

TCEQ PROPOSED PERMIT NO. WQ0014713001

2008 APR -2 PM 4:18

APPLICATION BY BP REAL  
ESTATE INVESTMENTS, LTD.  
FOR TPDES PERMIT  
NO. WQ0014713001

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BEFORE THE  
TEXAS COMMISSION  
ON  
ENVIRONMENTAL QUALITY

CHIEF CLERKS OFFICE

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**EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT**

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The Executive Director (ED) of the Texas Commission on Environmental Quality (TCEQ) files this Response to Public Comment (Response) on the BP Real Estate Investments, Ltd. (BP) application and ED's preliminary decision. As required by 30 Texas Administrative Code (TAC) Section 55.156, before a permit is issued, the ED prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk received timely comments from:

Representative Michael Villarreal	Betty Lou Jonas
Representative David Leibowitz	Martha Leatherman
Martha Allen	Douglas McNeel, on behalf of the Gallagher Ranch Cattle Co., Inc. and his family (Gallagher Cattle)
Mark Boucher	George MacRossin
Ronnie Brionas	Joe Manak
Mary Carter on behalf of the Gallagher Headquarters Ranch Development Limited (Gallagher Ranch)	James Moore
Jim and Judy Casey	Myfe Moore
Don and Margaret Chistilles	Analisa Peace on behalf of the Greater Edwards Aquifer Alliance (GEAA);
Larry and Lisa Cross	Judy Polk
Jerry Day	Fidel Ramirez
Bebe Finstermaker, Vice-Chairman of the Hill Country Planning Association (HCPA);	George Rice
Alyne Fitzgerald	Lyndia Sachtleben
Dr. Bob Fitzgerald	Beth Schott

Joe Freeland on behalf of San Antonio Water System (SAWS);	Gary Schott
Mrs. George Garza	Jennifer Schott
Phil and Wendy Gramm	Leslie Schott
Ron Green	Madelyn Schott
Jim Hannah	Neel McNeel Scott on behalf of Robert R. Scott Jr., Maury Scott, Nena Scott, Amy Scott, Gallagher Ranch Cattle, Co, and Gallagher Ranch Partners, LTD (Gallagher Partners)
Bobby Harris, Bandera County Commissioner	William Vorhes, representing Medina Highlands
Neil Hernandez	Mary Walpole
Chris Hill	Benjamin White
Eddie Johnson	Camille White
Randy Johnson, on behalf of the San Geronimo Valley Alliance, Inc. (SGVA)	Petition (see attachment A for a list of the individuals who signed the petition)

This response addresses all public comments received, whether or not withdrawn. If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Office of Public Assistance at 1-800-687-4040. General information about the TCEQ can be found at our website at [www.tceq.state.tx.us](http://www.tceq.state.tx.us).

## **BACKGROUND**

### Description of Facility

BP has applied to the TCEQ for a new TPDES permit, proposed Permit No. WQ0014713001 which would serve the Hills of Castle Rock development. The wastewater treatment facility would be a suspended growth biological treatment process with membrane separation in all phases. Treatment units in the Interim I Phase would include two bar screens, an anoxic basin, a membrane bio-reactor (MBR), a sludge holding basin, and a chlorine contact chamber. Treatment units in the Interim II Phase

would include four bar screens, an anoxic basin, an MBR, a sludge holding basin, and a chlorine contact chamber. Treatment units in the Final Phase would include four bar screens, two anoxic basins, two MBRs, a sludge holding basin, and a chlorine contact chamber. The draft permit has the following flow and effluent limits:

Characteristic	Interim I Phase Daily Average	Interim II Phase Daily Average	Final Phase Daily Average
Flow	0.075 million gallons per day (MGD)	0.150 MGD	0.225 MGD
Carbonaceous Biochemical Oxygen Demand (5-day) (CBOD)	10 milligrams per liter (mg/l)	10 mg/l	10 mg/l
Total Suspended Solids (TSS)	15 mg/l	15 mg/l	15 mg/l
Ammonia Nitrogen	3 mg/l	3 mg/l	3 mg/l
Total Phosphorus	0.5 mg/l	0.5 mg/l	0.5 mg/l
pH	Between 6.0 and 9.0 standard units	Between 6.0 and 9.0 standard units	Between 6.0 and 9.0 standard units
Dissolved Oxygen (DO)	4.0 mg/l	4.0 mg/l	4.0 mg/l

The facility has not been constructed.

The facility would be located approximately 3,000 feet northwest of the intersection of Park Road 37 and State Highway 16 in Medina County, Texas. The treated effluent would be discharged to an unnamed tributary of San Geronimo Creek; thence to an unnamed lake on the unnamed tributary; thence to the unnamed tributary; thence to San Geronimo Creek; thence to a series of unnamed lakes along San Geronimo

Creek; thence to the Medina River below the Medina Diversion Lake in Segment No. 1903 of the San Antonio River Basin.

#### Procedural Background

The permit application for a new permit was received on May 5, 2006, declared administratively complete on August 21, 2006 and declared technically complete on December 27, 2006. The Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) was published on September 13, 2006 in English and Spanish in the *Bandera Bulletin* and on September 14, 2006 in English and Spanish in the *Hondo Anvil Herald*. The Notice of Application and Preliminary Decision (NAPD) for a Water Quality Permit was published on April 18, 2007 in English and Spanish in the *Bandera Bulletin* and on April 19, 2007 in English and Spanish in the *Hondo Anvil Herald*. Notice of a public meeting was published on July 25, 2007 in English and Spanish in the *Bandera Bulletin* and on July 26 2007 in English and Spanish in the *Hondo Anvil Herald*. The public meeting was held on August 28, 2007 at the Dancing Bear Development in Mico, Texas. The public comment period ended at the conclusion of the public meeting. This application was administratively complete on or after September 1, 1999; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999.

## COMMENTS AND RESPONSES

### Comment 1.

Representative Leibowitz expressed concern over the location of the public meeting. Representative Leibowitz requested that the public meeting be moved to Helotes Elementary School, O'Conner High School, or the Helotes Nutrition Center.

Judy Casey asked why the public meeting was held on the developer's property.

### Response 1.

TCEQ must hold public meetings in the county in which the plant is or will be located.<sup>1</sup> The BP facility would be located Medina County, the facilities suggested by Representative Leibowitz are not in Medina County so they could not be used. The TCEQ relies on Applicants to find an appropriate location for a public meeting in the county. The facility must be large enough to accommodate the number of people anticipated, and must be reasonably accessible; at times the only facility available belongs to the Applicant.

### Comment 2.

SGVA asked what the purpose of the Public Meeting was.

### Response 2.

A public meeting is held if there is substantial public interest or if a member of the legislature requests one.<sup>2</sup> A public meeting has two purposes, first to provide the public an opportunity to ask questions and second to provide the ED with additional information regarding the proposed permit. A public meeting is divided into two

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<sup>1</sup> 30 Texas Administrative Code (TAC) § 55.154

<sup>2</sup> 30 Texas Administrative Code (TAC) § 55.154.

sections, an informal section and a formal section. During the informal section the public can ask questions of the Applicant and the ED, which will be answered at that time. During the formal section the public may make comments or ask questions which will be responded to in writing in the Executive Director's Response to Comments.

**Comment 3.**

SGVA asked if TCEQ would re-evaluate its position on the draft permit for BP's wastewater treatment plant based on information from the public meeting.

**Response 3.**

Yes. The ED reviewed the comments made during the formal session of the public meeting held on September 25, 2007. As a result of the comments made at the public meeting a TCEQ geologist visited the site on November 30, 2007. The geologist surveyed and photographed approximately 1.6 miles along an unnamed tributary from the proposed wastewater discharge outfall location to a pond area on BP's property. The intent of the survey was to investigate and describe any features exposed at the surface that may recharge the Trinity Aquifer before any dilution of wastewater occurs. The investigation found no large scale or significant recharge features that would convey undiluted wastewater from the surface to the subsurface.

After reviewing all the comments made during the public comment period, including those made during the public meeting, and considering the geologists findings, the ED has not made any changes to the draft permit.

**Comment 4.**

Martha Leatherman asked why the notices were not published in the *Helotes Echo*. Gallagher Cattle commented that BP did not provide proper or timely newspaper notice.

**Response 4.**

For all new, major amendment and renewal applications, the agency prepares two public notices; the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) and the Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD). The Applicant is required to publish these notices in a local newspaper and to provide a copy of the application, proposed draft permit and Executive Director's Preliminary Decision in a public place for viewing and copying. BP published the NORI, NAPD and the notice of the public meeting in English and Spanish in both the *Hondo Anvil Herald* and the *Bandera Bulletin*.

**Comment 5.**

Martha Leatherman and James Moore stated that they did not receive notice of BP's proposed wastewater treatment plant. Gallagher Cattle expressed concern that the application did not include a complete list of all names and addresses of persons affected by BP's application.

Camille White stated that there was not proper notice of BP's application. She believes that she should have received the NORI, but did not. Lisa Cross stated that she did not receive mailed notice, and she believes she should have.

**Response 5.**

For new permit applications, the Applicant must provide a list of affected landowners and a map showing their locations. The TCEQ requires applicants to identify landowners with property located adjacent to the wastewater treatment plant site and landowners with property on either side of the receiving stream for approximately one mile downstream from the point of discharge. The Applicant is required to certify that the submitted application is accurate. Lisa Cross, Martha Leatherman, James Moore and Camille White were not listed on the map submitted with BP's application.

The TCEQ mails notice of the application to the landowners and others on the mailing list for the application, which is maintained by the Office of the Chief Clerk. Martha Leatherman, James Moore and Camille White are on the mailing list dated updated July 16, 2007. Lisa Cross was added to the mailing list after the public meeting.

**Comment 6.**

Gallagher Partners stated that the map provided by BP was incorrect. According to Gallagher Partners, they own property No. 2, not Albert Scott Jr.

**Response 6**

TCEQ's rules provide that the Office of the Chief Clerk will mail notice to "the landowners named on the application map or supplemental map, or the sheet attached to the application map or supplemental map."<sup>3</sup> An application, which must be certified as true and accurate by the applicant, must include a list of adjacent and downstream landowners and their addresses along with a map locating the property owned by these

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<sup>3</sup> 30 TAC § 39.413(1)



persons.<sup>4</sup> The ED does not require applicants to continuously update the landowner map once the application is deemed administratively complete.

**Comment 7.**

Gallagher Partners contends that more people will be affected by the proposed discharge than those listed in the application. According to Gallagher Partners all downstream consumers of water from wells recharged by the San Geronimo Creek would be adversely affected by the discharge.

**Response 7.**

To ensure that as many people as possible are notified, the TCEQ's rules provide:

The applicant shall publish notice of application and preliminary decision at least once in a newspaper regularly published or circulated within each county where the proposed facility or discharge is located and in each county affected by the discharge.<sup>5</sup>

BP published the NORI, NAPD and the notice of the public meeting in English and Spanish in both the *Hondo Anvil Herald* and the *Bandera Bulletin*. Additionally, the notices were mailed to Representative King, Senator Uresti, Jr, Bandera and Medina County officials. The Office of Chief Clerk also maintains a list of individual who have requested notification regarding draft permits in Bandera and Medina Counties.

**Comment 8.**

Jim and Judy Casey expressed concern that the NORI did not state that a significant amount of the effluent would flow across the Edwards Aquifer recharge zone in the San Geronimo Valley and then into the Edwards Aquifer.

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<sup>4</sup> 30 TAC § 281.5(6).

<sup>5</sup> 30 TAC § 39.551(c)(1).

Neil Hernandez stated that the discharge route listed in the NAPD was incorrect. According to Mr. Hernandez, the discharge route is to: an unnamed tributary; thence to the San Geronimo creek; thence to the groundwater system as fracture flow and direct flow into cave entrances; thence to a groundwater pathway to the north and east (Government Canyon cave karst region); thence to the Eastern Medina storage unit (Kuniansky and Holligans 2004); thence to the public drinking water supply.

**Response 8.**

TCEQ's rules regarding notice for the NORI and NAPD require "a general description of the location of each existing or proposed discharge point and the name of the receiving water."<sup>6</sup> The notice for BP stated that the discharge route is from the facility to an unnamed tributary; thence to San Geronimo Creek; thence into the Medina River. The ED has determined that the notice meets the requirements of the rules.

The TCEQ considers the surface discharge route as a whole. Streams that are losing or gaining are not considered separately because streams are not identified by segment based on losing or gaining characteristics.

**Comment 9.**

Gallagher Ranch, Gallagher Cattle, Gallagher Partners and Camille White commented that because the proposed discharge route is in a sensitive area and the discharge may affect the Edwards Aquifer, the effluent limits for BP should be: 5 milligrams per liter (mg/l) of carbonaceous biochemical oxygen demand, 5 mg/l total suspended solids, 2 mg/l ammonia nitrogen, and 0.5 mg/l phosphorus.

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<sup>6</sup> 30 TAC § 39.551(d)(4)(B).

**Response 9.**

The outfall from the proposed discharge is approximately 10.8 miles upstream of the Edwards Aquifer recharge zone, therefore the effluent limits for discharges upstream of the Edwards Aquifer do not apply.<sup>7</sup> The recommended effluent limits of 10 mg/l of carbonaceous biochemical oxygen demand, 15 mg/l total suspended solids, 3 mg/l ammonia nitrogen, and 0.5 mg/l phosphorus, are predicted to maintain the 5.0 mg/L dissolved oxygen (DO) criterion of the unnamed lake, which is 1.6 miles downstream of the outfall on the immediate receiving unnamed tributary.

The discharge to the Edwards Contributing Zone is believed to meet the purpose of 30 TAC § 213.2 and is consistent with §26.401 of the Water Code. The goal of § 213.2 is to regulate activities in the contributing zone of the Edwards Aquifer that have the potential to pollute surface streams that recharge the Edwards Aquifer, and to protect existing and potential uses of the Edwards Aquifer.

The draft permit is consistent with TCEQ's legislative mandate which provides "[t]he legislature determines that . . . it is the goal of the groundwater policy in this state that the existing quality of groundwater not be degraded. This goal of nondegradation does not mean zero-contaminant discharge."<sup>8</sup>

**Comment 10.**

Gallagher Ranch commented that the dissolved oxygen DO in the lake could be a problem.

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<sup>7</sup> 30 TAC § 213.6.

<sup>8</sup> TWC § 26.401(b).

**Response 10.**

The TCEQ has determined that the DO concentration in the lake will be protected. An uncalibrated QUAL-TX model with estimated and standardized default values for hydraulic characterization, temperature, and kinetics was used in the evaluation. The model indicated that, provided that BP meets the effluent limits in its permit, the DO levels in the lake will be protected. The results of this evaluation can be reexamined upon receipt of information which conflicts with the assumptions employed in this analysis.

**Comment 11.**

Gallagher Ranch suggested that BP should be required to monitor its effluent once per day, rather than once per week, that the monitoring is not the correct type and that the proposed monitoring location is not sufficient to insure that adversely affected downstream parties, the Edwards Aquifer and the Edwards Aquifer Protection zone are protected.

**Response 11.**

The monitoring frequencies in the draft permit are based on the self-monitoring schedule required by TCEQ's rules.<sup>9</sup> According to the draft permit, BP must sample flow five times a week and the remaining constituents once a week. The monitoring frequencies will be reevaluated and may be modified once BP begins discharging, based on its compliance history.

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<sup>9</sup> 30 TAC § 319.9.

BP's draft permit requires that grab samples be taken to ensure compliance with its permit. According to TCEQ's rules, grab samples are appropriate when the total permitted flow from a wastewater treatment facility is less than 0.50 MGD.<sup>10</sup>

BP's draft permit also describes the sampling location as "following the final treatment unit." It is typical to require permittees to sample following the final treatment unit because that is the last point where the permittee has absolute control over the effluent. Once the effluent has reached the receiving water it becomes commingled with the receiving water and any other non-point source and point source discharges downstream. Thus, it is nearly impossible to determine where a particular contaminant originated from. Therefore, the ED has determined that the sampling point referenced in BP's draft permit is appropriate.

**Comment 12.**

Gallagher Cattle stated that BP's draft permit is not enforceable because it does not clearly describe the character of the discharge or the flow limitations.

**Response 12.**

The draft permit authorizes BP to discharge waste from the Hills of Castle Rock Water Recycling Water Treatment Facility, SIC Code 4952.<sup>11</sup> SIC Code 4952 applies to "[e]stablishments primarily engaged in the collection and disposal of wastes conducted through a sewer system, including such treatment processes as may be provided."<sup>12</sup>

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<sup>10</sup> 30 TAC § 319.9(a).

<sup>11</sup> See Draft Permit, page 1.

<sup>12</sup> [http://www.osha.gov/pls/imis/sic\\_manual.display?id=954&tab=description](http://www.osha.gov/pls/imis/sic_manual.display?id=954&tab=description)

Additionally, the draft permit specifies the daily average flow as 0.075 MGD (Interim I phase), 0.150 MGD (Interim II phase), and 0.225 MGD (Final phase) and the average effluent flow during any two hour period as 104 gpm (gallons per minute) (Interim I phase), 208 gpm (Interim II phase) and 312 gpm (Final phase).

The ED has determined that the description and flow limits are sufficient for the permit to be enforceable.

**Comment 13.**

Gallagher Cattle stated that the draft permit should require BP to perform whole toxicity monitoring.

**Response 13.**

The TCEQ Procedures to Implement the Texas Surface Water Quality Standards (January 2003) requires whole effluent toxicity (WET) testing of domestic wastewater discharges with an average permitted flow of 1 MGD or greater. BP requested a final phase daily average flow not to exceed 0.225 MGD; consequently, WET testing is not required.

**Comment 14.**

Lyndia Sachtleben expressed concern that the discharge from BP's proposed wastewater treatment facility would cause an increase in the fluoride in her drinking water. According to Lyndia, the fluoride in her drinking water already exceeds the state standards.

**Response 14.**

Other than as a water additive to promote strong teeth, fluoride is contributed by erosion of natural deposits and discharge from fertilizer and aluminum factories, none of which is associated with the proposed treated domestic wastewater discharge. In addition, there is no information available on the presence or absence of fluoride in the water supply for the area to be served by the proposed wastewater treatment facility. The situation in which the fluoride exceeds the state standard should be reported immediately for appropriate action to the entity regulating the abstraction, treatment and delivery of drinking water to the consumers. Assistance may be requested from the TCEQ Drinking Water Protection Team at 512-239-4619, or by contacting the TCEQ's Office of Public Assistance at 1-800-687-4040.

**Comment 15.**

Camille White asked if BP was going to use chlorine to disinfect its effluent and if BP would also be required to de-chlorinate its effluent?

**Response 15.**

In its application, BP proposed chlorination for disinfection of its effluent. The TCEQ Procedures to Implement the Texas Surface Water Quality Standards (January 2003) do not require dechlorination of effluent at flows less than one MGD. BP requested a final phase daily average flow not to exceed 0.225 MGD; consequently, dechlorination is not required.

**Comment 16.**

SGVA asked why TCEQ does not require BP to use ultra-violet to disinfect the effluent from the wastewater treatment plant.

**Response 16.**

TCEQ rules require that disinfection of domestic wastewater must be protective of both public health and aquatic life, however the rules do not require a specific method of disinfection.<sup>13</sup>

**Comment 17.**

Camille White asked that if the effluent limits are daily averages, would the concentration of pollutants be much higher at times?

**Response 17.**

Yes. Individual measurements making up the calculation of an average may be higher or lower than the average value. There are also effluent limits other than the daily average, i.e., 7-day average, daily maximum and single grab, in the draft permit for monitoring effluent quality.

**Comment 18.**

Mary Walpole asked what the minimum and maximum amount of effluent that BP can discharge in a single day.

**Response 18.**

There is no daily minimum and maximum flow proposed in the draft permit. Rather, the draft permit authorizes:

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<sup>13</sup> 30 TAC § 309.3(g).



<b>Phase</b>	<b>Daily Average Flow (MGD)*</b>	<b>Two-Hour Peak Flow (gpm)**</b>
Interim I	0.075	104
Interim II	0.150	208
Final	0.225	312

MGD = million gallons per day

gpm = gallons per minute

**Comment 19.**

Judy Casey asked how far downstream from BP's wastewater treatment facility will the effluent samples be taken.

**Response 19.**

Effluent samples will be taken at the outfall following the final treatment unit.

**Comment 20.**

Judy Casey asked if bacteria in wastewater proliferates downstream of wastewater treatment plants.

**Response 20.**

Effluent from domestic wastewater treatment facilities, such as BP, is typically disinfected by means of chlorination, which leaves some residual chlorine in the effluent. BP's effluent must contain a chlorine residual of at least 1.0 mg/l and may not have a chlorine residual of more than 4.0 mg/l after a detention time of at least 20 minutes based on peak flow.

Streams are essentially fed by surface runoff containing naturally occurring microorganisms, including bacteria, and organic matter which serves as food for the microorganisms. So bacteria is continually being naturally added to streams, making it difficult determine the exact reason of proliferation of bacteria downstream of a discharge.

**Comment 21.**

Gallagher Ranch, Gallagher Cattle and Camille White indicated support of BP's intent to use the effluent to irrigate common areas and individual lots within the proposed development.

**Response 21.**

The draft permit for BP is a discharge permit, meaning BP is only authorized to discharge its effluent to the unnamed tributary of San Geronimo Creek. TCEQ's rules require that before an entity can use its effluent for irrigation it must obtain a 30 TAC Chapter 210 authorization. It must also have a wastewater permit that provides for an alternative means of disposal during times when there is no demand for the use of the reclaimed water.<sup>14</sup> The Chapter 210 authorization is a separate authorization. Since the wastewater discharge permit is a prerequisite for obtaining the 30 TAC Chapter 210 authorization, it is not included in a discharge permit.

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<sup>14</sup> 30 TAC § 210.1.

**Comment 22.**

Gallagher Partners, Camille White and SGVA asked why the discharge from BP's wastewater treatment facility would not be recycled and used as the drinking water supply for the proposed development.

**Response 22.**

BP did not request authorization to recycle its effluent for drinking purposes in its permit application. The effluent limits in the draft permit do not meet the EPA primary drinking water standards, therefore the effluent could not be recycled and used as the drinking water supply. If the draft permit is issued, BP, however, may re-use its effluent if it obtains a 30 TAC Chapter 210 authorization to water landscape areas in and around the Hills of Castle Rock development.

**Comment 23.**

Don and Margaret Christilles, GEAA, Eddie Johnson, Randy Johnson, Betty Lou Jonas, Martha Leatherman, Myfe Moore, James Moore, Gallagher Cattle, George Rice, Jennifer Schott, Leslie Schott, Madelyn Schott, Gallagher Partners, Camille White, Commissioner Harris, SAWS, and Petitioners expressed concern that the discharge from BP's wastewater treatment facility will contaminate the Edwards Aquifer.

Gallagher Cattle and Gallagher Partners provided a report prepared by Dr. George Veni "Environmental Impact Assessment of City Public Service Electrical Transmission Lines Proposed for Placement in the San Geronimo Valley, Bexar and Median Counties, Texas." According to Gallagher Cattle, Dr. Veni concluded that 61,000,000 cubic meters

or 49,400 acre feet of water from the San Geronimo Valley may recharge the Edwards Aquifer.

Dr. Bob Fitzgerald stated that dye studies should be performed, before the draft permit is issued, to determine if the effluent has the potential to contaminate the Edwards Aquifer.

**Response 23.**

The effluent limits in BP's draft permit are more stringent than required by the Edwards Aquifer rules and are consistent with the effluent limits required for aquifer protection.<sup>15</sup>

The ED acknowledges that San Geronimo Creek recharges the Edwards Aquifer; a dye study is not necessary to confirm a pathway exists between San Geronimo Creek and the Edwards Aquifer.

**Comment 24.**

Gallagher Cattle stated that the proposed discharge is not compatible with the water quality management plan applicable to the Edwards Aquifer or the Edwards Aquifer recharge zone.

**Response 24.**

There is not a "water quality management plan" for the Edwards Aquifer, however, BP's proposed discharge was approved into the state Water Quality Management Plan by EPA on January 8, 2007. The recommended permit limits are consistent with the Edwards Aquifer Rules. The rules provide that new discharges or increases in discharges

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<sup>15</sup> See, 30 TAC Chapter 213 (relating to the Edwards Aquifer rules) and 30 TAC § 307.7 (relating to aquifer protection).

are prohibited on the recharge zone, and discharges upstream of the recharge zone meet different effluent limits based on the distance of the discharge to the recharge zone.<sup>16</sup> BP's proposed discharge would be more than 10 miles upstream of the Edwards Aquifer recharge zone, therefore the ED has recommended effluent limits, based on a daily average, of:

Carbonaceous Biochemical Oxygen Demand (5-day) – 10 mg/l  
Total Suspended Solids – 15 mg/l  
Ammonia Nitrogen – 3 mg/l  
Total Phosphorus – 0.5 mg/l

These limits are consistent with the Edwards Aquifer rules.<sup>17</sup>

**Comment 25.**

HCPA states that recharge of either the Edwards or Trinity aquifer is 3.5 miles from the proposed discharge location, not 11 miles as BP stated in its application.

Myfe Moore stated that that San Geronimo Creek enters a Edwards Aquifer recharge feature three miles from the proposed development.

George Rice stated that San Geronimo Creek crosses the Edwards Aquifer several miles upstream of where it is indicated in BP's application.

SGVA stated that according to an Environmental Impact Study completed by George Veni, "wastewater from the Hill of Castle Rock area will enter the recharge zone approximately four plus miles from the sewer facility rather than the 11 miles stated in BP's application."

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<sup>16</sup> 30 TAC § 213.6(a) and 30 TAC § 213.6(c)(2) .

<sup>17</sup> 30 TAC § 213.6(c)(2)

**Response 25.**

Using the official maps of the Edwards Aquifer recharge zone the ED determined that the proposed discharge is approximately 10.8 stream miles upstream of the Edwards Aquifer recharge zone.<sup>18</sup>

Additionally, the dissolved oxygen model showed that the water quality will be maintained through the pond located on BP's property and before entering San Geronimo Creek. Because the confluence of the unnamed tributary and pond with San Geronimo Creek is above any recharge to the Edwards Aquifer, the difference in stream distance on the location point of recharge was not seen as an issue.

**Comment 26.**

HCPA stated that reliable scientific studies are essential to determine the specific geographic boundaries and hydrology of the Edwards Aquifer Recharge Zone and the Carspona Region.

**Response 26.**

The regulatory boundaries used in the Edwards Aquifer program were established by the TCEQ and its predecessors using the information available at the time the maps were adopted. The primary techniques were interpretation of aerial photography, utilization of existing maps of other research organizations, and limited physical inspection or ground truthing. The boundary is interpreted from information containing varying degrees of detail, and the result is not a detailed depiction of actual field conditions at a site-specific scale of significant recharge features, which may contribute

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<sup>18</sup> The official maps of the Edwards Aquifer are located in TCEQ's main and regional offices, and in groundwater conservation district's offices.

to direct recharge. More detailed mapping efforts, refined geologic concepts, and hydrologic testing in recent years have enabled more accurate delineation of the recharge zone, affording better and more comprehensive water quality protection.

The boundaries of the regulatory zones for the Edwards Aquifer have undergone many changes as new information has been made available. Whole counties have been added (1985, 1990) and partially deleted (1986). The lines within counties have been modified with the transition zone being added (1986, 1990) and recharge zone being modified (1974, 1984, 1986, 1990, 1999). A buffer zone was established in 1970, deleted in 1974, and reestablished as the contributing zone in 1999.

The agency's official maps delineate regulatory zones for the surface area subject to regulation under Chapter 213, are referenced in the rules, and are therefore subject to rulemaking. Any additional changes to the rule would require additional rulemaking. Anyone can petition the Commission for rulemaking following the procedure in 30 TAC § 20.15.

**Comment 27.**

SGVA asked if TCEQ was aware that last year the San Geronimo Creek was dry, therefore any water entering the Edwards Aquifer recharge zone would have not been diluted.

**Response 27.**

The analysis for DO from this proposed discharge was confined to the intermittent unnamed tributary. The TCEQ is aware that due to recharge the creek in the area goes from a normally flowing watercourse, to a series of pools, to a normally dry stream bed.

**Comment 28.**

SGVA asked why TCEQ has different rules for discharges:

- three miles or less from the Edwards Recharge Zone;
- between three miles and five miles from the Edwards Recharge Zone;
- between five miles and 11 miles from the Edwards Recharge Zone; and
- more than 11 miles from the Edwards Recharge Zone.

**Response 28.**

The purpose of the Edwards Aquifer rules in 30 TAC Chapter 213 is to regulate activities having the potential for polluting the Edwards Aquifer and hydrologically connected surface streams in order to protect existing and potential uses of groundwater and maintain Texas Surface Water Quality Standards. Towards this end, all new or increased discharges of treated, other than industrial wastewater discharges, within zero to five miles upstream from the recharge zone, at a minimum, shall achieve the level of effluent treatment required by 30 TAC Section 213.6(c)(1). All new or increased discharges of treated wastewater, other than industrial wastewater discharges, more than five miles but within ten miles upstream from the recharge zone and any other discharge that the agency determines may affect the Edwards Aquifer, at a minimum, must achieve the level of effluent treatment required by 30 TAC Section 213.6(c)(2). Other specific locations of discharges, other than industrial wastewater discharges, relative to the recharge zone must comply with the effluent requirements described in 30 TAC Section 213.6(c)(3).



The effluent treatment levels specified in 30 TAC Section 213.6(c) of the Edwards Aquifer rules – for wastewater discharges that are within 5 miles and within 10 miles of the recharge zone – were not based directly on an explicit numerical analysis. However, available water quality data downstream from wastewater discharges in Central Texas streams indicate that substantial decrease of phosphorus, ammonia, and biochemical oxygen demand occurs over distances of several miles. The effluent levels that are required in 216(c) are reflective of the amount of decrease that can be expected during normal stream flows.

**Comment 29.**

Don and Margaret Christilles, Eddie Johnson, Randy Johnson and George Rice expressed concern that the discharge from BP's wastewater treatment facility will contaminate the Trinity Aquifer.

Lyndia Sachtleben expressed concern that the discharge from BP's wastewater treatment facility will contaminate the Trinity Aquifer, which is where her drinking water comes from.

**Response 29.**

A TCEQ geologist surveyed and photographed approximately 1.6 miles along an unnamed tributary from the proposed wastewater discharge outfall location to a pond area on the BP's property on November 30, 2007. The intent of the survey was to investigate and describe any features exposed at the surface that may recharge the Trinity Aquifer before any dilution of wastewater occurs. The geologist did not find any large scale or significant recharge features that would convey undiluted wastewater from the surface to

the subsurface, preventing contamination of the Trinity Aquifer. The geologist also found:

1. More pool areas containing water were identified in the site visit than were considered at the time of the Water Quality Standards permit review. The increased pool areas would have decreased nutrient concentrations from dilution over the same distance than modeling would have indicated.

2. Two areas of fractured limestone were observed exposed in the tributary bed. The areas of fractures in both locations appear to be small in width and would have the ability to convey only very minor amounts of surface water to the subsurface. The areas of fractures are in an early development of dissolution or fracture widening. The fractured limestone beds were underlain by marl that were not fractured and possessed low permeability.

3. Three drop off areas along the tributary would be waterfalls during wet weather conditions. The three waterfall areas could provide additional agitation, aeration, and oxidation of the nutrients contained in wastewater discharge and would decrease the wastewater ammonia concentrations sooner than modeling would show.

4. The size of the vegetation growth on seeps indicates that persistent discharge of water through seeps is a dominate process rather than a recharge of water into the subsurface.

5. The spring that was identified from the site visit was not considered at the time of the Water Quality Standards permit review and would have increased the dilution of the nutrients in the discharged wastewater before entering the large pond. If the permit

is issued, the spring will not be impacted because its orifice is located above the level of water from the discharge.

6. No decrease in surface water flow was noted as the tributary crossed the faulted area. The two faults did not recharge water in significant amounts from the surface downward to the subsurface.

7. The tributary empties into a large pond area. The pond appears to be deeper and larger than the volume considered in the Water Quality Standards review. The larger size of the pond would further dilute the wastewater nutrient concentration before entering San Geronimo Creek.

**Comment 30.**

Mrs. George Garza and Benjamin White stated that they are concerned about the discharge into the unnamed tributary.

Gallagher Cattle and Camille White stated that the effluent from the proposed wastewater treatment facility would contaminate surface water, and would allow degradation of the receiving waters.

**Response 30.**

The Texas Water Quality Standards require that discharges may not result in degrade the receiving waters, and may not result in situations that impair existing, attainable or designated uses, and that surface waters not be toxic to man, or to terrestrial or aquatic life.<sup>19</sup> The ED has determined that provided if BP meets its effluent limits the surface water will not be degraded.

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<sup>19</sup> 30 TAC § 307.4.

**Comment 31.**

Madelyn Schott expressed concern over the impact of the proposed discharge on the minnows in San Geronimo Creek.

Neil Hernandez stated that the existing water chemistry of San Geronimo Creek should be maintained to support a healthy aquatic ecosystem, and that the indigenous aquatic ecosystems could be modified as a result of the authorized discharge.

SGVA asked what actions would be taken to ensure the balance of aquatic life in the creek and lake remains stable.

Gary Schott and Leslie Schott stated that children like to look at the fish, minnows, turtles and birds in and around San Geronimo Creek. They stated that they are afraid that if the wastewater discharge permit is issued to BP, the creek will be ruined.

Eddie Johnson and Randy Johnson, expressed concern that the effluent from BP's wastewater treatment facility will contaminate a swimming hole on their property, rendering it useless.

Benjamin White and Camille White expressed concern that their family will not be able to use San Geronimo Creek for swimming if BP's wastewater discharge permit is issued.

Gallagher Partners and Camille White stated that the proposed discharge from BP's wastewater treatment facility would adversely affect recreation downstream of the discharge.

Martha Leatherman, James Moore and Gary Schott expressed concern that their families and friends would not be able to use the creek for swimming or fishing.

Camille White expressed concern that it would not be safe to eat fish out of the San Geronimo Creek if BP's draft permit is issued.

**Response 31.**

If BP receives its permit, the use and enjoyment of surface waters should not be negatively impacted by the discharge if it is treated according to the effluent limits in the draft permit. According to the Texas Surface Water Quality Standards (TSWQS), “[w]ater in the state shall be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water or any combination of the three.”<sup>20</sup> Additionally, “[w]ater in the state shall be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock, or domestic animals resulting from contact, consumption of aquatic organisms, consumption of water, or any combination of the three.”<sup>21</sup> The treated effluent will be disinfected to protect human health and required not to exceed a maximum chlorine residual to protect aquatic life.

**Comment 32.**

Phil and Wendy Gramm, who noted that they live approximately ten miles from the proposed wastewater treatment plant, expressed concern that they would come into contact with the contaminated water when crossing the creekbed.

**Response 32.**

The level of treatment in the draft permit is higher than secondary and disinfection of the effluent is required. Secondary treatment requires a minimum

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<sup>20</sup> 30 TAC Section 307.6 (b)(3).

<sup>21</sup> 30 TAC Section 307.6 (b)(4).

reduction of pollutants.<sup>22</sup> BP estimates that during periods without rain when there is typically no flow in the creek, the peak day flow depth just downstream from the treatment plant site would be less than three-fourths of an inch.

**Comment 33.**

GEAA stated that TCEQ should consider the risk to the receiving water of anthropogenic or emerging contaminants (including pharmaceuticals) before it issues a wastewater discharge permit to BP.

Neil Hernandez expressed concern that the proposed development will cause pesticides, salts (from water softeners), chlorine, fluoride, potassium permanganate, iodine, and many incidental contaminants (anti-freeze, VOCs, and animal waste) to enter surface water, the karst aquatic system and the public drinking water system.

Camille White expressed concern that pharmaceuticals have been found in grey water near sewage treatment plants. In support of her concern she provided a EPA paper "Emerging Contaminants in U.S. Waters" and "Prozac in the Water."

George Rice stated that the impact of all contaminants (including chlorinated organics and emergent contaminants) discharged from wastewater treatment plants should be evaluated before a permit is issued to BP.

SGVA asked if there was a plan to mitigate the effects of emerging contaminants (hormones, food additives, detergents and pharmaceutical) on the endocrine systems of aquatic creatures as well as humans.

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<sup>22</sup> 30 TAC Section 309.1(b).

Judy Casey asked what TCEQ would do about the 700 known contaminants that TCEQ does not require BP to monitor.

**Response 33.**

The EPA is investigating pharmaceutical and personal care products (PPCPs), and has stated that scientists have not found evidence of adverse human health effects from PPCPs in the environment. Detergents and disinfectants are also considered emerging contaminants for which adequate data do not exist to determine a potential environmental or public health risk.

**Comment 34.**

Gallagher Cattle stated that discharges from BP's proposed wastewater treatment facility would violate applicable water quality standards.

Ronnie Brionas stated that TCEQ should not issue a wastewater discharge permit to BP until TCEQ analyses the impact of the discharge on water quality standards.

**Response 34.**

The TSWQS require that discharges not result in degradation of receiving waters, or in situations that impairs existing, attainable or designated uses, and that surface waters not be toxic to man, or to terrestrial or aquatic life.<sup>23</sup> The effluent limits in BP's draft permit were designed to maintain a dissolved oxygen concentration of 5.0 mg/l in the downstream pond.

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<sup>23</sup> 30 TAC § 307.4(d)

The TSWQS also require that discharges not cause excessive growth of aquatic vegetation which impairs an existing, attainable or designated use.<sup>24</sup> BP's facility would be a new facility; therefore, the antidegradation policy required an evaluation of the probable effects of nutrients on surrounding aquatic ecosystems. Because of staff's concerns over very low background levels of nutrients in the region, BP's draft permit includes a total phosphorus limit of 0.5 mg/l in each phase. The response of streams similar to the unnamed tributary of San Geronimo Creek, across the uplift, due to discharges to discharges that contain nutrients orders of magnitude higher nutrient levels than is seen in natural settings, justified the imposition of the total phosphorus limit.

**Comment 35.**

SGVA asked who performed the anti-degradation review.

**Response 35.**

An antidegradation review was performed by staff of the Water Quality Standards Team, in accordance with RG-194 Procedures to Implement the Texas Water Quality Standards. Staff's review was approved by Water Quality Division management.

**Comment 36.**

SGVA asked where the anti-degradation baseline could be found.

**Response 36.**

The antidegradation review as defined in §307.5 was performed in accordance with RG-194 Procedures to Implement the Texas Water Quality Standards.

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<sup>24</sup> 30 TAC § 307.4(e)



**Comment 37.**

SGVA and Judy Casey asked what “no significant degradation of water quality” means.

**Response 37.**

Degradation “is defined as a lowering of water quality by more than a *de minimus* extent, but not to the extent that an existing use is impaired.”<sup>25</sup> The ED has determined that if the effluent is treated to the level as dictated in the draft permit, it will not cause degradation but will be protective of the uses of San Geronimo Creek.

**Comment 38.**

SGVA asked what the chances are of degradation occurring, how much degradation could occur and what could be done about it if it did occur.

**Response 38.**

The staff’s review under the Texas Water Quality Standards does consider probabilities of degradation. TCEQ’s rules prohibit discharges that degrade receiving waters, and can not result in situations that impairs existing, attainable or designated uses, and that surface waters can not be toxic to man, or terrestrial or aquatic life.<sup>26</sup>

**Comment 39.**

Gary Schott, Jennifer Schott, HCPA, William Vorhes and Ben White expressed concern over the impact of the proposed discharge on San Geronimo Creek which is used for drinking water.

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<sup>25</sup> 30 TAC § 307.5

<sup>26</sup> 30 TAC § 307.4.

William Vorhes stated that the effluent from BP's proposed wastewater treatment facility should meet drinking water standards since people drink from the San Geronimo Creek.

Gallagher Partners and Camille White, stated that the proposed discharge from BP's wastewater treatment facility would adversely affect the health of people who drink the water.

Neil Hernandez expressed concern over the impact of BP's proposed discharge on the public drinking water supply.

Myfe Moore stated that drinking water would be negatively impacted by the discharge from BP's proposed wastewater treatment plant.

**Response 39.**

TCEQ's rules prohibit discharges to surface water that result in degradation of receiving waters or result in situations that impair the existing, attainable or designated uses.<sup>27</sup> The unclassified receiving water uses are limited aquatic life uses for the unnamed tributary of San Geronimo Creek and high aquatic life uses for the unnamed lake on the tributary of San Geronimo Creek. The designated uses for Segment No. 1903 are high aquatic life uses, public water supply, aquifer protection, and contact recreation.

TCEQ's Water Quality Standards are designed to protect??? two types of domestic water supplies; public water supply and aquifer protection.<sup>28</sup> The ED is not aware of any public water supply systems along the discharge route, however at the public meeting several individuals stated that they drink untreated water from the creek.

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<sup>27</sup> 30 TAC Chapter 307

<sup>28</sup> 30 TAC § 307.7(2)

According to information from the adjacent landowners map and the Texas Water Development Board, the Schotts are upstream from the confluence of the unnamed tributary and Geronimo Creek. Because the Schotts are upstream their surface and groundwater quality would not be influenced by the proposed discharge.

**Comment 40.**

Camille White stated that the gray water from the wastewater treatment facility will not be drinkable.

**Response 40.**

Without treatment, graywater is not drinkable because it is wastewater from showers, bathtubs, handwashing lavatories, sinks that are not used for disposal of hazardous or toxic ingredients, sinks that are not used for food preparation or disposal and clothes-washing machines.<sup>29</sup> BP's draft permit does not authorize the discharge of graywater.

**Comment 41.**

GEAA stated that BP should be required to treat its effluent to drinking water standards, not recreational standards.

**Response 41.**

The discharge from BP's wastewater treatment facility would be to an unnamed tributary of San Geronimo Creek which is classified as having limited aquatic life uses, it is not designated as a public water supply. The effluent limits in BP's draft permit will

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<sup>29</sup> 30 TAC § 285.80.

protect and maintain the limited aquatic life uses of the unnamed tributary of San Geronimo Creek as well as all downstream receiving waters.

**Comment 42.**

SGVA asked if the effluent from BP's wastewater treatment facility would be drinkable.

**Response 42.**

No, the effluent from the proposed wastewater treatment facility will not be not drinkable because it will not meet the USEPA primary drinking water standards.

**Comment 43.**

Phil and Wendy Gramm, expressed concern over their groundwater. They stated that they obtain all their drinking and household water from wells.

Gallagher Cattle and Gallagher Partners stated that the effluent from the proposed wastewater treatment facility would contaminate groundwater. Gallagher Cattle also stated that they use water from two shallow wells for drinking water.

**Response 43.**

At the public meeting Gallagher indicated that the shallow water wells used for drinking water are located near San Geronimo Creek. If shallow groundwater is found to be closely connected with a surface water body, then the groundwater quality may be influenced from naturally occurring changes in surface water quality. For example storm water may have elevated bacteria levels that may affect water quality of the shallow wells. The TCEQ recommends anyone using shallow groundwater that is closely

connected to surface water, as Gallagher Ranch appears to be, to disinfect the water to treat for bacteria before human consumption.

Furthermore, the ED does not expect the proposed discharge to increase bacteria levels in the stream or ground water. This is based on several factors, including, the dilution by springs contributing flow to the unnamed tributary and pool areas on BP's property, the oxidation and aeration processes by flowing over three water fall areas on BP's property, mixing and nutrient sedimentation deposition within the large pond on BP's property, and further dilution by San Geronimo Creek, therefore, the proposed discharge is not expected to change deeper groundwater quality that exists in the Trinity or Edwards Aquifer.

**Comment 44.**

Phil and Wendy Gramm expressed concern that the proposed discharge could negatively impact the health of both their family and the wildlife on their ranch.

Gallagher Cattle stated that the discharge from BP's proposed wastewater treatment facility would create health hazards, nuisances and adverse effects to the public and environment.

Myfe Moore, Madelyn Schott and Gallagher Partners expressed concern over the impact of the proposed discharge on wildlife that drink the water.

Gary Schott, Jennifer Schott and Madelyn Schott expressed concern over the impact of the proposed discharge on livestock that drink the water.

Judy Casey expressed concern that prolonged consumption of treated effluent by humans will produce chronic illnesses or death.

Betty Lou Jonas expressed concern over the impact of the proposed discharge on fish and wildlife that drink out of the San Geronimo Creek.

Martha Leatherman and James Moore, stated that their wildlife management program is based on the San Geronimo Creek being a pure water supply for the abundant wildlife on their property.

**Response 44.**

The proposed permit was drafted in accordance with 30 TAC Chapter 307, Texas Surface Water Quality Standards, and "Procedures to Implement the Texas Surface Water Quality Standards," January 2003 (Implementation Procedures). The TCEQ rules state that surface waters cannot be made toxic to aquatic or terrestrial organisms.<sup>30</sup> While these rules and the Implementation Procedures do not specifically designate criteria for the protection of livestock, they do designate criteria for the protection of aquatic life and human health. Those criteria should also prevent impacts to the health and performance of livestock.

The Texas Parks and Wildlife Department is the state agency that oversees and protects wildlife and their habitat. It can be contacted by calling 800-792-1112 or at by mail at 4200 Smith School Road, Austin, Texas 78744. The Texas Parks and Wildlife Department received notice of BP's permit application.

**Comment 45.**

Neil Hernandez expressed concern that the indigenous aquatic ecosystems could be modified as a result of storm water runoff.

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<sup>30</sup> 30 TAC § 307.4(d).

HCPA and SGVA stated that storm water will contain garbage, pesticides, fertilizers and other hazardous materials.

SGVA also stated that because the development would have more than 19% impervious cover storm water will change the flood plain.

**Response 45.**

Storm water is not within the scope of the proposed TPDES wastewater discharge permit. Storm water, if regulated, would fall under the TCEQ TPDES Storm Water Permitting Program. Technical questions relating to the Storm Water Management Program can be obtained by calling 512-239-4671 or via email at [swgpp@tceq.state.tx.us](mailto:swgpp@tceq.state.tx.us).

**Comment 46.**

Neil Hernandez expressed concern that rainfall will be captured by retention ponds, rather than recharging the aquifer.

**Response 46.**

The permit application for wastewater discharge does not include proposals for retention ponds to treat wastewater. The developer may add amenity ponds, provided it obtains all necessary authorizations.

**Comment 47.**

Commissioner Harris expressed concern that Bandera County has not approved the plat for the proposed development.

**Response 47.**

The administrative and the technical reviews do not require an approved plat for the development because the permit application covers only the treatment and disposal of

wastewater generated from the proposed development. The draft permit is not for the actual development, but is an authorization to discharge treated wastewater.

**Comment 48.**

SGVA asked if BP made false claims in its application for a wastewater discharge permit.

**Response 48.**

BP, through its consulting engineer, certified that the information submitted in the permit application is true, accurate and complete. The ED has no information that BP made a deliberate attempt to deceive with the information submitted. If there was missing or unclear information noted during the review process, the additional information was requested from BP. Additionally, the draft permit provides that “after notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

- i. Violation of any terms or conditions of this permit;
- ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.”

**Comment 49.**

SGVA stated that BP’s application is inaccurate because in the Domestic Technical Report 1.1, Attachment, Section B, dated August 21, 2006, BP indicated hat



628 lots will be occupied by year 4, but on the next page BP indicates 789 lots will be occupied by year 4.

**Response 49.**

The development schedule shows that 798 units will be finished in year 5.

**Comment 50.**

Aileen Fitzgerald stated that BP's application was incorrect. According to Aileen, the nearest water intake is three or four miles from the proposed discharge location, not five miles as reported in the application.

**Response 50.**

The map with the TCEQ Water Rights Permits Team indicates a water intake for irrigation at another tributary of the San Geronimo Creek. This intake is upstream of the confluence of the tributary where the proposed discharge point is located and the tributary where the intake is located. The intake is around four stream miles from the proposed discharge location.

**Comment 51.**

SGVA stated that BP's application misstated that April 11, 2006 is indicative of "normal dry weather."

**Response 51.**

For the purpose of recommending oxygen demanding effluent limits, all discharge permits in the state are evaluated under critical conditions of low flow and high temperature.

**Comment 52.**

SGVA stated that BP's application is inaccurate because the application does not state that San Geronimo Creek is within three miles of the discharge.

**Response 52.**

Maps in the permit application identify the discharge as 2.3 miles upstream of San Geronimo Creek.

**Comment 53.**

SGVA stated that BP's application is inaccurate because the application does not state that unnamed tributary flows directly into the San Geronimo Creek less than a mile from the pond.

**Response 53.**

Aerial photography identifies an impoundment (unnamed lake) on the discharge route of the unnamed tributary, approximately 0.6 miles upstream of San Geronimo Creek.

**Comment 54.**

Representative Leibowitz, Ronnie Brionas, Mark Boucher, GEAA, Chris Hill, Myfe Moore, Neil Hernandez, Fidel Ramirez, Gary Schott, Leslie Schott and William Voorhees, expressed general opposition to BP's draft permit.

**Response 54**

The ED appreciates the concern expressed regarding this permit. The ED evaluates an application in light of the statutory and regulatory requirements applying to TPDES permits. It is staff's opinion that the application meets these requirements.

**Comment 55.**

SAWS stated that before the TCEQ can issue a permit to BP, the ED should determine if it would be appropriate for SAWS to serve the development. SAWS stated that it can provide retail sewer utility service to the proposed area, which would be consistent with its overall plan to provide retail sewer service throughout San Antonio's extra-territorial jurisdiction (ETJ). SAWS also stated it would be inconsistent with the Commission's policy of regionalization if TCEQ were to issue a permit to BP.

**Response 55.**

BP indicated that it was in consultation with the SAWS regarding the proposed wastewater treatment facility.<sup>31</sup> The administrative report of the permit application states "[w]e are pursuing an agreement with SAWS for them to take over ownership and operation of the facility once it is operational."

**Comment 56.**

SAWS stated that before BP could operate the proposed wastewater treatment facility as a retail sewer utility it would have to obtain a Certificate of Convenience and Necessity (CCN). To obtain a CCN within San Antonio's extraterritorial jurisdiction, BP would have to have San Antonio's consent.

George MacRossin, SGVA asked if TCEQ was aware that TCEQ's water quality staff is protesting SAWS CCN application on its own motion.

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<sup>31</sup> See letter dated October 27, 2006

**Response 56.**

In a letter to BP dated September 5, 2006, the TCEQ Utilities and Districts Section acknowledged BP's withdrawal of its water and sewer CCN applications. According to TCEQ's letter BP was withdrawing its applications because it is working with SAWS to acquire water and/or sewer services for the requested area.

**Comment 57.**

Phil and Wendy Gramm expressed concern that if San Geronimo Creek rises due to the extra flow from BP's wastewater treatment plant, their only means of access to their home could be hindered.

**Response 57.**

BP estimates that the effect of peak discharge from the proposed wastewater treatment facility during dry weather would only add 0.68 inch extra water to the creek, however, the increase in water in the receiving water is not part of TCEQ's evaluation of an application for a wastewater discharge permit.

**Comment 58.**

Neil Hernandez stated that TCEQ does not have the information to predict the results of the proposed discharge or a catastrophic spill.

**Response 58.**

The draft permit prohibits unauthorized discharges. An unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of the draft permit. The proposed MBR wastewater treatment facility will have an

equalization basin and additional storage tankage for future units, which could be used to store wastewater for subsequent treatment should there be a disruption in the treatment process.

An analysis of the discharge was conducted using an uncalibrated QUAL-TX model for an effluent flow of 0.225 million gallons per day (MGD). Headwater flow of 0.0 cubic feet per second (cfs) for the unnamed tributary was used in the model. Based on the model results, the proposed effluent set of 10 mg/l CBOD5, 3 mg/l NH3-N and 4 mg/l DO is adequate to maintain the 3.0 mg/l DO criterion of the unnamed tributary and the 5 mg/l DO criterion of the unnamed lake. In addition, the operation and maintenance manual for the facility will address emergency operation plan for site-specific emergency situations that may develop.

**Comment 59.**

Ron Green, Myfe Moore, and SGVA stated that TCEQ should consider the potential impact of the entire development before issuing a wastewater discharge permit to BP. Neil Hernandez expressed concern over abuse of private property rights by developers in environmentally sensitive areas.

Camille White stated that it is irresponsible for the developer to build an entire city inside a rainwater collection system.

Neil Hernandez expressed concern over the destruction of the last pristine region in Bexar County. SGVA stated that TCEQ should require developments blend in with the existing landscape.

Aileen Fitzgerald stated that she does not think two homes per acre qualifies as low density housing. GEAA and Myfe Moore, stated that the proposed high density development is inappropriate for the site. Madelyn Schott asked why the Medina County requirement of one house to 1.5 acres does not apply to this proposed development.

Myfe Moore stated that the people in the area don't want the proposed development to be built.

HCPA requested a moratorium on any type of construction in the San Geronimo watershed.

**Response 59.**

The administrative and the technical reviews for a wastewater discharge permit do not require an evaluation of the impact of the proposed development because the permit application covers only the treatment and disposal of wastewater generated from the proposed development. The draft permit is not for the development, but is an authorization to discharge treated wastewater. Any concerns with the proposed development itself should be addressed with the appropriate local governmental entity.

**Comment 60.**

Neil Hernandez stated that TCEQ should conduct various studies before it issues a wastewater discharge permit to BP. According to Neil, the studies should include:

- an ecological and hydrological investigation before it issues a permit to BP;
- an identification of critical habitat areas and major recharge features;
- an identification of groundwater flow paths and durations;

- a review of the effect of placing residential sewer lines less than four inches above shallow subterranean streams and shallow water tables

Judy Casey asked if there were any studies to predict the behavior of heavy gases produced from this project combined with all other heavy gas producing sources within the San Geronimo watershed and what are the potential injuries that may occur from exposure to those gases on very calm temperature inverted days.

**Response 60.**

The TCEQ rules do not require applicants for wastewater treatment plants, such as BP, to submit ecological, hydrological or groundwater flow studies. The Executive Director has authority to request additional information, if the additional information is reasonably required in order for the Executive Director to ascertain if the facility will be constructed according to the applicable statutes and rules.<sup>32</sup> In this case, however, the Executive Director's staff determined that additional information, as suggested by the protestants, is not necessary.

A review of the sewer line design is not a part of the permit review process, however the sewer lines must comply with TCEQ's rules and any additional county rules.<sup>33</sup>

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<sup>32</sup> 30 TAC § 305.48(3).

<sup>33</sup> See 30 TAC Chapter 317.

**Comment 61.**

Neil Hernandez expressed concern over integrating sewer and drinking water systems. SGVA asked why TCEQ will authorize a sewer plant to be integrated with a public water supply without considering the cumulative effects.

**Response 61.**

TCEQ's rules require water lines and sewer lines be separated to prevent cross-contamination. Specifically:

Protecting public water supply. Water lines and sanitary sewers shall be installed no closer to each other than nine feet between outside diameters. Where this cannot be achieved, the sanitary sewer shall be constructed in accordance with §317.13 of this title (relating to Appendix E--Separation Distances) and §290.44(e)(1) of this title (relating to Water Distribution). Separation distances between sanitary sewer systems and water wells, springs, surface water sources, and water storage facilities shall be installed in accordance with the requirements of §§290.41(c)(1), (d)(1), (e)(1)(C), (e)(3)(A), and §290.43(b)(3) of this title (relating to Water Sources and Water Storage), as appropriate. Where rules governing separation distance are in conflict, the most strict rule shall apply. No physical connection shall be made between a drinking water supply, public or private, and a sewer or any appurtenance. An air gap of a minimum of 18 inches or two pipe diameters, whichever is greater, shall be maintained between all potable water outlets and the maximum water surface elevation of sewer appurtenances. All appurtenances shall be designed and constructed so as to prevent any possibility of sewage entering the potable water system.<sup>34</sup>

**Comment 62.**

Neil Hernandez commented that TCEQ should estimate the effluent loss from leaks or ruptured sewer lines at 25, 50 and 100 year intervals in karst areas.

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<sup>34</sup> 30 TAC § 317.2(a)(7).



**Response 62.**

The draft permit prohibits unauthorized discharges. An unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of the draft permit.

**Comment 63.**

Martha Leatherman, James Moore, Madelyn Schott, Gallagher Partners, Benjamin White, Camille White, SGVA, and Petitioners expressed concern over odor from BP's wastewater treatment plant. Specifically, SGVA asked what would be done to control or abate the odors and how close homes would be built to the wastewater treatment plant.

**Response 63.**

BP will meet the buffer zone required to abate and control nuisance odors by locating the proposed wastewater treatment units no closer than 150 feet to the nearest property line.<sup>35</sup> Therefore, homes cannot come closer than the BP's property line or 150 feet to the treatment units.

In addition, the proposed wastewater treatment system is an aerobic system. An aerobic system uses oxygen from the air to reduce the organic content of the wastewater. Oxygen likewise turns sulfide compounds (the most common odor-causing compounds) into odorless sulfates. Wastewater without dissolved oxygen can also produce offensive odors. The draft permit requires that the effluent contain a minimum of 4.0 mg/l dissolved oxygen.

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<sup>35</sup> 30 TAC Section 309.13(e)(1).

**Comment 64.**

Martha Leatherman and James Moore commented that the rise in the level of the creek will erode the surrounding land.

**Response 64.**

BP estimates that the effect of peak discharge from the proposed wastewater treatment facility on a 25-year flood level would only add 0.0168 inch of depth to the creek. Further, the proposed final phase flow of 225,000 gallons per day is equal to 0.35 cubic feet per second. This flow will result in a velocity, 0.04 feet per second, that is less than the minimum scouring velocity in the design of sewer line, i.e., two feet per second. The flow is therefore not anticipated to contribute to erosion.

**Comment 65.**

Gallagher Cattle stated that BP's proposed permit should be denied because it does not comply with agency rules.

Judy Polk stated that the permit should be denied since TCEQ does not have adequate funding to protect the environment.

Myfe Moore stated that the TCEQ should be sued if it grants BP's permit request. Neil Hernandez stated that TCEQ does not have any legitimate reason to issue the wastewater discharge permit to BP and Beth Schott requested that TCEQ go over and beyond its standards before it issues a permit to BP.

Judy Casey asked why TCEQ allows creeks and aquifers to be polluted, even if the law allows it.

**Response 65.**

The legislature created the TCEQ as the agency with primary responsibility for implementing the constitution and laws of Texas relating to the conservation of natural resources and the protection of the environment.<sup>36</sup> The legislature also authorized TCEQ to issue permits for the discharge of waste or pollutants into or adjacent to water in the state.<sup>37</sup> As part of TCEQ's legislative mandate, it has adopted rules regarding permits for the discharge of waste into water in the state.<sup>38</sup>

After evaluating BP's application, all applicable rules and statutes, all additional information from the comments, public meeting, and site visit, the ED has determined that the draft permit will be protective of the environment and complies with all applicable TCEQ statutes and rules.

**Comment 66.**

Martha Leatherman, James Moore, Neil Hernandez and SGVA stated that the effluent from BP's wastewater treatment facility will have a high salt content because water from the Cow Creek Aquifer is very hard, so the residents of the development will have to use water softeners.

**Response 66.**

The permit application does not include or require information on the water supply for the development, because it is an application for authorization to discharge treated wastewater.

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<sup>36</sup> TWC Section 5.012

<sup>37</sup> TWC Section 27.027.

<sup>38</sup> TWC Section 5.103

**Comment 67.**

Jennifer Schott, expressed concern that because the proposed development will use well water and deplete the aquifer, her well could run dry.

Camille White, SGVA, and Petitioners expressed concern of the depletion of the Trinity and Edwards Aquifers. Neil Hernandez expressed concern over the depletion of the Cow Creek Aquifer.

**Response 67.**

The permit application is not for water extraction, but for the discharge of treated domestic wastewater and therefore cannot address the depletion of the Trinity Aquifer or the Edwards Aquifer. Any water wells will be subject to local regulation; BP may be required to obtain separate authorization for any water wells.

**Comment 68.**

Camille White and Leslie Schott stated that septic tanks would be better for the development than the proposed wastewater treatment plant.

**Response 68.**

Wastewater treatment plants typically provide superior treatment of raw sewage than septic tanks. To meet its effluent limits, BP's wastewater treatment facility will have to provide secondary treatment involving disinfection. For a proposed development of this type, a wastewater treatment facility will provide a higher level of environmental protection than septic tanks.

**Comment 70.**

Camille White and the Petitioners expressed concern that if San Geronimo Creek floods, the flood water will be contaminated.

**Response 70.**

River floods usually result from heavy rains where soil and vegetation cannot absorb all water. The water then runs off the land in quantities that cannot be carried in the stream channel or kept in natural ponds or man-made reservoirs. The flood water is contaminated by the materials (pesticides, herbicides, animal waste) that it carries as it passes over land. The draft permit requires that the proposed treatment facility be protected from a 100-year flood event. Consequently, the facility is expected to operate properly and meet its effluent limits even during flood events.

**Comment 71.**

Camille White expressed concern over air contaminants.

**Response 71.**

TCEQ is the agency responsible for enforcing air pollution laws. The Texas Clean Air Act provides that certain facilities may be exempt from the requirements of an air quality permit if, upon review, it is found that those facilities will not make a significant contribution of air contaminants to the atmosphere and that human health and the environment will be protected. According to the TCEQ rules,<sup>39</sup> wastewater treatment plants have undergone this review and are permitted by rule, provided the wastewater treatment facility only performs the functions listed in the rule.

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<sup>39</sup> 30 TAC § 106.532.

**Comment 72.**

Camille White and Neil Hernandez expressed concern over the protection of archaeological digs.

**Response 72.**

The Texas Historical Commission is the state agency dedicated to the historical preservation of Texas' architectural, archaeological and cultural landmarks. Notice regarding the permit application has been sent to the Texas Historical Commission. TCEQ has not received any comments from the Texas Historical Commission.

**Comment 73.**

Camille White stated that the psychological impact of being forced to drink gray water because it has been discharged into a creek is huge. She stated that the mere thought of raw sewage with all its E-coi bacteria, urine and other contaminants, going in one end of a sewage facility and coming out the other end being safe enough to drink is unimaginable.

**Response 73.**

The effluent from the wastewater treatment facility will not be not drinkable without additional treatment. However, the discharge must comply with the Texas Surface Water Quality Standards which are designed to protect water quality in the receiving stream.

**Comment 74.**

HCPA asked what type of water will be treated and what the chemical composition of the water would be.

**Response 74.**

The wastewater to be treated will be domestic wastewater. Its composition will be waste from households, such as waste from laundry, sinks, showers, and toilets.

**Comment 75.**

HCPA and SGVA asked why the draft permit would authorize the discharge of 225,000 gallons per day when, according to HCPA, the development will discharge at least 1,000,000 gallons per day. Mary Walpole asked if the discharge of 225,000 gallons per day would be sufficient when all the homes are built, or if BP will have to amend its permit every few years.

**Response 75.**

A revised wastewater generation projection was submitted by BP on October 31, 2006. The projection shows that the proposed final phase flow of 0.225 MGD will be reached about five years from the start of the development. Amending the permit will be BP's decision; however whenever the flow for any domestic sewage treatment facility reach 75 percent of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion or upgrade of its wastewater treatment or collection facilities.<sup>40</sup>

**Comment 76.**

HCPA asked if BP's proposed wastewater treatment facility would be built too close to the flood plain.

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<sup>40</sup>30 TAC § 305.126.

SGVA asked if the MBR (where raw sewage is stored) will be eight feet above the 100 year flood plain and if storm water would ever enter the MBR.

**Response 76.**

BP clarified that based on the current update of the Flood Insurance Rate Map (FIRM), revised as of June 29, 2007, the proposed buffer zone for the treatment facility would be outside of the 100-year flood event. BP also stated that the proposed wastewater treatment facility would be well above the 100-year flood plain.

The proposed collection system is a sanitary sewer system and not a combined or storm water system. Consequently, storm water should not enter the MBR system. BP clarified that a small component of the flow to the facility during a storm event would originate from storm water, contributing to peak flow. The MBR is designed to handle peak flows.

**Comment 77.**

Beth Schott stated that if the permit is issued the wastewater treatment facility should be manned 24/7.

**Response 77.**

TCEQ's rules require owners to employ licensed wastewater operators and the chief operator of each facility is required to hold a specific level of license based on the type of treatment and permitted daily average flow. In this case BP's proposed facility must be operated by an operator holding a Category C license or higher.<sup>41</sup> The operator must be present at the facility a minimum of five days per week and must be available by

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<sup>41</sup> 30 TAC § 30.350(e).



phone or pager seven days per week. The amount of time per day that the operator is required to be onsite is not stipulated in the rules and an operator is not required to be onsite 24 hours a day.

**Comment 78.**

Mary Walpole asked who owns the unnamed lakes on the discharge route, if the lakes will collect sediment, what the lakes will be used for and if they will be fenced.

**Response 78.**

The unnamed lakes on the discharge route are considered to be water in the state and are subject to protection under the Texas Surface Water Quality Standards. Lakes are by definition a standing body of water, and thus tend to be depositional environments. BP's draft permit does not require the lakes to be fenced; TCEQ is unaware of any landowner intending to fence the unnamed lakes.

**Comment 79.**

Mary Walpole asked if the flood maps are the old flood maps or the new ones that Pat Brauner is working on.

**Response 79.**

BP clarified, in letter dated October 10, 2007, that it is using the Flood Insurance Rate Map (FIRM), revised as of June 29, 2007.

**Comment 80.**

Mary Walpole asked how much sewage is discharged in Medina County and if there is a limit to the amount of sewage that TCEQ will authorize to be discharged.

**Response 80.**

The TCEQ does not authorize the discharge of raw sewage; rather it authorizes the discharge of treated effluent. The ED evaluates the cumulative effects of current “loading” of the receiving water for each application for a wastewater discharge permit. The BP discharge would be the first discharge in this area, thus currently there is no load in San Geronimo Creek. The amount of discharge that TCEQ will authorize to any given receiving water depends on a variety of factors, including the flow of the receiving water, the uses of the receiving water, the nature of the discharge and the volume of the discharge.

**Comment 81.**

Gallagher Cattle asked if TCEQ had requested input from San Antonio and the Edwards Aquifer Authority on BP’s draft permit.

**Response 81.**

The Manager of the San Antonio Water System, the General Manager of the San Antonio River Authority, the Mayor of San Antonio, the Health Official for the City of San Antonio and the Edwards Aquifer Authority are all included on the mailing list. The San Antonio Water System provided comments on the draft permit, however none of the other entities commented on it.

**Comment 82.**

Jim Hannah asked how many violations TCEQ has identified in the past five years, the amount of the fines and the percentage of the fines that have been collected to date.

**Response 82.**

BP's proposed facility is not yet constructed; therefore TCEQ has not assessed any fines against that plant.

**Comment 83.**

Gallagher Ranch stated that it would analyze water, using established analytical protocols, from the San Geronimo Creek.

**Response 83.**

Citizens may gather data to show that a permittee is not in compliance with TCEQ rules. For more information on citizen collected evidence, please see

[http://www.tceq.state.tx.us/compliance/complaints/protocols/cvi\\_proto.html](http://www.tceq.state.tx.us/compliance/complaints/protocols/cvi_proto.html)

**Comment 84.**

SGVA asked what safeguards would be used to ensure BP's wastewater treatment facility does not release raw sewage due to the wastewater treatment facility malfunctioning due to flooding, lightning strikes, manmade disasters or economic considerations.

Petitioners expressed concern that raw sewage would be released if BP's wastewater treatment facility malfunction.

**Response 84.**

The proposed MBR wastewater treatment facility will have an equalization basin and additional storage tankage for future units which could be used to store wastewater for subsequent treatment should there be a disruption in the treatment process. Furthermore, BP is proposing to provide a back-up electric power generator that would

activate on loss of power. In addition, the operation and maintenance manual for the facility will address emergency operation plan for site-specific emergency situations that may develop. The Design Criteria for Sewerage Systems in 30 TAC Chapter 317 does not include economic considerations in wastewater treatment facility design.

**Comment 85.**

SGVA asked if TCEQ was aware the location proposed by BP for the wastewater treatment facility was under water on August 16, 2007 (Tropical Storm Erin).

**Response 85.**

According to TCEQ's rules "[a] wastewater treatment facility unit may not be located in the 100-year flood plain unless the facility unit is protected from inundation and damage that may occur during that flood event."<sup>42</sup> The information regarding the impact of Tropical Storm Erin has been forwarded to BP for its consideration in the final facility design.

**Comment 86.**

SGVA asked where the 500-year flood plain is.

**Response 86.**

BP indicated that the 500-year flood plain is not indicated in the current FIRM map.

**Comment 87.**

SGVA asked several questions regarding BP's Contributing Zone Plan:

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<sup>42</sup> 309.13(a).

1. Why TCEQ has different rules for developments with 20% or less impervious cover and those with more than 20% impervious cover in the Edwards contributing zone.
2. What the differences are in TCEQ's rules for developments with 20% or less impervious cover and those with more than 20% impervious cover in the Edwards contributing zone.
3. What costs are associated with constructing the detention ponds that are required for developments over the Edwards Aquifer contributing zone.
4. Would BP be subject to criminal penalties for providing false information in its application that caused massive flooding and drowning in the San Geronimo Valley.
5. SGVA asked what would happen if the actual impervious cover exceeded the 20% limit at build out.
6. What percentage of actual impervious cover has been calculated for the Hills of Castle Rock when all of the development, including the retail, school, commercial, fire department, and emergency services are included in the calculation.

**Response 87.**

A Contributing Zone Plan (CZP) is a separate authorization from a wastewater discharge permit and is not part of the wastewater permit process. The purpose of a CZP is to regulate activities that have the potential to pollute surface streams which recharge the Edwards Aquifer and to protect the existing and potential uses of the Edwards

Aquifer.<sup>43</sup> The purpose of a wastewater discharge permit is to regulate the discharge of pollutants into or adjacent to water in the state.<sup>44</sup>

**Comment 88.**

SGVA asked what the TCEQ's mission statement is.

**Response 88.**

The TCEQ's mission statement is "[t]he Texas Commission on Environmental Quality strives to protect our state's human and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste."<sup>45</sup>

**Comment 89.**

SGVA asked if TCEQ had ever denied a permit for a wastewater treatment plant.

**Response 89.**

TCEQ does not deny many wastewater treatment facility permits because most applicants choose to withdraw their applications if the ED has environmental concerns that cannot be resolved. Since the ED's staff has drafted this proposed permit, staff has determined that the draft permit meets all statutory and regulatory requirements. The draft permit could be revised if new information is received at a contested case hearing.

**Comment 90.**

Judy Casey asked which TCEQ evaluates first: proof that water is available for a proposed development, or an application for a wastewater discharge permit.

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<sup>43</sup> 30 TAC § 213.20

<sup>44</sup> TWC § 26.027

<sup>45</sup> <http://www.tceq.state.tx.us/about/mission.html>

**Response 90.**

Availability of water for the proposed development is not part of the permit application or a consideration in the permit processing for a wastewater discharge permit.

**Comment 91.**

Judy Casey asked if neighboring residents have the right to prevent 1,000,000 gallons of contaminated water from being discharged into creeks and aquifers.

**Response 91.**

TCEQ's rules provide a variety of mechanisms for public involvement in the permitting of wastewater treatment plants. First, the public has an opportunity to comment on all proposed draft wastewater permits during the public comment period. Second, the public may request reconsideration of the commission decision or request a contested case hearing.<sup>46</sup> Third, anyone may contact the TCEQ either at 1-888-777-3186 to reach the appropriate TCEQ region office or by e-mail at [cmplaint@TCEQ.state.tx.us](mailto:cmplaint@TCEQ.state.tx.us) to express concerns over the operation of an existing wastewater treatment plant. Finally, citizens may gather data to show that a permittee is not in compliance with TCEQ's rules. For more information on citizen collected evidence, please visit the TCEQ web site at <http://www.tceq.state.tx.us/compliance/complaints/>.

**Comment 92.**

Judy Casey asked if it is better to use treated effluent for landscape irrigation or for drinking.

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<sup>46</sup> 30 TAC Section 55.201

**Response 92.**

There are different sets of regulations that apply to the stated uses. The permittee has the option to use the effluent for depending on its needs, and ability to meet the regulations.

**Comment 93.**

Judy Casey and Neil Hernandez stated that the cumulative affect of the proposed discharge should be considered before TCEQ issues a wastewater discharge permit to BP.

**Response 93.**

Cumulative loadings from all point sources are routinely evaluated for impacts to a receiving water body. The full permitted flow of the discharge is evaluated before the ED makes his recommendation. In this case BP is the only point source discharger in the watershed of the unnamed tributary and San Geronimo Creek. Total Maximum Daily Load (TMDL) evaluations that include all point and non-point source loadings are generated for watersheds that are on the State's inventory of impaired water bodies, the 303(d) list. The Medina River (Segment 1903) and its sub-watersheds are not listed as impaired.

**Comment 94.**

Neil Hernandez asked what the effect the effluent from the proposed wastewater treatment facility will have on the Eastern Medina Storage Unit.



**Response 94.**

No significant recharge features were found on the BP's property so no recharge specifically from effluent to the Eastern Medina Storage Unit is expected.<sup>47</sup> The treated effluent combined with the dilution contributed by San Geronimo Creek, considering evaporation and transpiration, is expected to add an unknown amount of recharge to the Eastern Medina Storage Unit (as Eastern Medina Storage Unit is identified in the USGS Water-Resources Investigations Report 00-4148).

**Comment 95.**

Myfe Moore stated that the proposed permit should be denied because TCEQ does not have sufficient staff to enforce its rules.

**Response 95.**

TCEQ regional offices conduct both periodic inspections and inspections based on complaints received. If a permit is issued, to report complaints about the plant, please contact the TCEQ at 1-888-777-3186 to reach the appropriate TCEQ regional office or by e-mail at [complaint@TCEQ.state.tx.us](mailto:complaint@TCEQ.state.tx.us). Noncompliance with TCEQ rules or the permit may result in an enforcement action.

**Comment 96.**

Commissioner Harris stated that the hill country would not recover from the destruction caused by additional runoff of floodwaters from the proposed development; Mark Boucher and GEAA expressed concern over downstream flooding.

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<sup>47</sup> The Eastern Medina Storage Unit is a fault bounded and treated like a segregated block of Edwards Aquifer

**Response 96.**

The permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes and coastal waters. The draft permit includes effluent limits and other requirements that BP must meet even during rainfall events and periods of flooding. TCEQ does not have jurisdiction to address flooding issues in the wastewater permitting process. PB indicates the facility is located above the 100-year flood plain. For flooding concerns, please contact the local floodplain administrator for this area. If you need help finding the local floodplain administrator, please call the TCEQ Resource Protection Team at 512/239-4691.

**Comment 97.**

Jerry Day, Camille White and Neil Hernandez expressed concern over endangered species. Neil Hernandez also expressed concern over the disruption of wildlife corridor and over the introduction of non-indigenous plants and animals.

**Response 97.**

The Texas Parks and Wildlife Department is the state agency that oversees and protects wildlife and their habitat. It can be contacted by calling toll free 800-792-1112 or at 4200 Smith School Road, Austin, Texas 78744. The US Fish and Wildlife Service has jurisdiction over endangered species, more information on endangered species can be found at <http://www.fws.gov/endangered/>. Both agencies received notice of this application.

TCEQ staff performs a limited review regarding endangered aquatic dependent species. TCEQ staff determined that no priority watershed of critical concern has been identified in Segment No. 1903. However, the facility associated with this permit action is located within the San Geronimo Creek subwatershed of Segment No. 1903, and is located within the Edwards Aquifer contributing zone. San Geronimo Creek headwaters originate in northeast Medina County and flows across the Edwards Aquifer contributing and recharge zones. Thus, Texas Wild Rice (*Zizania texana*), Peck's Cave Amphipod (*Stygobromus pecki*), Comal Springs Dryopid Beetle (*Stygoparnus comalensis*), Comal Springs Riffle Beetle (*Heterelmis comalensis*), Fountain Darter (*Etheostoma fonticola*), San Marcos Gambusia (*Gambusia georgei*), Texas Blind Salamander (*Eurycea rathbuni*), and the San Marcos Springs Salamander (*Eurycea nana*), all potentially occur within the watershed due to recharge features of the Edwards Aquifer.

The administrative and the technical reviews for a wastewater discharge permit do not require an evaluation of the impact of the proposed development because the permit application covers only the treatment and disposal of wastewater generated from the proposed development. The draft permit is not for the development, but is an authorization to discharge treated wastewater. It is BP's responsibility to ensure that all necessary permits are obtained.

**Comment 98.**

HCPA and SGVA asked who was going to provide water to BP's development; Judy Casey asked if there is an endless supply of water.

**Response 98.**

Applicants are not required to provide information regarding the water supplier in an application for a wastewater discharge permit.

**Comment 99.**

SGVA asked what TCEQ's position is on the correlation to subdivision density and risks to public health and ecology.

**Response 99.**

TCEQ does not have a position on the correlation to subdivision density and risks to public health and ecology.

**Comment 100.**

Judy Casey asked if developers have more rights than taxpayers.

**Response 100.**

All private and corporate citizens have the same rights in the wastewater permitting process. To ensure that the public has an opportunity to participate, TCEQ's rules provide a variety of mechanisms for public involvement in the permitting of wastewater treatment plants. First, the public has an opportunity to comment on all proposed draft wastewater permits during the public comment period according to TCEQ rules in 30 TAC Section 55.152. Second, the public may request reconsideration of the ED's decision or request a contested case hearing according to the rules in 30 TAC Section 55.201. Third, anyone may contact the TCEQ either at 1-888-777-3186 to reach the appropriate TCEQ region office or by e-mail at [complaint@TCEQ.state.tx.us](mailto:complaint@TCEQ.state.tx.us) to express concerns over the operation of an existing wastewater treatment plant. Finally, citizens may gather data to show that a permittee is not in compliance with TCEQ's rules.

For more information on citizen collected evidence, please go to the TCEQ web site at <http://www.tceq.state.tx.us/compliance/complaints/>.

**Comment 101.**

Martha Leatherman and James Moore, stated that they are concerned that their property values will decrease as a result of BP's wastewater treatment plant.

Myfe Moore and Comissioner Harris, expressed concerns over the additional traffic that the proposed development would generate.

SGVA expressed concern over trucks transporting chlorine to the wastewater treatment facility since Bandera Road is not an approved truck route.

SGVA asked if TCEQ was aware that BP had drilled several wells on its property without obtaining the necessary permits.

Neil Hernandez expressed concern over SAWS practice of filling cave entrances with concrete.

SGVA asked why every aquatic system below a SAWS wastewater treatment facility fails to meet recreational use because of high bacteria levels or high dissolved oxygen levels.

**Response 101.**

Texas Water Code Chapter 26 and applicable wastewater regulations do not authorize the agency to consider traffic, truck routes, activities of other entities, or property values when reviewing a permit application.

**Comment 102.**

Neil Hernandez stated that the permit should not be granted based on economic factors.

Gary Schott asked who would pay for the new drinking water system and the new bridge he would have to install if the permit is issued.

Neil Hernandez stated that it will cost the taxpayers millions of dollars to clean up the mess that will be caused by the discharge from the wastewater treatment plant.

Gallagher Cattle stated that BP's proposed permit is inadequate because it fails to provide for compensation to or indemnification of adversely affected parties in the event that they are damaged by the discharge of sewage effluent into the San Geronimo Creek.

Judy Casey asked if TCEQ has a plan to restore the aquatic system after a catastrophic spill.

**Response 102.**

If issued, BP's wastewater discharge permit will not authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. Violations of personal rights, including damages, must be addressed through civil proceedings. Anytime anyone has a concern over any wastewater treatment facility they may contact the TCEQ Region 13 Office at (210) 490-3096 or toll free at (888) 777-3186.

**CHANGES MADE TO THE DRAFT PERMIT IN RESPONSE TO COMMENT**

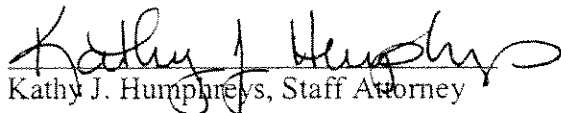
No changes to the draft permit have been made in response to public comment.

Respectfully submitted,

Texas Commission on Environmental Quality

Glenn Shankle  
Executive Director

Robert Martinez, Director  
Environmental Law Division



Kathy J. Humphreys, Staff Attorney

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REPRESENTING THE  
EXECUTIVE DIRECTOR OF THE  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALIT

# ATTACHMENT A



**PETITION**

Berger, J.	Light, Dale
Brightwell, Barbara	Light, Lydia G.
Brim, Robert L.	MacRoss, G.
Briseno, Monique	Martinez, Danielle
Brummett, Ed	Martinez, Erica
Burke, John	Martinez, Lydia
Callorus, Christopher	McAllen, James & Katherine
Cantu, Albert	McCormick, Babra
Casey, Judy	McDaniel, Tina
Christilles, Don	McNeel, Douglas V.
Christilles, Margaret	Moore, Mary
Concerned Citizen	Moore, Myfe
Concerned Citizen	Moreno, Josefa
Concerned Citizen	Murray, D.A.
Day, Jerry N.	Murray, Linda
Day, L.	Murry, Paul
Delgado, Alberico	Nunford, Ella J.
Dunfor, E.J.	Obiedo, Dorothy
Fowler, Cindy	Orma, Martha
Fry, Glen	Owens, Patricia
Galuon, David	Owens, Wayne
Garza, Roy	Peak, Jack
Gonzales, Charles	Pruett, Bobby
Guerra, Jesus	Reel, David R.
Haby, Curtis	Rigsby, Dolly
Haby, Shirly	Rigsby, Micahel J.
Haner, Jerome & Barbara	Rosas, Gilbert
Henley, Yolanda	Sachtleben, J.J.
Hernandez, John	Sachtleben, Lyndia
Hohmann, Shane	Schott, Beth
Hughes, Anita	Schott, Gary
Hughes, Michael	Schott, Hank
Johnson, Doris	Schott, Jennifer
Johnson, Eddie	Schott, Katie
Johnson, Randy	Schott, Luke
Johnson, Shakira	Schott, Madelyn
Jonas, Phyllis	Stalls, Madelin
Jonas, Richard	Tadter, V.
Kasper, Loretta	Tiplon, Earle
Killian, Danny	Tiplon, Linda
Killian, Kathleen	Tondre, Paul
Klien, Kaye	Touar, Roger A.
Kovleski, Ray	West, Anna M.

Kruder, Kimberly	White, Benjamin F.
Langford, Alan	White, Camille
Lancaster, Carol	White, John H.
Lancaster, Kim	White, Tuleta