

**ISSUES, OBJECTIONS AND CONCERNS WITH THE APPLICATION OF GAPPED
BASS L.L.C. FOR PERMIT APPLICATION WQ0005397000**

BY ENVIRONMENTAL STEWARDSHIP

10 March 2023

**I. COMPLETENESS, ACCURACY AND COMPLIANCE
OF THE APPLICATION WITH TEXAS LAW, TCEQ RULES AND APPLICATION
REQUIREMENTS**

1. The Application fails to adequately assure that the applicant has the operational control required of operators, given the clear responsibilities identified in the Industrial Administrative Report of the Boring Company to pay for permit fees, report violations of the permit, and to control of other management decisions over the operations. Moreover, there is a clear relationship of the Boring Company to Gapped Bass with Gapped Bass clearly responsible to the Boring Company.
2. The Application fails to adequately identify a proper basis for its determination that the facility and discharge are minor for purposes of referral of the application to EPA. ES does not believe GB can prove or support its burden of proof on this issue.
3. The Initial¹ Application fails to adequately demonstrate compliance with all applicable facility design and management requirements, including but not limited to:
 - a. The owner and location of any sludge disposal site is not identified, See, Item 10, subsection h, Owner of sewage sludge disposal site of the Industrial Administrative Report. 11 c indicates sewage sludge is not disposed of onsite but does not give location or carrier.
 - b. That there will be adequate testing of the sludges to assure the sludges will not contain toxic, hazardous constituents and will not be industrial or hazardous wastes.
 - c. The location and management procedures for sludge created at the facility to assure prevention of the following were not identified:
 - i. ground or surface water contamination
 - ii. the attraction of flies, mosquitos and other insects that could be carriers of disease, or
 - iii. odors or other nuisance conditions.
 - d. All constituents of its wastewaters from industrial and municipal sources have not been identified.
 - i. Applicant has not completed WORKSHEET 2.0, POLLUTANT ANALYSES REQUIREMENT, even though the applicant frequently and consistently cites disposal of treated waste to the Colorado River as the option being requested as a disposal method in the TPDES Permit application². **Worksheet 2.0 is required for all applications submitted for a TPDES permit. Worksheet 2.0 is not required for applications for a permit to dispose of all wastewater**

¹ Some of the deficiencies listed have been cured as a result of TCEQ deficiency letters but are listed here to demonstrate the pattern of omission, obfuscation, and lack of compliance with, or knowledge of, existing laws and regulations.

² see Introduction: Phase 1 will authorize the land application or discharge to the Colorado River of up to 22,500 gallons per day (GPD) of treated industrial and domestic wastewater.

ATTACHMENT 1 - ISSUES LIST

- by land disposal or **for discharges solely of storm water** associated with industrial activities.
- ii. Applicant does not intend to SOLEY use land disposal for its treated wastewater comingled with domestic waste. Applicant is also requesting permit to dispose into the Colorado River³,
 - iii. Applicant does not adequately demonstrate that the purpose of comingling of industrial and domestic wastewater **is not to dilute** the concentration of industrial contaminants before discharge. ["the solution to pollution is not dilution".]
 - iv. Applicant does not intend to use wastewater impoundments⁴ (lagoons or ponds) to control wastewater when land application is not available. Applicant needs to be required to have impoundments or containments rather than depending on discharge to Colorado River.
- e. The facility and operations have not been designed in sufficient detail to allow proper evaluation of the proposed treatment, storage, and discharge facilities to assure protection of ground and surface waters.
 - f. The location, testing and procedures for the management of run-off waters and other waters associated boring spoils are not identified.
 - g. The location or management of wastewaters during times of frozen ground, when soils are saturated, or under other conditions when wastewater cannot be applied to the land or discharged, given that the application states that there will be no storage of wastewaters have not been identified.
 - h. The operator has not demonstrated adequate experience with the siting, design and operations for the storage, treatment, application, and discharge facilities and with the monitoring, recording and reporting requirements for the management of the wastewater to assure compliance with the Texas laws and regulations.
 - i. The Application does not demonstrate that it was prepared by a qualified person, one who is competent and experienced in the field to which the Application relates and thoroughly familiar with the operation or project for which the Application is made. (30 TAC §305.45(a) (8)).
 - j. The Application does not demonstrate that there will be adequate monitoring and reporting to detect violations of permit limitations and of state water quality and use standards due to the multiple sources of contaminants reaching the River from direct surface discharges, storm water runoff and groundwater discharges from the land application. Applicant has not adequately completed the following:
 - i. Section 4. Well and Map Information (page 33): c: Groundwater monitoring wells or lysimeters are /will be installed around the land application site or wastewater ponds. **YES, should be checked**⁵.
 - ii. Section 6. Laboratory Accreditation and Certification needs to be completed.
 - iii. Section 7. Effluent Monitoring Data needs to be completed.

³ See Section 7 (a) Other (e.g., portable toilets) , specify and Complete Item 7.b: On-site treatment and disposal through sprayfields in the interim, eventually to be routed to the Colorado River

⁴ Section 3. Impoundments, Applicant has checked "no".

⁵ If yes, provide the existing/proposed location of the monitoring wells or lysimeters on the site map attached for Item 4.a. Additionally, attach information on the depth of the wells or lysimeters, sampling schedule, and monitoring parameters for TCEQ review, possible modification, and approval.

ATTACHMENT 1 - ISSUES LIST

- iv. Section 8. Pollutant Analysis will need to be completed within 2 years of operations.
- k. The Application does not demonstrate that there will be adequate record keeping procedures and adequate duration of maintaining such records of constituents in the wastewaters and application rates to assure that long-term impacts of the land application can be evaluated.
- l. The Application does not demonstrate that the Operator will have sufficient property interest in all locations of wastewater treatment, application, routing and discharge to assure control of all proposed activities.
- m. The Application does not demonstrate that the location of all proposed activities will comply with all applicable location standards, buffer requirements and other requirements for
 - i. nearby schools, hospitals, churches, or homes,
 - ii. known faults, oil or gas wells, water wells, springs, seeps, surface water groundwater recharge zones or features, flood plains, archeological and historic sites or wetlands and
 - iii. the discovery of faults, groundwater recharge features, oil or gas wells, water wells and archeological and historic artifacts during site preparations for or construction at the wastewater facilities, and
 - iv. the presence of endangered or threatened species or habitat or of critical habitat for such species.
- n. The Application does not demonstrate that there will be adequate facilities or operations to prevent access to wastewaters facilities, ponds or land application areas by feral pigs and other animals that could use access to contact the wastewaters or to disturb the soils or vegetation at the land application sites or the liners of ponds. .
- o. The Application does not demonstrate that there will be adequate facilities or operations to prevent nuisance conditions.
- p. The Application does not demonstrate that Gapped Bass will report to TCEQ and local governments its violations of the permit, as well as upsets or accidents at the site, or creation of odors or other nuisance conditions.
- q. The Application does not demonstrate that there are adequate descriptions of the location and extent of land application sites and discharge point(s) to assure enforcement of the Permit by federal, state and local governments.
- r. The Application does not demonstrate that Gapped Bass has adequate knowledge of requirements of Texas laws, and regulations applicable to the facility and activities, to assure compliance with such laws and regulation and any permit issued give the history includes citations by TCEQ and TXDOT, including,
 - i. The Boring Company construction of a driveway at an unsafe location after TXDOT advised the Company of that issue,⁶ and

⁶ It is Environmental Stewardship's understanding based on a report from Bloomberg . . . that after a year of demanding exceptions, TXDOT legal had to threaten to barricade the entrance to get the Boring Company to submit a safe plan and . the violation by the Boring Company continue to this day, with and April 25th, 2022 TXDOT email threatening to barricade their driveway. See, <https://www.bloomberg.com/news/articles/2022-06-15/elon-musks-boring-co-is-feuding-with-texas-over-a-driveway?srnd=technologyvp>

ATTACHMENT 1 - ISSUES LIST

- ii. The Boring Company moved six families into mobile homes on the site, without an adequate septic system or other wastewater management system.⁷
- iii. The Boring Company⁸ pressured Bastrop County officials to approve numerous permits at breakneck speed — even as The Boring Co. was being cited for two code violations and issued three warnings of noncompliance.

II. PROPER PUBLIC NOTICE AND OPPORTUNITY FOR PUBLIC COMMENTS

The Application fails to demonstrate compliance with all applicable notice requirements, including but not limited to

- i. The failure of the notice of application and intent to provide the required information on the potential discharge location and routes with sufficient specificity to provide the public, local governments, the Texas Parks and Wildlife Department, and EPA with notice of potential locations of discharges to the Colorado River or its tributaries from surface or groundwater discharges resulting from the operation of the proposed treatment facility.
- ii. The failure to identify all landowners who will be affected and must be provided with proper notice
- iii. The failure to assure proper and timely notice by newspapers.

⁷ It is Environmental Stewardship's understanding based on a report from the Austin Business Journal that the Boring Company simply piped the wastewaters into a legacy system that had been there for an old cabin and was not adequate for the six mobile homes. See <https://www.bizjournals.com/austin/news/2022/02/28/boring-co-bastrop-warehouse-facility-residences.html>.

⁸ It is Environmental Stewardship's understanding based on a report from the San Antonio Express Article that “documents also reveal that the companies have pressured Bastrop County officials to approve numerous permits at breakneck speed — even as The Boring Co. was being cited for two code violations and issued three warnings of noncompliance. On June 22 of this year, then-county engineer Robert Pugh complained in a letter to Bastrop County Commissioner Clara Beckett about the heavy demands both companies had placed on the county’s Development Services and engineering departments.” Pugh wrote that staff had been “regularly hounded” by Boring Co. and Starlink employees and consultants to “expedite and approve permit applications that are incomplete and not in compliance with the Commissioners Court (CC) regulations.” In an email dated March 1, 2022, Pugh, the county engineer at the time, told The Boring Co.’s director of business operations, Paul Gentsch, that inspectors discovered the company had built employee housing on the property without proper septic- tank disposal. He directed the company to fix the problem within 60 days. In another email to Gentsch, also in March, Pugh noted several problems county officials found during an inspection of the property on Feb. 24. They included a discrepancy between the number of houses the company said would be located on the property and the number actually built; an RV and two trailers that weren’t in the original design plans; and septic holding tanks that a contractor was servicing without a legally required permit. County inspectors also observed a cement truck being hosed down in a right-of-way ditch, in violation of a Texas Commission on Environmental Quality regulation, according to an email. “In sum, priority needs to be given to bringing OSSF (on-site septic facility) into compliance, and all site plans submitted need to be consistent, showing all structures, OSSF fields, building locations and roadway locations and configurations,” Pugh wrote. But the company still hadn’t resolved the septic tank problem as of May 17, county officials said in a letter to The Boring Co. They warned that continued use of unauthorized holding tanks could result in a Class C misdemeanor charge, fines and court costs. Annie Blanks , San Antonio Express-News Dec. 16, 2022, Updated: Dec. 16, 2022, 2@05 p.m.

III. IMPACTS OF WASTEWATER APPLICATION ON GROUND WATERS.

The Application fails to adequately demonstrate that the land application of wastewaters and related operations will not cause pollution of groundwaters. The contaminants in the waste waters applied will move into the Colorado River Alluvium and Calvert Bluff, Simsboro, and Hooper Aquifers; aquifers which provide drinking and irrigation water to residents all along this segment of the river.

- 1) The Application has not properly and adequately characterized the aquifers, perched waters or other groundwater formation below the areas of wastewater application. ES does not believe GB can prove or support its burden of proof on this issue.
- 2) The Application has not adequately identified the location of all springs, seeps, recharge features, water wells, oil or gas wells, exploratory wells, or other wells in the area of its proposed activities.
- 3) The Application has not adequately demonstrated that all public and private water wells, springs, seeps, stock ponds, or other sources of water supply for domestic or agricultural uses within the appropriate regulatory distance in state law have been adequately identified and accurately located.
- 4) The Application has not adequately demonstrated that the rate of application of wastewaters for each area of application is appropriate given the different soils and groundwater conditions.
- 5) The Application has not demonstrated that there will be proper planting and maintenance of an appropriate cover crop(s) for the rate of application of wastewaters at each application sites.
- 6) The Application does not adequately identify the contaminants that are expected to be present in the pre-treated wastewater, or that are expected to be present in the wastewater being applied, including PFAS compounds (see ATTACHMENT 3) or how those contaminants will be removed and disposed of by other means. Further, ES does not believe GB can prove or support its burden of proof on this issue.
- 7) The Application does not adequately identify nutrients, such as nitrogen and phosphorous compounds, that are known to be above desired levels in this segment of the river, and how those compounds will be treated and removed from the wastewater applied and/or directly discharged. Further, ES does not believe GB can prove or support its burden of proof on this issue.
- 8) The Application does not adequately identify drilling fluids as a source of contaminants that will be a component of the wastewater to be treated, even-though it is known that it is the intent to conduct boring operations on the properties. Further, ES does not believe GB can prove or support its burden of proof on this issue.
- 9) The Application does not adequately identify the components of drilling fluids that will be contaminants that will be in the wastewater being treated, nor how those compounds will be

ATTACHMENT 1 - ISSUES LIST

treated and removed from the wastewater being applied and/or directly discharge. Further, ES does not believe GB can prove or support it burden of proof on this issue.

- 10) The application has not adequately demonstrated that its proposed treatment facilities can or will treat the wastewaters sufficient to meet the limits for protection of ground and surface water as a result of the land application of the wastewaters.
- 11) The Application has not adequately demonstrated that there will be the required inspection and maintenance activities for the wastewater application equipment, pumps, lines, and discharge ports to assure that the equipment will not fail or result in application rates in violation of those proposed in the Application, or result in ponding of wastewater, or discharge of wastewater to areas not authorized.
- 12) The Application has not adequately demonstrated that there has been or will be adequate pre-application monitoring of the quality of the ground waters to assure that the required monitoring of ground waters after application will identify any contamination from the land application, a concern of significant importance since it is evident that land application has already begun to occur at the site. Further, ES does not believe GB can prove or support it burden of proof on this issue.
- 13) The Application has not demonstrated that there will be adequate monitoring, proper location and depths for groundwater monitoring, or the recording and reporting of monitoring detection of groundwater contamination.
- 14) The Application has not adequately identified the chemical constituents and physical parameters that will be measured and monitored during pre-application and during application of wastewater at the site, including nitrogen, phosphates, per- and polyfluoroalkyl substances (PFAS), and pharmaceuticals.
- 15) Thus, the Application has not adequately demonstrated that the application of wastewaters will not contaminate ground waters over time? Further, ES does not believe GB can prove or support it burden of proof on this issue.
- 16) The Application does not adequately demonstrate that the applicant has developed a plan to manage produced groundwater from boring operations in a manner that avoids waste of groundwater.
- 17) The Application does not adequately demonstrate that the applicant has developed a plan to manage produced groundwater from boring operations in a manner that avoids nuisance pools of standing water and percolation of potentially contaminated water into the underlying alluvium and aquifers. Further, ES does not believe GB can prove or support it burden of proof on this issue.
- 18) The Application does not adequately demonstrate that the applicant has developed a plan to store, dispose of, and otherwise manage spoils from boring operations in a manner that avoids runoff of contaminated stormwater from the property into the Colorado River.

ATTACHMENT 1 - ISSUES LIST

- 19) The Application does not adequately demonstrate that the applicant has investigated, understands, and has developed a plan to avoid or mitigate the impacts of boring through the Colorado Alluvial Aquifer on the Colorado River without diminishing or otherwise damaging the flow and water quality of the aquifer and/or river. Further, ES does not believe GB can prove or support its burden of proof on this issue.
- 20) The Application does not adequately demonstrate that the facilities proposed are adequate to treat and dispose of domestic wastewater from additional Phase 1 and Phase 2 Project Awesome housing development recently revealed and not discussed in the application.
 - i) Is the sprayfield adequate to handle the additional wastewater from proposed future developments.
- 21) The Application does not address how industrial and domestic wastewater from Space X, Starlink, and other associated companies will be managed, treated, and disposed of.

IV. IMPACTS OF WASTEWATER APPLICATION ON SURFACE WATER QUALITY.

The Application fails to adequately demonstrate that the operations will not cause pollution of surface water or comply with water quality standards for exception aquatic life use designation for the Colorado River. The Colorado River, as it runs through Bastrop County, is primarily a gaining stream as it is recharged by groundwater flowing from the Carrizo-Wilcox Aquifer group by way of the Colorado Alluvial Aquifer (CAA), and application of treated wastewater over the river alluvium and the Calvert Bluff, Simsboro, and Hooper Aquifers underlying the disposal site has the high probability of contaminating the river unless the highest water quality treatment technology available are installed by the applicant. The Application fails to demonstrate that the technology to be used is the best-available-technology for treating the wastewater being discharged and will not further degrade the water quality or aquatic use standards for this segment of the river. Further, ES does not believe GB can prove or support its burden of proof on this issue.

The Geological Atlas of Texas, Austin shows that the site for land application overlies the alluvial aquifer along the Colorado River (Qal - Alluvium, and Qt Fluvial Terrace) and is near the outcrops of the Calvert Bluff, Simsboro, and Hooper aquifers. The alluvial aquifer exchanges water with the Colorado River and with underlying aquifers.

According to the Groundwater Availability Model (GAM), the site of the proposed land application is underlain by 25 to 50 feet of alluvium. The alluvium is underlain by the Calvert Bluff Aquifer.

The water discharged to the proposed land application areas would be applied directly above the alluvial aquifer. Thus, any contaminants in the applied water may be transported to the Colorado River via the Colorado Alluvial Aquifer (CAA).

PFAS compounds have been identified in the Colorado River at the Webberville Boat Launch, Onion Creek, Gilliland Creek, and Decker Creek (Segment 1428) above this site. The land application and direct discharges of waste waters will likely include PFAS that add to the current

ATTACHMENT 1 - ISSUES LIST

loading of such contaminants in the river. PFAS compounds have been identified in Wilbarger, Big Sandy, Piney, Alum creeks, and the Colorado River at Smithville below this site. See ATTACHMENT 3.

Moreover:

1. The Application has not adequately demonstrated that all applicable state water quality standards will be met in the Colorado River from discharge of contaminated groundwaters to the river. No dye tracer studies or other studies or discharge from the aquifers below the land application areas have been done to determine the nature of the alluvial and fluvial terrace deposits in order to describe and quantify the connectivity between Colorado River and the Carrizo-Wilcox Aquifer group. Further, ES does not believe GB can prove or support its burden of proof on this issue.
2. The Application has not adequately demonstrated compliance with all applicable anti-degradation requirements that may be violated due to the discharge of contaminated groundwaters. Further, ES does not believe GB can prove or support its burden of proof on this issue.
3. The Application has not adequately demonstrated that storm water ponds, berms or other controls are adequately located, sized, and operated, given recent increases in storm events, to avoid run on to the land application areas, or other areas of wastewater storage, processing or treatment and then run off to surface waters.

V. IMPACTS OF DIRECT WASTEWATER DISCHARGES TO THE COLORADO RIVER ON SURFACE WATER QUALITY.

The application does not adequately provide sufficient details on timing and use of surface water discharges or treatment technologies to assure protection of the water quality in the receiving segment of the Colorado River, a segment designated for Exceptional Aquatic Life Uses. Further, ES does not believe GB can prove or support its burden of proof on this issue.

1. The Application has not adequately demonstrated that all applicable state water quality standards will be met in the Colorado River from discharge.
2. The Application has not adequately demonstrated that all applicable technology standards will be met.
3. The Application has not adequately demonstrated that there will be adequate provisions for the monitoring, recording, and reporting of constituents in the discharge, or violations of the permit or water quality standards during normal, start-up or upset conditions.

Environmental Stewardship is concerned whether Segment 1428 of the Colorado River fully complies with Texas Water Quality Use standards for Aquatic-Life, Recreational, and Drinking Water uses.

1. Whether the evaluation of impacts properly considers current conditions and complies with applicable regulations to ensure the draft permit is protective of

ATTACHMENT 1 - ISSUES LIST

water quality, including utilizing accurate assumptions and inputs, e.g., proper evaluation of the current state of pollutants in and impairments of the Colorado River and its tributaries downstream of the discharge in a manner that considers the total loading on the river.

- a. Whether the impacts of the explosion of gravel mining operations and associated stormwater permits in this segment of the river have been properly considered and enforced relative to the silt load being deposited into the river.
- b. Whether the Executive Director's antidegradation review was accurate, e.g., proper evaluation of the current state of pollutants in, and impairments of, the Colorado River downstream of the discharge, proper use of the historic measuring period for evaluation of degradation and proper evaluation of the degradation standard:
 - i. Whether impairments in Segment 1428, AUID: 1428_0 have been timely field studied using biological metrics, monitored, and assessed by TCEQ, based on TCEQ, TPWD, or LCRA data collected since originally assessed in 2006 to determine if the segment should be on the 303(d) list based on impairment of fish and microbenthic communities, nitrogen, and phosphorus, or whether removal of these causes for impairment were justifiably based on best-available science.

VI. OTHER CONSIDERATIONS

1. Whether the burden of proof has rightfully been placed on the Applicant and the Commission to prove that concerns and issues brought up before the Commission are in accordance with the federal laws that have been delegated to the State.
2. Whether the Commission has been as transparent, as is necessary to provide the public adequately and fully with timely and visible notice of proposed actions and timely and efficiently provided the information and documents necessary for the public interest to be able to review and respond to such proposed actions without delays.