



November 10, 2016

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

RE: City of Dripping Springs' Application and TCEQ's Preliminary Decision and Draft Permit No. WQ 001448803

Dear Ms. Bohac:

On behalf of Protect Our Water – No Dripping Discharge in Our Creeks and Wells, ("POW" or "Protect Our Water") please accept these comments and request for contested case hearing in the above-referenced matter. POW's mailing address is 100 Commons Ford Rd, ste. 7155, Dripping Springs, TX 78620. Official communications for POW in regard to the above-referenced matter may be sent to Sarah B. Faust, P.O. Box 4772, Austin, TX 78765, (512) 415-7781, sarah.b.faust@gmail.com.

Protect Our Water

Protect Our Water is a Texas non-profit corporation organized to protect and preserve Onion Creek as a valuable natural resource used for swimming, fishing and boating, as a contributing source to aquifers and drinking water wells, and as wildlife habitat. POW's mission is to protect the existing pristine nature of surface water in Onion Creek and its tributaries – and the groundwater recharged from these bodies – from deterioration due to the release of treated sewage and other contaminants into its waters. POW is organized to oppose pollution into Onion Creek and is prepared to enforce state and federal environmental laws to keep Onion Creek and its tributaries in pristine condition for our community. POW members own property on Onion Creek and are community members that recreate in Onion Creek and use and enjoy its natural beauty and clear waters. POW members have individual wells and are customers of the Dripping Springs Water Supply Corp., all of which rely on the Trinity Aquifer and are subject to recharge from Onion Creek. The interests POW seeks to protect by requesting a contested case hearing on the City of Dripping Springs' draft permit are the interests of our members in Onion Creek as a natural resource providing drinking water supply and recreational, scientific, artistic and spiritual experiences. As described below, POW members' interests in the use of Onion Creek for drinking water supply, for use and enjoyment of their property, and for recreational, scientific, artistic and spiritual experiences will all be injured by the direct discharge of wastes into Onion Creek as proposed to be authorized in the draft permit.

Onion Creek and the Proposed Draft Permit

Onion Creek as it flows immediately below the confluence with Walnut Springs in the area of the discharge is an exceptionally high quality water body. It has extremely clear water that is ideal for swimming, fishing, snorkeling, kayaking and canoeing. As it flows through Driftwood the turquoise waters provide refreshing swimming holes beneath tall cypress trees. The clear waters have very little algae, with the smooth limestone bottom showing through from the surface. When it is flowing the creek has waterfalls from dams and deep pools for swimming, but the creek can also be very dry with almost no water in it. The traditional land use in the area below the discharge was ranching and farming, and while several large subdivisions have sprouted along Hwy 290 W around Dripping Springs, there are more large lot subdivisions, ranchettes, and some intact large ranches near to Onion Creek south of Dripping Springs. A lot of the creekfront has retained its rural character. Onion Creek is a popular place for weddings, weekend retreats, and other holiday getaways because of its crystal-clear water and many opportunities for water recreation. Many fish, frog, toad, and waterfowl make their habitat in Onion Creek. Many other animals use the creek as a water source. Much of the creek is undisturbed natural area, allowing for spiritual and religious communing with nature. Onion Creek in the area immediately below the discharge is a losing reach of creek, and thus water from the creek is connecting to groundwater and recharging the Trinity Aquifer. There is evidence that wells near Onion Creek show creek water in the water chemistry, and well levels correspond to rise and flow of Onion Creek. Onion Creek recharges the Barton Springs Edwards Aquifer, and is accountable for up to forty-percent of the recharge at Barton Springs Pool in Austin. The water quality of Onion Creek is critical to the drinking water of over 50,000 Central Texas residents, as well as maintaining the habitat of endangered species such as the Barton Springs salamander and Austin Blind Salamander.

Proposed TPDES Permit No. WQ0014488003 (“Draft Permit”) would authorize the City of Dripping Springs to treat and discharge up to 995,000 gallons per day in of wastewater effluent into Walnut Springs and thence to Onion Creek Segment No. 1427. At Final Phase, the wastewater effluent is proposed to be discharged with 5 mg/L BOD, 5 mg/L Total Suspended Solids, 1.2 mg/L Ammonia Nitrogen, and 0.15 mg/L Total Phosphorous. There is no proposed effluent discharge limitation for nitrate-nitrogen.

Because of its integral nature to Central Texas as a drinking water supply, endangered species habitat, and recreational water body, designated uses of Onion Creek include primary contact recreation 1, high aquatic life use, public water supply and aquifer protection. 30 Tex. Admin. Code § 307.7. Primary contact recreation 1 is the highest level of recreational activity a water body can be designated, and describes activities that are presumed to involve a significant risk of ingestion of water such as wading by children, swimming, diving, tubing, handfishing, kayaking, canoeing and rafting. 30 Tex. Admin. Code § 307.3(49). Onion Creek is protected by the aquifer protection water quality standards, and nutrients from permitted discharges must not cause excessive growth of aquatic vegetation that impairs an existing or designated use. 30 Tex. Water Code § 307.4(e). Because the wastewater discharge pollution could cause an impairment, the Tier 1 Antidegradation policy applies and existing uses and water quality sufficient to protect those existing uses must be maintained. 30 Tex. Admin. Code § 307.5(b)(1). Because Onion Creek

exceeds fishable/swimmable quality and the wastewater discharge could cause degradation (degradation being lowering of water quality by more than a de minimis extent), the Tier 2 Antidegradation policy applies under which the discharge shall not be allowed unless it can be shown to the commission's satisfaction that the lowering of water quality is necessary for important economic or social development. Tex Admin. Code § 307.5(b)(2). Discharges that cause pollution that are authorized by the Texas Water Code, the Federal Clean Water Act, or other applicable laws must not lower water quality to the extent that the Texas Surface Water Quality Standards are not attained. Tex. Admin. Code § 307.5(b)(5)(4).

POW strongly opposes issuance of the Draft Permit and the expansion of the wastewater treatment plant. POW and its members would be adversely affected by issuance of the Draft Permit. POW has reviewed the permit application and Draft Permit and provides comments and issues for the Commission's consideration. POW has analyzed the Draft Permit under the phases proposed by the Applicant, including the Final Phase flow. The Applicant has stated publicly that its intention is to reuse much of the effluent through Chapter 210 reuse, providing water to subdivisions and other properties for irrigation. However, the Applicant has made no legal commitments to TCEQ or any other parties that would restrict its legal authority to discharge effluent at the full volume and under all conditions allowed under the Draft Permit. Therefore, POW's comments reflect the effluent discharge as proposed under the Draft Permit.

POW and its members had Lauren Ross, P.E., Ph.D. of Glenrose Engineering review the Application and Draft Permit and prepare a report. Ms. Ross has provided the attached report, "Review of Proposed City of Dripping Springs Wastewater Effluent Discharge to Onion Creek." Ms. Ross's report covers a multitude of issues regarding the Draft Permit. The issues described below and those in Ms. Ross's report together are the issues raised by POW. In developing these comments POW utilized many source materials which are attached, including:

WASP Model Analysis of a City of Drip Dripping Springs Proposed Wastewater Treatment Plant Discharge to Onion Creek, SR-16-09, November 2016, filed with TCEQ November 10, 2016.

WASP Model Analysis of a City of Dripping Springs Proposed Wastewater Treatment Plant Discharge to Onion Creek, SR-16-05, April 2016, filed with TCEQ on May 12, 2016.

Supplemental Comments on Application for Proposed Permit No. WQ0014488003 by the City of Austin Law Department, filed with TCEQ on August 11, 2016.

Supplemental Comments on City of Dripping Springs' Application and TCEQ's Preliminary Decision and Draft Permit for Proposed TPDES Permit No. WQ 14488003, filed with TCEQ September 29, 2016.

Hunt, Brian B., Alex S. Broun, Douglas A. Wierman, David A. Johns, and Brian A. Smith. "Surface-Water and Groundwater Interactions along Onion Creek, Central Texas." Gulf Coast Association of Geological Societies Transactions. Volume 55. (2016): 261-282.

Issues with the Draft Permit and Application

The Notice of Receipt of Application and Intent to Obtain Water Quality Permit (NORI) and Notice of Application and Preliminary Decision (NAPD) are deficient because they do not sufficiently describe the discharge point. The NORI did not give notice to landowners of the location of the discharge point because it did not sufficiently describe the discharge point which is over a mile and a half from the only address given in the application – that of the wastewater treatment plant. Even though the wastewater treatment plant site is a few hundred feet from Onion Creek, Applicant has decided to pipe the treated effluent approximately a mile and a half upstream to the proposed discharge point in the Caliterra subdivision. The NORI and the NAPD only give the address for the wastewater treatment plant. The NORI stated that “The discharge route is from the plant site via pipe to Walnut Springs; thence to Onion Creek.” The NAPD stated that “The treated effluent will be discharged to Walnut Springs; thence to Onion Creek in Segment No. 1427 of the Colorado River Basin.” Neither of these descriptions gives an address for the discharge point or a description of the distance or direction of the discharge point from the address of wastewater treatment plant site. A simple reading of the notice would not give a person notice of the location of the discharge point in order that they may assess how they may be affected.

The Notice of Receipt of Application and Intent to Obtain Water Quality Permit (NORI) and Notice of Application and Preliminary Decision (NAPD) was insufficient because Development CAT Solutions, LLC owns the land where the discharge point is located and is therefore not an adjacent or affected landowner. Development CAT Solutions, LLC is the owner of the Caliterra development and the wastewater discharge point. Caliterra is a 600 acre master planned community with 250 acres reserved for natural open spaces and parks. Development CAT Solutions, LLC, is listed as a property owner for the wastewater treatment facilities in the Application, but they are also listed as affected persons because they are landowners “located on both sides of the discharge route for one full stream mile downstream of the point of discharge.” See Domestic Administrative Report 1.1, Affected Landowner Information. The affected landowner list should not include property owned by Development CAT Solutions because they are a property owner for the treatment facilities. Domestic Technical Report 1.0 asks “If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.” The Applicant responded “City of Dripping Springs (WWTP site) and Development CAT Solutions, LLC (Discharge Point).” Development CAT Solutions, LLC is listed as an affected landowner although they are an owner of the property on which the wastewater treatment facilities (discharge point) sits, and a contractual beneficiary of the draft permit being approved because they are a wastewater customer and reuse customer of the City of Dripping Springs. Development CAT Solutions, LLC should be treated the same as an Applicant would and the property boundaries for affected landowners should be extended to one mile downstream of any land owned by Development CAT Solutions, LLC.

The Applicant’s proposed flows are not justified by need. Because the commission is charged with the responsibility of determining the need for a permit, an applicant must provide justification for the proposed flows. The Commission may deny or alter the terms and conditions of the proposed permit based on consideration of need. Tex. Water Code § 26.0282; TCEQ Wastewater Permit Application Guidelines, p. 64. Applicants are to provide an anticipated construction start date and operation schedule for each phase being proposed. If construction is dependent upon

housing/commercial development, the applicant must provide information from the developer, including the size of the development (number of lots), the date construction on the development is scheduled to begin, and the anticipated growth rate of the development (number of houses per month or year). “Failure to provide sufficient justification for the continued need for the permit and/or each proposed phase may result in a recommendation for denial of the application or proposed phases.” TCEQ Wastewater Permit Application Guidelines, p. 64.

The Application fails to provide justification for the proposed flows with construction timelines and thus the Commission is unable to determine the need for this permit. The Application states merely that “over the last few years, the City has been receiving numerous new service requests. In response to the requests, the City currently has a permit amendment pending to increase its permitted capacity from 162,500 GPD to 348,500 GPD. [This was granted]. This capacity is already 100% reserved for future developments, and the City continues to receive additional requests. A new permit and WWTP is needed to allow for the city to continue to grow and provide sewer service to new and existing customers.” Application, Domestic Technical Report 1.1, Page 20 of 76. First, the Applicant does not define its service area. Many of the developments listed on the Applicant’s Wastewater Flow and Growth Projections table are not within the City of Dripping Springs, so clearly the projected service area extends beyond the city limits but it is nowhere defined in the Application. The Application refers to new service requests, but provides no information about the size of the service requests, the timelines for construction and anticipated growth rates, date at which the 348,500 GPD permitted treatment capacity will be reached, or the rate at which the City or service area will grow and when. There is no description of for whom and when the 348,500 gallons per day is reserved. The Application provides Wastewater Flow and Growth Projections with total LUE projections per year by development but they are not provided on a timeline. (Table 1, Revised October 19, 2015). For example, the Arrowhead development is listed as having 250 LUEs online in 2021, but has no LUEs listed as needed in years 2015-2021. It is unlikely that 250 LUEs in a residential subdivision would come online all in one year. The Arrowhead LUEs and all LUEs on the growth table should be provided on the timeline at which they will be developed. The Applicant fails to provide, as required, the date construction on the development is scheduled to begin, and the anticipated growth rate.

The Applicant explains in another portion of the Application that the proposed flow phases are not based on need but derived from a desire to have as much permitted capacity as possible while staying below minimum thresholds for adding redundancies required by the rules. “The City is proposing three permit phases. The proposed Interim I Phase is 0.399 MGD and allows the City of [sic] operate the new WWTP in accordance with 30 TAC, Chapter 217.153 (c) that requires that WWTPS over .400 MGD have two aeration basins and two clarifiers for redundancy. This will allow the City to continue to grow while the existing WWTP is being retrofitted.” Application, 2.0 Proposed Hydraulic and Organic Wastewater Loadings. The Applicant is essentially saying that the Interim I Phase design flow was strategically set just to avoid building two aeration basins and clarifiers for redundancy and flow control, rather than being based on the projected growth and construction timeline. “The proposed Interim II Phase is 0.4975 MGD. “If needed, it is hopeful that TCEQ will grant the City a variance to 30 TAC 217. 153(c) during the retrofit of the existing WWTP to allow the City to continue to keep growing.” Application, 2.0 Proposed Hydraulic and Organic Wastewater Loadings. We take this to mean that even after expanding the plant to 0.4975 MGD the applicant intends to avoid providing sufficient redundancy.

Existing permitted wastewater treatment capacity exists to serve the wastewater flows used to justify need. There are currently 1.2345 million gallons per day of Texas Land Application Permit sewage treatment capacity in and near the City of Dripping Springs. The following have TCEQ permits to land apply effluent:

City of Dripping Springs	WQ14488001	348,000 GPD
City of Dripping Springs (Scenic Greens)	WQ14488002	250,000 GPD
Caliterra (Hays County Development District 1)	WQ14208001	186,000 GPD
Arrowhead Ranch Utility Company LLC	WQ14824001	125,000 GPD
WFC Headwaters Owner VII LP	WQ14587001	325,000 GPD

Much of the capacity of these permitted facilities is unused. Applicant City of Dripping Springs seeks to convert most of this permitted TLAP capacity into its discharge permit. TLAP is the preferred method of wastewater effluent management in the Texas hill country and Onion Creek watershed because of the high quality, low nutrient waters and the impact of nutrients from wastewater discharge on the creeks and aquifers. Forty percent of the Applicant’s planned LUEs in 2021 in the Wastewater Flow and Growth Projections are attributable to Caliterra (580 LUEs) and Arrowhead (250 LUEs), for a total of 830 of the 2,062 planned LUEs. Both Arrowhead and Caliterra have current, issued TLAP permits that would more than account for their planned LUEs in 2021. The planned LUEs in 2021 without Caliterra and Arrowhead is 1,232 LUEs or 215,600 gallons per day at 175 gallons per LUE. The City of Dripping Springs wastewater treatment plant (14488001) has current flow of approximately 70,000 gallons per day and therefore that plant has more than enough permitted capacity to accommodate the remaining 215,600 gpd of wastewater flow projected for 2021. Additionally, there is still the Scenic Greens and Headwaters TLAP permits that could provide wastewater service if needed.

Even at the 2025 projected LUEs of 3,409 the full 666,575 gallons per day could be completely accounted for by the permitted TLAP capacity in and near the City of Dripping Springs. Under Water Code 26.0282, this permit should be altered or denied because there is already permitted capacity with higher levels of treatment in the form of immediately available TLAP capacity.

Proposed flows are not needed during the permit term and not justified. The phasing of the volumes is not consistent with construction phases and projected inflows. Design flow rates for units that will be constructed within the next five years must be provided. Instructions for Domestic Technical Report 1.1., Section 1 Permitted or Proposed Flows. “If construction of specific phases will not be started within this five-year time period, the phase may not be included in the proposed permit.” The application states the estimated construction start date for both Interim I Phase and Interim II Phase is August 2019. Estimated construction start date for Final Phase is January 2021. However, at the planned construction of Final Phase Applicant will have barely reached its planned LUEs for its Interim II Phase. In 2021, when its flows are estimated at 430,850 gallons per day, the Applicant shows no justification for any proposed flows over its Interim II Phase of 497,500 gallons per day within the five year window to be considered in a permit. Reaching to the final projected date of 2025 the Applicant plans on 3,409 LUEs at 175 gallons per day requiring only 666, 575 gallons per day of wastewater treatment capacity –

although 2025 is well beyond the five-year window. The Applicant fails to justify any need at all for the proposed Final Phase Flow of 995,000 gallons per day.

The Application does not provide the information required to assess regionalization. The application indicates affirmatively that there are domestic permitted wastewater treatment facilities and/or collection systems within a three-mile radius of the proposed facility but fails to provide a list of these facilities, including permittee's name and permit number, and an area map showing the location of these facilities. The Applicant failed to provide certification that the permitted facilities within a three-mile radius are not willing to expand to accept the volume of wastewater proposed in the application. Application, Domestic Technical Report 1.1, Page 20 of 76. Without any information regarding permitted facilities within three miles of the proposed facility, the TCEQ cannot implement the state policy to encourage and promote the development and use of regional and area-wide waste collection, treatment and disposal. Without providing this information the Applicant is also alleviated from providing justification and cost analysis of expenditures that shows the cost of connecting to the nearby facilities versus the cost of the proposed facility. In fact, because the existing and permitted TLAP capacity that would serve individual subdivisions would occur within each subdivision without need for long wastewater lines, the cost of extension of infrastructure to the wastewater treatment plants and environmental risk of long sewage lines likely exceeds that of using the existing and permitted TLAP facilities in the area. The Application is deficient because the Applicant provided no information about other nearby permitted facilities nor their ability to provide the service being requested.

The wastewater treatment plant design does not sufficiently protect nearby landowners from noise and odors. Odors emanate from wastewater treatment plants to a number of chemicals being used in the treatment process: ammonia, chlorine, sulfur dioxide, mercaptans, hydrogen sulfide and others. The rotten egg smell of hydrogen sulfide is most common. The nearby landowners are at risk to odors from the facility. Odors are worse at the headworks and at screening facilities, particularly if collection lines are long and the sewage becomes anaerobic. Other sources of odors at sewage treatment facilities are the return streams from filter backwashing and sludge and biosolids management. The application and Draft Permit do not provide adequate odor mitigation plans to protect nearby landowners. See report of Lauren Ross, attached.

The Draft Permit does not take into account any unpleasant odor quality of the effluent and the possible adverse effect it may have on Onion Creek and its recreational uses. Because Onion Creek has a primary contact 1 recreational standard, the Commission must consider any unpleasant odor quality of the effluent and the possible adverse effect that it might have on the receiving body of water. POW members that recreate in Onion Creek and use their property for allowing paying and non-paying guests to recreate in Onion Creek will be affected by any unpleasant odor quality of the effluent. There is no evidence in the Application or the Draft Permit that the Applicant or TCEQ analyzed the odor that will be present with the effluent and that it will not affect recreational use. In considering the issuance of a permit to discharge effluent into any body of water having an established recreational standard, the commission shall consider any unpleasant odor quality of the effluent and the possible adverse effect it might have on the receiving body of water, and the commission may consider odor as one of the elements of the water quality of the effluent. Tex. Water Code § 26.030. Constituents within the effluent could cause odor, as well as anaerobic conditions created by decaying benthic algae could cause odor in

Onion Creek, or any bypass or untreated effluent conditions. Odor in the effluent would impact Onion Creek's recreational use. Furthermore, there is parkland throughout Caliterra surrounding the discharge point and the area immediately downstream of the discharge point. These areas are marketed as amenities for recreation and fishing. "In considering issuance of a permit to discharge effluent comprised primarily of sewage or municipal waste into any body of water that crosses or abuts any park, playground or schoolyard within one mile of discharge, the commission shall consider any unpleasant qualities of the effluent including unpleasant odor, and any possible adverse effects that the discharge of the effluent might have on the recreational value of the park, playground, or schoolyard." Texas Water Code 26.030(b). There is no showing in the Application or Draft Permit that the effect of any unpleasant odor in the discharge on these park areas was considered. Odor in the effluent here would affect the ability of families and children to use the park. See report of Lauren Ross, attached.

The Draft Permit fails to limit nitrate, a key nutrient affecting algae growth and with human health effects from exposure. The draft permit has no limit on nitrate of Total Nitrogen. Nitrate-nitrogen concentrations in Onion Creek are naturally very low, which is consistent with the clear water quality of Onion Creek and low amounts of algae. Nitrogen and phosphorus pollution cause algal blooms, depressed dissolved oxygen concentrations, fish kills, murky water, and the depletion of desirable plant and animal habitat. Increased algae and turbidity leads to higher chlorination requirements for safe drinking water, which in turn produces higher concentrations of disinfection by-products that increase cancer risks. The additional nitrate discharged into Onion creek as effluent would be significantly higher than naturally occurring concentrations in Onion Creek. The nitrate input into Onion Creek will violate the Texas Surface Water Quality Standards by causing excessive algae growth. There is nothing in the Draft Permit that would prevent Onion Creek from exceeding the maximum safe drinking water levels for nitrate-nitrogen of 10 mg/L due to the proposed discharge of effluent. Excessive algae growth in Onion Creek would impair existing and designated uses of Onion Creek and impair the aquifer protection and public water supply uses. See Report of Lauren Ross, attached.

"Other Requirement 9" makes the permit non-final and avoids public participation as to the nitrate-nitrogen effluent limit. "Other Requirement 9" in the Draft Permit provides that "within 90 days from the start-up of the facility, the permittee shall provide an effluent analysis for nitrate-nitrogen at Outfall 001 while the facility is treating effluent to the quality permitted to discharge to water in the state....Based on the technical review of the submitted analytical result, an amendment may be initiated by TCEQ staff to include additional effluent limitations and/or monitoring requirements for nitrate-nitrogen." This draft permit provision holds one of the most significant aspects of a water quality discharge permit until after the permitting process is over. The public and affected persons should be able to evaluate the proposed nitrate-nitrogen limit and the impact to existing uses of Onion Creek from the discharge, and exercise their rights to contest the proposed limit if it is not appropriate. Nutrient limits are the central protective feature of a TPDES permit. It is unknown at this time whether public participation would be allowed in a staff-initiated permit amendment, and although it clearly should be it is not guaranteed. Texas Water Code § 26.019 requires that the commission shall prescribe the conditions on which a permit is issued, including "the character and quality of the waste that may be discharged under the permit." The draft permit does not identify the character and quality of the waste that may be discharged

and cannot be issued without a nitrate-nitrogen limit because that is necessary for protection of the water quality of the state. See Report of Lauren Ross, attached.

The Total Phosphorous limit in the Draft Permit increases the phosphorous load in Onion Creek and will degrade water quality. The proposed draft permit limit of Total Phosphorous to .15 mg/L based on the monthly median is an order of magnitude greater than the naturally occurring phosphorous concentrations in Onion Creek. At this level the clear water conditions in Onion Creek will be degraded by algae growth. Nutrients from permitted discharges must not cause excessive growth of aquatic vegetation that impairs existing and designated uses. Excessive algae growth from phosphorous discharged into Onion Creek will impair POW members primary contact recreation use of the creek because swimming, fishing and boating are not desirable in an algae-filled creek and are undertaken in Onion Creek because of its crystal-clear waters. See Report of Lauren Ross, attached.

The effluent limits in the Draft Permit will cause degradation of groundwater and not protect water supply nor maintain Onion Creek's aquifer protection use, and could allow degradation of drinking water provided by wells, including exceeding the drinking water standard for nitrogen. There is evidence that wells in the area of the discharge are influenced by Onion Creek. A study by the Hays Trinity Groundwater Conservation District, the Barton Springs Edwards Aquifer Conservation District, and the City of Austin documented flow loss from a reach of Onion Creek downstream from the proposed effluent discharge that includes the Dripping Springs Water Supply Company wells. There is substantial evidence that because of its hydrologic connection to the Upper and Middle Trinity Aquifers, degradation of Onion Creek from the proposed effluent discharge would degrade individual and public water supply wells. The effluent discharge could harm groundwater and thus individual and public water supplies because the effluent discharge can reach the wells. There is no nitrogen limit in the Draft Permit and it is not known what the nitrogen level will be in the effluent. Without a specific treatment process and maximum nitrogen level, discharge of the effluent in this area closely connected to wells could cause the groundwater to exceed the 10mg/L drinking water standard. Exposure to excessive nitrogen through drinking water can have significant adverse health effects. See Report of Lauren Ross, attached.

The Draft Permit is inconsistent with TCEQ Antidegradation policy – Tier 1 and Tier 2. Water quality modeling by the City of Austin has shown that there will be excessive algae growth from the discharge at the nutrient effluent limits allowed in the Draft Permit that would impair the existing primary contact recreation uses, aquifer protection, aquatic life use, and public water supply. Based on water quality modeling, the degradation of water quality would be more than a de minimis extent. See Report of Lauren Ross, attached.

The Tier 2 Antidegradation Policy was not applied to review of the Draft Permit and/or was applied incorrectly. Because of the inadequate nutrient limits for effluent, or lack of any limit for some nutrients in the Draft Permit, the discharge of effluent at the authorized levels would cause degradation of Onion Creek which currently exceeds fishable/swimmable quality. The discharge under the Draft Permit would cause degradation of Onion Creek by more than a de minimis extent. The Applicant has made no showing that lowering of water quality is necessary for important economic or social development. See Report of Lauren Ross, attached.

The Total Phosphorous effluent limit being based on a median rather than a mean concentration allows for greater phosphorous loading to occur and makes permit terms inapplicable. See report of Lauren Ross, attached.

Because the treatment system design was based on different effluent limits than now required by the proposed draft permit, the wastewater treatment as described in the application is cannot reliable predict effluent quality. See report of Lauren Ross, attached.

Based on water quality modeling, the effluent limits in the Draft Permit will cause surface and groundwater degradation. See report of Lauren Ross, attached.

The discharge under the Draft Permit will allow degradation of federally protected endangered species habitat. See report of Lauren Ross, attached.

The wastewater treatment process described in the permit application would not meet the proposed Draft Permit terms including the effluent limits. See report of Lauren Ross, attached.

The treatment processes may cause exceedance of the sulfate and sodium standards for Onion Creek. See report of Lauren Ross, attached.

The Draft Permit does not specify the sulfate limit in the effluent. The permit does not identify the character and quality of the waste that may be discharged as required by Tex. Water Code 26.019 and cannot be issued without a sulfate limit because that is necessary for protection of the water quality of the state. See Report of Lauren Ross, attached.

A Class C Operator is inadequate for a large volume wastewater treatment plant with a complex treatment process discharging into a high-quality receiving water. See Report of Lauren Ross, attached.

The Applicant's compliance history indicates it is not qualified or prepared to successfully operate a larger and more complicated wastewater treatment plant. See Report of Lauren Ross, attached.

The Draft Permit fails to require the Best Available Treatment for nutrient removal. See Report of Lauren Ross, attached.

The Draft Permit and Application fail to meet the water quality standards for wastewater effluent in the Belterra Permit. See Report of Lauren Ross, attached.

The Draft Permit fails to require firm-demand beneficial reuse as a condition of the permit. See Report of Lauren Ross, attached.

The Draft Permit fails to require effluent dechlorination. See Report of Lauren Ross, attached.

The Draft Permit fails to require whole effluent toxicity testing. See Report of Lauren Ross, attached.

The water quality modeling done to review the permit was using an inadequate QUAL-TX model that was implemented with inappropriate parameters. See Report of Lauren Ross, attached.

The Draft Permit is not adequately protective of health and human safety by allowing emerging contaminants to be discharged into Onion Creek and exposes recreational users and groundwater users to these contaminants. See Report of Lauren Ross, attached.

The Draft Permit does not consider the extraordinary impact of upset conditions that accompanies a direct discharge in a sensitive and high quality water body such as Onion Creek. See Report of Lauren Ross, attached.

The technical memoranda do not indicate any groundwater impact analysis was undertaken in review of the Application and Draft Permit. The Draft Permit is deficient without a groundwater impact analysis. The Draft Permit is not a final permit and issuance of the permit would not be a final action without a groundwater impact analysis. See Report of Lauren Ross, attached.

The analysis and decision on adverse effects to groundwater supply has been illegally deferred until after the Draft Permit is issued and degradation may have occurred. The TCEQ Interoffice Memorandum recommendation for Textox screening for nitrates once the proposed discharge occurs is an illegal deferment of TCEQ's responsibility to analyze the Application and Draft Permit for degradation. The Draft Permit is not final and issuance of the permit would be a non-final action. See Report of Lauren Ross, attached.

Members of POW That Would Otherwise Have Standing To Request a Hearing in Their Own Right

Rich and Sarah (Sally) Beggs ("Beggs"), 1794 Trebled Waters Trail, Driftwood, Texas 78619, are POW members that use and enjoy their property along Onion Creek for multiple activities that rely on the high quality water of Onion Creek including recreation, wildlife habitat, bee cultivation, agricultural use, religious services, scientific study, and archaeological studies. The Beggs property is approximately 1.5 miles downstream of the proposed discharge point and surrounds both sides of Onion Creek. The Beggs rely on water from the Dripping Springs Water Supply Company for water for their home. The Beggs will be affected by the proposed discharge in a manner not common to members of the general public because they own property on Onion Creek and frequently recreate in Onion Creek from their property. The water of Onion Creek is exceptionally clear when it runs through their property and much of their use of their property relies on the clean water in Onion Creek. The Beggs are affected persons because they have a personal justiciable interest related to the use and enjoyment of their property on Onion Creek. Because the proposed discharge will change the quality of water in Onion Creek there is a reasonable relationship between their interest in the use and enjoyment of their property as abutting

a clear and clean Onion Creek and the permitting of a wastewater discharge into the creek. Because the water supply for their home is provided by the Dripping Springs Water Supply Company, there is a reasonable relationship between their interest in clean and safe drinking water for their home and the permitting of a wastewater discharge into the creek a short distance upstream from water supply wells used by their water supplier.

Jeff Root and Michelle Oyler (“Roots”), 1638 Trebled Waters Trail, Driftwood, Texas 78619, are POW members that use and enjoy their property along Onion Creek for many activities that rely on the high quality water of Onion Creek including recreation and wildlife observation. The Roots property is located approximately 1.3 miles downstream of the discharge point and surrounds both sides of Onion Creek. The Roots will rely on water from the Dripping Springs Water Supply Company for water for their home. The Roots will be affected by the proposed discharge in a manner not common to members of the general public because they own property on Onion Creek and frequently recreate in Onion Creek from their property. The water of Onion Creek is exceptionally clear when it runs through their property. The Roots utilize Onion Creek from their property for swimming, fishing, snorkeling, and observing wildlife. The water is so clear that you can observe fish from the deepest portion of the creek in front of their property. The Roots are affected persons because they have a personal justiciable interest related to the use and enjoyment of their property on Onion Creek. Because the water supply for their home will be provided by the Dripping Springs Water Supply Company, there is a reasonable relationship between their interest in clean and safe drinking water for their home and the permitting of a wastewater discharge into the creek a short distance upstream from water supply wells used by their water supplier. The likely impact of the activity – discharge of wastewater into Onion Creek 1.2 miles upstream of their property - if permitted and carried out in accordance with the draft permit is that their family’s recreational use of the creek will be restricted, their property value could be lowered, and their drinking water could be contaminated.

Jeff and Kara Shaw, 903 S. Creekwood Drive, Driftwood, Texas 78619, are POW members that use and enjoy their property along Onion Creek for many activities that rely on the high quality water of Onion Creek including recreation, observation of wildlife habitat, artistic endeavors, and religious practice. The Shaw property is approximately 7.6 stream miles downstream of the discharge point. The Shaws will be affected by the proposed discharge in a manner not common to members of the general public because they own property on Onion Creek and frequently recreate in Onion Creek from their property and use water from a well for their home. The water of Onion Creek is exceptionally clear when it runs through their property. The Shaws are affected persons because they have a personal justiciable interest related to the use and enjoyment of their property on Onion Creek. Because the proposed discharge will change the quality of water in Onion Creek there is a reasonable relationship between their interest in the use and enjoyment of their property as abutting a clear and clean Onion Creek and the permitting of a wastewater discharge into the creek. The likely impact of the activity – discharge of wastewater into Onion Creek 7.6 miles upstream of their property - if permitted and carried out in accordance with the draft permit is that their family’s recreational use of the creek will be restricted, their water supply compromised, and their property value could be lowered.

Umari Partners, LP, represented by Melissa Abel, 509A West Lynn Street, Austin TX 78703 (512) 900-6306, are POW members that use and enjoy their property known as Tingari

Ranch on Onion Creek approximately 1.5 miles downstream from the discharge point. Umari, LP is an adjacent landowner listed for mailed notice of the Draft Permit. Umari, LP would be adversely affected by the proposed discharge in a manner not common to members of the general public because they have owned property along the creek for more than twenty-five years, use groundwater for our sole source of drinking water supply, and frequently use the creek for recreation and wildlife observation. The water of Onion Creek is extremely clear at their property and there is a pooled area for swimming. Because the proposed discharge will degrade the quality of water in Onion Creek, and degrade groundwater used to supply their well, there is a reasonable relationship between their interest in the use and enjoyment of their property. The likely impact of the activity – discharge of wastewater into Onion Creek 1.5 miles upstream of their property - if permitted and carried out in accordance with the draft permit is that their recreational use of the creek will be restricted, their water supply compromised and their property value lowered.

Reed Burns and RPC Investments, Inc. are POW members that use and enjoy their properties located close to the sewage treatment plant and along Onion Creek. Reed Burns and RPC Investments, Inc. were listed as affected landowners for mailed notice of the Draft Permit. Reed Burns mailing address is 6501 Thomas Springs Rd., Austin, Texas 78736. The mailing address for RPC Investments, Inc. is 4401 Spicewood Springs Rd. ste. 300, Austin, TX 78759. Reed Burns' property at 22701 FM 150 W, Driftwood, TX 78169 is located north-northeast of the plant and is at risk from noise and odors from the expanded plant. Drinking water for that property is provided by a well that is at risk of contamination and or/degradation from the proposed discharge of effluent under the Draft Permit. Reed Burns also owns an 11.98 acre tract at the confluence of Onion Creek and South Onion Creek approximately 2.5 miles downstream of the discharge point. This property has a good productive well that is at risk from contamination and/or degradation from the proposed discharge of effluent under the Draft Permit. Reed Burns and his family engage in recreational activities and wildlife observation in Onion Creek from this property. RPC Investments, Inc. owns the approximately 266 acre Charro Ranch which is also at the confluence and adjacent to the existing City of Dripping Springs sewage treatment plant. This property has 2 houses on it and 2 domestic water wells and significant frontage on Onion Creek that is approximately 2.3 miles downstream from the discharge point. This property is also used for recreation, entertainment, wildlife observation and other activities in and along Onion Creek. Reed Burns and RPC Investments, Inc. would be adversely affected by the proposed discharge in a manner not common to members of the general public because they have owned property along the creek for many years, use groundwater for drinking water supply, and frequently use the creek for recreation and wildlife observation. The water of Onion Creek is extremely clear at their properties. Because the proposed discharge will degrade the quality of water in Onion Creek, and degrade groundwater used to supply their wells, there is a reasonable relationship between their interest in the use and enjoyment of their property. The likely impact of the activity – discharge of wastewater into Onion Creek 2.3 to 2.5 miles upstream of their property - if permitted and carried out in accordance with the draft permit is that their recreational use of the creek will be restricted, their water supply compromised and their property value lowered.

Wesley M. Pitts and Cristal C. Pitts, 600 Darden Hill Rd., Driftwood, Texas 78619, are POW members that use and enjoy their property along Onion Creek for many activities that rely on the high quality water of Onion Creek including recreation and observation of wildlife. The Pitts property is approximately 5.8 stream miles downstream of the discharge point. The Pitts will

be affected by the proposed discharge in a manner not common to members of the general public because they own property on Onion Creek and frequently recreate in Onion Creek from their property and use water from a well for the sole source of water supply for their home. The water of Onion Creek is exceptionally clear when it runs through their property. The Pitts are affected persons because they have a personal justiciable interest related to the use and enjoyment of their property on Onion Creek. Because the proposed discharge will change the quality of water in Onion Creek there is a reasonable relationship between their interest in the use and enjoyment of their property as abutting a clear and clean Onion Creek and the permitting of a wastewater discharge into the creek. The likely impact of the activity – discharge of wastewater into Onion Creek 5.8 miles upstream of their property - if permitted and carried out in accordance with the draft permit is that their family’s recreational use of the creek will be restricted, their water supply compromised, and their property value could be lowered.

Conclusion

The Draft Permit and Application are deficient and do not meet all state and federal legal and technical requirements, including the Texas water quality standards and implementation procedures for the standards, the Clean Water Act, wastewater treatment design, siting and operation rules, nor groundwater protection rules of the Safe Drinking Water Act. POW asks the TCEQ to reconsider its proposed issuance of the Draft Permit because it will not be protective of human health and safety, the environment and physical property. POW requests a contested case hearing because the proposed wastewater discharge under the application will significantly affect water quality in Onion Creek and groundwater, and thus impact the health and normal use and enjoyment of property by our members. We reserve the right to supplement these comments and request for contested case hearing within applicable deadlines.

Sincerely,

/s/ Sarah B. Faust