



**Barton Springs  
Edwards Aquifer**  
CONSERVATION DISTRICT

October 13, 2009

Ms. April Hoh  
Texas Commission on Environmental Quality (MC-150)  
P.O. Box 13087  
Austin, Texas 78711-3087  
Fax (512) 239-3311

Subject: 30 TAC 311, Subchapter I Draft Rules related to Water Quality Management  
of the Barton Creek and Onion Creek Watersheds

Dear Ms. Hoh:

The Barton Springs/Edwards Aquifer Conservation District (“BSEACD”) has actively participated in the TCEQ-initiated Stakeholders Group meetings and other discussions on the above referenced matter. The BSEACD requests that the Texas Commission on Environmental Quality (“Commission”) more carefully consider and respect the input and consensus opinions of the BSEACD and the other stakeholders that will be most affected by the proposed rule language and whose jurisdictions comprise the large majority of the affected area.

**The Context for BSEACD Comments and Concerns**

The Edwards Aquifer (“Aquifer”) is a unique underground system of water-bearing formations in Central Texas wherein water rapidly enters the aquifer through the ground as surface stream inflow and rainfall infiltration, making it very susceptible to pollution from the surface. It is estimated that surface stream inflows from the creeks that cross the recharge zone provide as much as 85% of the recharge to the Aquifer<sup>1</sup>. The watersheds of both Onion and Barton Creeks comprise the entire area that contributes surface recharge to the Barton Springs segment of the Edwards Aquifer.

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<sup>1</sup> Raymond M. Slade, Jr., Michael E. Dorsey, and Sheree L Stewart, *Hydrology and Water Quality of the Edwards Aquifer Associated with Barton Springs in the Austin Area, Texas*, (1986)

The Aquifer is either a sole-source or primary source of drinking water for tens of thousands of people and is a vital resource to the general economy and welfare of the greater Austin area and the State of Texas. Water that recharges the Aquifer resurges at the Barton Springs complex, where it is a heavily used recreational and aesthetic resource as well as a sensitive ecological and endangered species habitat.

In addition to aquifer protection concerns, the tolerance for increases in nutrients of hill country streams, such as those in the Onion Creek and Barton Creek watersheds, is extremely low. Even under designed operating conditions, effluent discharges from wastewater treatment plants can substantially increase both nitrogen and phosphorus species over background concentrations in receiving stream waters. Reliable scientific studies indicate that these increases will likely lead from time to time to eutrophic and/or anoxic surface and subsurface water conditions during extended periods of time, and therefore to both nuisance and human health concerns in the streams and the groundwater-based drinking water supplies. This point was heavily scrutinized and ultimately validated in the proceedings of the Hays County Water Control District No. 1 (Belterra) contested case proceedings. In an order issued by the Commission<sup>2</sup>, the Commission considered the Executive Director's revised draft TPDES permit which included effluent limits very similar to the limits in the draft rule and determined as a Conclusion of Law that:

*"WCID [Belterra] has not shown by a preponderance of the evidence that a continuous discharge pursuant to the terms of the revised Draft Permit would not cause degradation ... by less than a de minimis extent nor that such a lowering of the water quality is necessary for important economic or social development..." [emphasis added]*

In other words, a continuous discharge with effluent limits very similar to the limits of the proposed rule (except Total Nitrogen) would cause degradation. In this context, the BSEACD respectfully submits the following comments for careful consideration and preferably re-consideration of the draft rule language.

### **Comments and Concerns on the Process**

In response to the rulemaking petition filed by BSEACD and the City of Austin on October 1, 2008, the Commission denied the petition but also determined that stakeholders input was necessary to ensure that all issues relating to the petition were more fully explored and all potentially impacted entities have an opportunity to participate.<sup>3</sup> The Commission's directive went further to instruct Commission staff to solicit stakeholder input on the relevant issues raised in the petition and to report back to the commission within six months (by 5/8/09) unless rulemaking

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<sup>2</sup> TCEQ Order Concerning the Application by Hays County Water Control and Improvement District No. 1 For Amendment to TPDES Permit No. WQ0014293001, TCEQ Docket No. 2007-1426-MWD, SOAH Docket No. 582-08-0202.

<sup>3</sup> TCEQ Decision of the Commission Regarding the Petition for Rulemaking Filed by The BSEACD and the City of Austin, TCEQ Docket No. 2008-1601-RUL

has been initiated as a result of the stakeholder input. The BSEACD actively participated in the stakeholders' process and, given the strong consensus from that process, questions whether the Executive Director adhered to the direction and intent of the Commissioners' directive. Additionally, BSEACD submits the following comments and suggested remedies related to this process.

- *Comment:* The rule petition that prompted the Commissioners to solicit stakeholder's input requested that a direct discharge prohibition (with certain exceptions) be adopted for these watersheds. The draft rule does the opposite by allowing for discharges provided certain provisions are met. Commission staff has suggested that *the draft rule was developed to allow for direct-discharges in response to direction implied by the Commissioners in their denial of the petition*. BSEACD strongly disagrees with this logic. The order directing staff to convene the stakeholders group clearly states that the purpose of soliciting the input was "... to ensure that all issues relating to the petition are fully explored and all potentially impacted entities have an opportunity to participate". This directive clearly implies that the true reason for denial was that the Commissioners didn't feel that *any* action on the rule petition was prudent without further evaluation and discussion of the issues, not that the Commissioners felt that a discharge prohibition was inappropriate.
- *Comment:* The Commission webpage for the Barton/Onion Creek Stakeholders group describes the scope of the second stakeholder meeting held on March 26, 2009, as being to "explore wastewater discharge options". With the exception of a single opposing opinion without any scientific support being offered, the entire stakeholders group agreed that a rule prohibiting discharge was the preference. The group was *directed* to discuss direct discharge options because the Commission indicated that the preference for a discharge prohibition was not clear. Discussion of direct discharge should by no means be construed as being the preferred option or consensus opinion of the group.
- *Comment:* The stakeholders group had not received any communication after the second stakeholders meeting on March 26, 2009, and was not informed of any intent to initiate rulemaking. This lack of communication has left many of the stakeholders feeling disenfranchised and wondering how all of their valuable time and input was utilized since the draft rule clearly does not reflect the consensus opinions of the large majority of the group and the science-supported conclusions provided, nor does it provide the scientific basis for the draft rule that was developed.
- *Comment:* There is a concern that the proposed rule will become the new standard once the formal rulemaking process is initiated. Once this more formal process begins, experience suggests it will likely be very difficult to compel the Commission to reconsider a different approach or substantially revise the proposed rule.

*Suggested Remedy:* The issues related to the petition have been fully explored by the stakeholders as directed by the Commission and the overwhelming majority of the group has determined that 1) these watersheds are too sensitive to accommodate the pollutant loadings from multiple direct discharges without adverse consequences; and 2) a discharge prohibition and a requirement for wastewater disposal via land application in these watersheds is an appropriate alternative general rule. The Commission should honor the consensus conclusions of the stakeholders group that it initiated and either: 1) redraft a rule that truly reflects stakeholder input as the Commissioners have directed, or 2) abate the current rule-making schedule to allow for further discussion and more prudent rulemaking options. The active participants in the stakeholders group are accepted by the professional and scientific community as the regional experts on stream ecology and aquifer hydrogeology and are responsible for most research and studies conducted in the area. BSEACD suggests that a collaborative technical group composed of these regional experts and of Commission technical staff be convened to discuss the existing body of scientific evidence and develop recommendations for a rule supported by sound science and stakeholder consensus.

## **General Comments and Concerns**

- *Comment:* The Commission staff has indicated that the intent of the draft rule language and proposed effluent set was to establish “a ceiling” that would set the maximum allowable pollutant loading from a direct discharge. The rule has provisions that allow the Commission to impose more stringent restrictions but the rule also allows increases in certain effluent limits provided certain measures are implemented. This provision allowing an increase in effluent limits is not consistent with the stated intent of establishing a ceiling on pollutant loading.
- *Comment:* As described above, the draft rule indicates that the Commission could allow limits that are more stringent or less stringent than the specified effluent set, without elaboration as to the factors that would be considered in such discretion. This degree of latitude will require intensive analysis and review by Commission technical staff to justify any requested diversion from the prescribed effluent set, which are almost guaranteed by such a provision. Additionally, allowing direct discharges in these particular watercourses will require incredible expenditures of time, money, and other public resources by both the Commission and local governmental entities that will be obligated to analyze, comment, and potentially contest every permit proposed under this rule.
- *Comment:* All of the documented science presented at the stakeholders meetings showed clear evidence of degradation if multiple discharges were allowed even at the more stringent effluent set. Again, this fact was reinforced by the Commission Order on the Belterra Permit that determined that a similar, *single* discharge that would be allowed by the draft rules would cause degradation.

- However, this evidence appears to have been ignored. It seems clear the proposed effluent set in the draft rule was derived only by what would be technologically feasible by advanced treatment methods. The Commission is obligated to consider both technology and water quality derived effluent limitations when considering permit limits and to implement the more stringent of the two. Further, the Commission is under no statutory or other legal obligation to provide any applicant an opportunity to direct discharge to these watercourses, most especially under circumstances that science strongly indicates water quality protection could be compromised.
- *Comment:* As discussed above, the Belterra Permit, as originally drafted and amended by the Executive Director and without the provisions of the “Partial Settlement Agreement”, was determined by the Commission to allow for degradation. It is important to note that the final permit that included the provisions of this “Partial Settlement Agreement” was the result of a mediation effort that produced a compromise set of limits and provisions that allowed for only a single discharge on a very intermittent basis with specified limitations and ongoing stream monitoring with triggers for additional future provisions. The draft rule has the same effluent limits as the Belterra Permit but would allow for multiple discharges on a continuous basis, which, therefore, would certainly allow and promote degradation.
- *Comment:* In discussions of the development of the draft rule language, the Commission was unable to explain how the protection of the endangered and threatened species of the Barton Springs complex was considered or how the proposed rule would be protective.

Suggested Remedy: Redraft the rule to set a more appropriate standard that could be considered “a floor” rather than a ceiling with respect to water quality protection. BSEACD respectfully requests that the submitted petition recommending a discharge prohibition be considered as the basis for such a “floor” in a redrafted rule, as the stakeholder group strongly supported. This floor could then include provisions that allow for something above such a floor (such as a direct-discharge) provided that the applicant can provide sufficient demonstration that a direct discharge would not cause degradation or affect the threatened and endangered species of the Barton Springs complex. The measures specified in the draft rule (including stream flow limits, storage lagoons, non-continuous discharges, etc.) could then be considered possible components of such a demonstration.

### **Comments and Concerns About Specific Rule Provisions**

- *Comment:* The draft rule affects the Barton and Onion Creek Water Quality areas upstream of the recharge zone boundary. 30 TAC §213.6(c) also has provision for discharges upstream of the recharge zone that differ from the draft rule.

*Suggested Remedy:* The draft rule should include a provision that clearly states that the more stringent limits and provisions of the draft rule would supersede the provisions of 30 TAC §213.

- *Comment:* The draft Rules 311.94 (a) and (b) state that all domestic wastewater treatment facilities that receive a permit for a new or expanded facility after September 1, 2010 that authorize *continuous* discharges into water in the state in the Barton Creek Water Quality Area or the Onion Creek Water Quality Area must meet the effluent limitations set forth in Section 309 and also those in Figure §311.93(a) [the reference was to Figure “§311.93”, but the context suggests it should be §311.93(a)] (emphasis in italics added). A strict interpretation of this language would suggest that these provisions would not apply if the discharge was not continuous, as might exist if the facility also operated in part under a TLAP or Section 210 authorization.

*Suggested Remedy:* These two Rules provisions, if not otherwise abated, should refer to “...authorize continuous or intermittent discharges into water in the state...”. Otherwise, the more stringent effluent set of Figure §311.93(a) would never be applicable if any land application technology was deployed for any part of the disposal volume. This change is particularly important in view of the then-prevailing, less stringent “Edwards Rule” restriction in areas upstream of the recharge zone.

- *Comment:* Rule 311.93, related to establishment of limits for industrial and stormwater discharges using best professional judgment, could potentially allow for lesser standards when there are municipal components or oxygen-demanding waste streams in an industrial discharge.

*Suggested Remedy:* The rule should specify that the oxygen-demanding waste streams that are a component of the aggregate industrial discharge shall be monitored for compliance with the appropriate effluent limits as specified in the rule (or more stringent ones, if necessary) prior to commingling with other industrial waste streams (i.e. monitoring via an internal outfall).

- *Comment:* Rule 311.94(b) related to domestic discharges would allow continuous discharges within an effluent set specified in Figure §311.93(a). This effluent set is remarkably similar to the effluent set of the aforementioned Belterra Permit and appears to be derived from concentrations that are perceived as simply those that are technologically feasible. As noted previously, the Commission in effect determined that this identical effluent set would allow for degradation. This Belterra Permit authorized a discharge located at the very top of the Bear Creek watershed and is arguably representative of a typical municipal wastewater discharge that might be authorized for any location within the Barton and Onion Creek

- watersheds covered by the draft rule. It is reasonable to conclude that a similar discharge would also allow degradation.

*Suggested Remedy:* Technology-based limits are not appropriate for this watershed rule. An effluent set that would allow discharge without degradation would have to be developed on a case by case basis. The draft rule should not include a prescribed effluent set but rather, should prohibit discharges except for cases where a site-specific effluent set and other appropriate protective measures could be proposed that would prevent degradation.

- *Comment:* Rule 311.94(c) (Rule is enumerated in the draft as 311.94(b) but it appears to be intended to be (c) in actuality) would allow for an increase in concentrations of certain effluent limitations provided certain measures are implemented. Again, the Belterra Permit included many of these provisions but only allowed intermittent (not continuous) discharges with the more stringent effluent set. To allow the same measures with a less stringent effluent set appears to be flawed logic. Additionally, this provision is the clear evidence that the draft rule does not operate as a ceiling on allowable effluents as it has been characterized, but in fact serves as a floor that could be raised, to the detriment of water quality.

*Suggested Remedy:* If the true intent of this rule is to establish a minimum requirement for effluent quality and water quality protection, this provision does not accomplish this. The more prudent approach is to set a more stringent floor by presumptively prohibiting discharges, with exceptions then allowed on a case by case basis with an appropriate prescribed demonstration of non-degradation by the applicant.

- *Comment:* Rule 311.95 related to Operator Requirements would allow for Class “B” and “C” operators to operate the plant. Operation of a plant sophisticated enough to meet the proposed effluent set is arguably beyond the capabilities of these license classes.

*Suggested Remedy:* The rule should be revised to require Class “A” operators only, and even with this highest class stipulated, the safeguards of part (b) of this rule are still warranted.

We appreciate the opportunity to comment on the draft rule package. We have numerous other specific questions or concerns about the draft rule and the manner in which it was developed. The draft rules will most directly affect those of us that live and govern in this area. With this in mind, the BSEACD respectfully suggests that the rules as currently drafted are simply unacceptable, as they are inherently flawed and demonstrably will not protect these sensitive watersheds. Therefore, we strongly urge the Commission to abate the current rulemaking schedule and to fully take into account the basis of the comments and suggestions of the BSEACD as well as the other stakeholders. We stand ready to work with the Commission to explore

feasible alternatives and solutions that address our comments and concerns. Any future correspondence related to this matter should be directed to either W. F. (Kirk) Holland, P.G. at [kholland@bseacd.org](mailto:kholland@bseacd.org), John T. Dupnik, P.G. at [john@bseacd.org](mailto:john@bseacd.org), or by phone at (512)282-8441.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robert D. Larsen", with a long horizontal flourish extending to the right.

Robert D Larsen, Ph.D.  
President, Board of Directors

cc: Ms. L'Oreal Stepney  
Ms. Kim Wilson  
Ms. Karen Holligan  
Dr. Jim Davenport