterra conditions and limits, the proposed permit, if approved, should include measures to achieve these qualitative standards.

5. The proposed Total Phosphorus (TP) effluent limits are substantially higher than background concentrations in Onion Creek. Further, a Water Quality Analysis Simulation Program (WASP) model indicates the effluent quality *as proposed* will degrade the trophic classification of Onion Creek which could impair the ability of the stream to meet the water quality criteria for aquatic life and, therefore, will not meet the applicable water quality and anti-degradation standards. Again, this change in trophic status was judged by the ALJ in the Belterra contested-case to equate to degradation beyond *de minimis* levels, in violation of the TCEQ's Antidegradation Policy.
6. Recent scientific investigations jointly conducted by the BSEACD and the Hays Trinity GCD on Onion Creek in Hays County have produced new data and provide compelling evidence indicating that at least two segments of Onion Creek actively recharge the Trinity Aquifer; this includes the stream segment of Onion Creek immediately downstream of the proposed outfall location. While there is strong evidence of direct recharge from Onion Creek to the Trinity Aquifer, uncertainties remain as to how much, how quickly, and under what conditions the recharge occurs. Additional studies to provide better information on the extent and location of the Trinity groundwater that could be affected by impaired recharge quality are currently being planned. Those results will be critical to determining what public and private drinking water supplies would be potentially at risk of being adversely affected by the proposed discharge, the magnitude of risk, and whether the Segment Use of "Aquifer Protection" is being maintained.
7. Both the BSEACD and the Hays Trinity GCD have jurisdictional authority over and permitted production wells producing groundwater from the Trinity Aquifer. The BSEACD intends to work cooperatively with the Hays Trinity GCD in supporting these studies to gauge the potential impacts to the two Districts' shared aquifer, recognizing that the constituents of the Hays Trinity GCD are most directly and immediately affected. Preliminary decision-making on the draft permit's conditions should take into account these new, potentially critical considerations.
8. As a directly downstream GCD, BSEACD has concerns about the impacts on the Edwards Aquifer recharge in its jurisdiction, including the possible direct impacts from the direct discharge, as proposed. But it is as much or even more concerned about the cumulative

impacts on the Edwards arising from the precedent set by the permit for future permitted discharges combined with enabling increased development intensity in the contributing watersheds. Runoff from such areas provides its recharge and will be sources of increasing amounts of non-point source pollution and of erosion/sedimentation fostered by the proposed large-scale centralized WWTP. Such cumulative impacts would impair the buffering capacity of the contributing creeks and the Edwards Aquifer to withstand any adverse effects of direct discharges in the contributing zone.

9. While there is a demand for beneficial reuse of the effluent from the proposed plant under Chapter 210, the entire volume of effluent proposed in the application would be authorized for direct discharge, and any anticipated reuse would be entirely discretionary with no guarantee that the volume or frequency of discharge would be minimized or that the receiving stream conditions would be acceptable.