

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 8, 2015

Bridget C. Bohac, Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: **Application by JPHD, Inc. for new TLAP Permit No. WQ0015201001;
TCEQ Docket No. 2015-0664-MWD**

Dear Ms. Bohac:

I have enclosed the Executive Director's Response to Hearing Request in the above-entitled matter. Please let me know if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Ashley McDonald".

Ashley McDonald, Staff Attorney
Environmental Law Division

Enclosure

cc: Mailing List

TCEQ DOCKET NO. 2015-0664-MWD

APPLICATION BY JPHD, INC.	§	BEFORE THE TEXAS COMMISSON
FOR TLAP PERMIT NO.	§	ON
WQ0015201001	§	ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR’S RESPONSE TO HEARING REQUEST

I. Introduction

The Executive Director (ED) of the Texas Commission on Environmental Quality (the TCEQ or Commission) files this Response to Hearing Request (Response) on the application of JPHD, Inc. for a new Texas Land Application Permit (TLAP) No. WQ0015201001. The Office of the Chief Clerk (OCC) received hearing requests from Eric Allmon on behalf of Hamilton Pool Road Matters, Edmond McCarthy and Robert Ayers on behalf of Shield Ranch, Inc. and Daniel Jones.

Attached for Commission consideration are the following:

- Attachment A—GIS Satellite Map
- Attachment B—Compliance History
- Attachment C—Technical Summary and Proposed Permit
- Attachment D—Executive Director’s Response to Public Comment

II. Description of the Facility

JPHD has applied to the TCEQ for a new permit that would authorize the disposal of treated domestic wastewater via a subsurface area drip irrigation system on six areas with a minimum total surface area of 104.79 acres, divided into 36 zones. The draft permit authorizes the disposal of treated domestic wastewater effluent at an average flow not to exceed 150,000 gallons per day in the Interim I phase, 300, 000 gallons per day in the Interim II phase and 450,000 gallons per day in the Final Phase. The application rate shall not exceed 0.1 gallons per square foot per day.

The effluent limitations in the draft permit are: 10 mg/l five day biochemical oxygen demand (BOD₅) and 15 mg/l total suspended solids (TSS) based on the daily average flow; and 126 colony forming units (CFU) or most probable number (MPN) of *E. coli* based on a single grab sample. Additionally, the pH shall be between 6.0 and 9.0 standard units, and the effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes. If approved, the proposed wastewater treatment facility will serve JPHD, Inc. This permit will not authorize the discharge of pollutants into water in the state.

The proposed wastewater treatment facility and disposal site will be located 3.2 miles west of the intersection of State Highway 71 and Hamilton Pool Road, on Hamilton Pool Road, in Travis County, Texas 78738. The wastewater treatment facility and disposal site will be located in the drainage basin of Barton Creek in Segment No. 1430 of the Colorado River Basin.

III. Procedural History

The application for a new permit was received November 25, 2013 and declared administratively complete on February 03, 2014. The Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) was published in the *Austin-American Statesman* on February 25, 2014. The Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD) was published in the *Westlake Picayune* and the *Lake Travis View* on August 07, 2014. The Notice of a Public Meeting was published in the *Lake Travis View* on November 6, 2014. A public meeting regarding this permit application was held on December 15, 2014 at Star Hill Ranch. The public comment period ended on December 15, 2014. 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.

IV. Evaluation Process for Hearing Requests

House Bill 801 established statutory procedures for public participation in certain environmental permitting proceedings. For those applications declared administratively complete on or after September 1, 1999, it established new procedures for providing public notice and public comment, and for the Commission's consideration of hearing requests. The Commission implemented House Bill 801 by adopting procedural rules in 30 Texas Administrative Code (30 TAC) Chapters 39, 50, and 55. The application was declared administratively complete on June 1, 2013; therefore it is subject to the procedural requirement of HB 801.

A. Response to Request

The Executive Director, the Public Interest Counsel, and the Applicant may each submit written responses to a hearing request. 30 TAC § 55.209(d).

Responses to hearing requests must specifically address:

- a) whether the requestor is an affected person;
- b) whether issues raised in the hearing request are disputed;
- c) whether the dispute involves questions of fact or of law;
- d) whether the issues were raised during the public comment period;
- e) whether the hearing request is based on issues raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the Executive Director's Response to Comment;

- f) whether the issues are relevant and material to the decision on the application; and
- g) a maximum expected duration for the contested case hearing.

30 TAC § 55.209(e).

B. Hearing Request Requirements

In order for the Commission to consider a hearing request, the Commission must first determine whether the request meets certain requirements.

A request for a contested case hearing by an affected person must be in writing, must be filed with the chief clerk within the time provided and may not be based on an issue that was raised solely in a public comment withdrawn by the commenter in writing by filing a withdrawal letter with the chief clerk prior to the filing of the Executive Director's Response to Comment.

30 TAC § 55.201(c).

A hearing request must substantially comply with the following:

- a) give the name, address, daytime telephone number, and, where possible, fax number of the person who files the request. If the request is made by a group or association, the request must identify one person by name, address, daytime telephone number, and, where possible fax number, who shall be responsible for receiving all official communications and documents for the group;
- b) identify the person's personal justiciable interest affected by the application, including a brief, but specific, written statement explaining in plain language the requestor's location and distance relative to the proposed facility or activity that is the subject of the application and how and why the requestor believes he or she will be adversely affected by the proposed facility or activity in a matter not common to members of the general public;
- c) request a contested case hearing;
- d) list all relevant and material disputed issues of fact that were raised during the public comment period and that are the basis of the hearing request. To facilitate the commission's determination of the number and scope of issues to be referred to hearing, the requestor should, to the extent possible, specify any of the executive director's response to comments that the requestor disputes and the factual basis of the dispute and list any disputed issues of law or policy; and
- e) provide any other information specified in the public notice of application.

30 TAC § 55.201(d).

C. "Affected Person" Status

In order to grant a contested case hearing, the Commission must determine that a requestor is an "affected person." Section 55.203 sets out who may be considered an affected person.

- a) For any application, an affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. An interest common to members of the general public does not qualify as a personal justiciable interest.
- b) Except as provided by 30 TAC § 55.103, government entities, including local governments and public agencies, with authority under state law over issues raised by the application,
- c) In determining whether a person is an affected person, all factors shall be considered, including, but not limited to, the following:
 - 1) whether the interest claimed is one protected by the law under which the application will be considered;
 - 2) distance restrictions or other limitations imposed by law on the affected interest;
 - 3) whether a reasonable relationship exists between the interest claimed and the activity regulated;
 - 4) likely impact of the regulated activity on the health and safety of the person, and on the use of property of the person;
 - 5) likely impact of the regulated activity on the use of the impacted natural resource by the person; and
 - 6) for governmental entities, their statutory authority over or interest in the issues relevant to the application.

30 TAC § 50.203.

A group or association may also request a contested case hearing. In order for a group or association to request a contested case hearing, the group or association must show that it meets the following requirements:

- a) one or more members of the group or association would otherwise have standing to request a hearing in their own right;
- b) the interests the group or association seeks to protect are germane to the organization's purpose; and
- c) neither the claim asserted nor the relief requested requires the participation of the individual members in the case.

30 TAC § 55.205(a). In addition the Executive Director, Public Interest Counsel, or the Applicant may request that a group or association provide an explanation of how the group or association meets the above requirements. 30 TAC § 55.205(b).

D. Referral to the State Office of Administrative Hearings (SOAH)

When the Commission grants a request for a contested case hearing, they are required to issue an order specifying the number and scope of the issues to be referred to SOAH for a hearing. 30 TAC § 50.115(b). Subsection 50.115(c) sets out the test for determining whether an issue may be referred to SOAH. "The commission may not refer an issue to SOAH for a contested case hearing unless the commission determines that the issue: 1) involves a disputed question of fact; 2) was raised during the public

comment period; and 3) is relevant and material to the decision on the application.” 30 TAC § 50.115(c).

V. Analysis of Hearing Requests

The Executive Director (ED) has analyzed the hearing requests to determine whether they comply with Commission rules, who qualifies as affected person, what issues may be referred for a contested case hearing, and what is the appropriate length of the hearing.

A. Whether the Requestors Complied with 30 TAC §55.201 (c) and (d).

The public comment period for this permit application ended on December 15, 2014. The period for timely filing a request for a contested case hearing on this permit application ended March 29, 2015. Hamilton Pool Road Matters (HPR), Robert A. Ayers, and Mr. Daniel Jones all submitted timely hearing requests.¹ The hearing requestors included: their contact information, a physical address, a statement of what each individual believes to be a personal justiciable interest affected by this permit application, and provided a list of disputed facts raised during the public comment period. The ED concludes that these hearing requests substantially comply with the requirements of 30 TAC §55.201 (c) and (d).

The ED concludes that the CCH requests of Hamilton Pool Road Matters, Robert Ayers, and Mr. Daniel Jones substantially comply with the requirements of 30 TAC §55.201.

B. Whether the Requestor Meets the Requirements of An Affected Person.

1) Hamilton Pool Road Matters (HPR), represented by Eric Allmon

Hamilton Pool Road Matters (HPR) is a Texas non-profit corporation whose purposes include protection of the natural environment along and near Hamilton Pool Road. HPR particularly seeks to protect surface water and groundwater sustainability, as well as minimize the adverse impact of the contamination or use of such waters on residents in southwest Travis County. HPR states that it has several members that would be significantly impacted by the activities for which JPHD is seeking authorization, including three owners of property adjacent to Little Barton Creek immediately downstream of the application fields. The ED concludes that the interests HPR seeks to protect are germane to the organization’s purpose.

To satisfy the group/association requirements of 30 TAC §55.205 (a), HPR identified the following persons as members of their organization who, according to HPR, has standing to request a contested case hearing (CCH) in their own right and whose individual participation in the CCH is not required: Dick and Kathleen Hanson,

¹ The hearing requestors filed their requests on the following dates: Hamilton Pool Road Matters, May 30, 2014; Robert Ayers, August 29, 2014; Mr. Daniel Jones, March 25, 2014.

Judy Hendricks, Mehrad Morrahi, Jessica Tenant, and Robert Ayers (managing partner of Shield Ranch). The relative locations of these individuals in relation to the facility are shown on Attachment A.

HPR's hearing request adequately identifies the Hanson's personal justiciable interest in this permit application by identifying their property in relation to the proposed facility and explaining how that the Hanson's will likely be affected by the proposed wastewater treatment and irrigation activities in a manner not common to the members of the public. According to HPR's hearing request, the Hanson's property is approximately 1600 feet from Drip Field No. 5, and approximately 3,300 feet from the wastewater treatment plant. JPHD has also listed the Hanson's property on the affected landowner map. HPR's hearing request claims that the Hanson's regularly engage in recreational activities on their property and own a groundwater well. Additionally, the hearing request states that the Hanson's have concerns regarding odor, potential adverse impacts to the use and enjoyment of their property, and groundwater contamination.

Considering the factors listed in 30 TAC §55.203 (c) used to determine affected person status, the ED has determined based on the issues raised and relative proximity of the Hansons' property to the proposed wastewater treatment plant and irrigation zones, they have a personal justiciable interest not common to other members of the general public, given that the proposed facility and land application activities could possibly impact the use of their properties. Given the interest claimed and the relative location of the Hanson's property, they would be able to request a contested case hearing in their own right. According to the requirements listed at 30 TAC §55.205(a)(1), only one of the group's members is required to have such standing, therefore, the ED has not assessed whether the other four HPR members identified would have standing in their own right.

The ED recommends that the Commission find that Hamilton Pool Road Matters satisfies the group/association requirements of 30 TAC §55.205 (a).

2) **Robert Ayers (Shield Ranch)**, represented by Ed McCarthy

Robert Ayers (managing partner of the Shield Ranch family partnership, that owns operates Shield Ranch) states that he represents Shield Ranch, and he is also a member of Hamilton Pool Road Matters. Shield Ranch is a 6,800 acres property located 4500 feet from the location of the of proposed wastewater treatment facility. According to JPHD's adjacent landowner map and the ED's satellite, Shield Ranch is located south of the proposed of the proposed facility and irrigation fields just across Hamilton Pool Road.

Robert Ayers has expressed concerns regarding whether both the current and future uses and enjoyment of Rocky Creek and the Shield Ranch property located downstream of the proposed wastewater treatment facility and its discharge would be impacted impermissibly and/or adversely by the granting of this permit application. Additionally, Robert Ayers is concerned about the potential of nuisance odors, water borne pollutants, bacteria and other health risks to human health and livestock,

impaired water quality in Rocky Creek and other waters that would traverse Shield Ranch, and regionalization of the proposed facility. Considering the factors listed in 30 TAC §55.203 (c) used to determine affected person status, the ED has determined based on the issues raised and relative proximity of Shield Ranch to the proposed wastewater treatment plant and irrigation zones, Mr. Ayers has a personal justiciable interest not common to other members of the general public, given that the proposed facility and land application activities could possibly impact the use of his property.

The ED recommends that the Commission find that Robert Ayers is an affected person.

3) Daniel Jones

Mr. Jones' property is not listed on JPHD's adjacent landowner list. However, based on the GIS map, Mr. Jones' property is located approximately within one-half mile from the proposed facility. In his hearing request, Mr. Jones has expressed concerns regarding the proposed wastewater disposal system and impacts to surface water, the absorption capacity of the soils during rain events, groundwater contamination, odor, noise, and questions the measures that will be taken by TCEQ to monitor the proposed facility and discharge activities. Considering the factors listed in 30 TAC §55.203 (c) used to determine affected person status, the ED has determined based on the issues raised by Mr. Jones and his proximity to the proposed wastewater treatment plant he has an personal justiciable interest not common with other members of the general public, as the proposed facility and land application activities could possibly impact the use his property.

The ED recommends that the Commission find that Daniel Jones is an affected person.

C. Whether Issues Raised Are Referable to the State Office of Administrative Hearings for a Contested Cased Hearing.

In addition to recommending to the Commission those persons who qualify as affected persons, the Executive Director (ED) analyzed the issues raised in the hearing requests in accordance with the regulatory criteria. All issues were raised during the public comment period and none of the issues were withdrawn. All identified issues in the response are considered disputed unless otherwise noted.

1. Whether the characteristics of the site render it unsuitable for the subsurface drip irrigation of wastewater effluent.

This is an issue of fact. If it could be shown that the characteristics of the site make it unsuitable for the proposed subsurface drip irrigation, that information would be relevant and material to the decision on the permit application.

The ED recommends that the Commission refer this issue to SOAH.

2. Whether the proposed irrigation system creates an unacceptable risk of harm to ground water.

This is an issue of fact. If it could be shown that the proposed irrigation system created an unacceptable risk of harm to ground, that information would be relevant and material to the decision on the permit application.

The ED recommends that the Commission refer this issue to SOAH.

3. Whether the proposed irrigation system creates an unacceptable risk of harm to surface water sources.

This is an issue of fact. If it could be shown that the proposed irrigation system created a risk of harm to surface water sources, that information would be relevant and material to the decision on the permit application.

The ED recommends that the Commission refer this issue to SOAH.

4. Whether the proposed treatment facility and subsurface area drip dispersal system comply with the unsuitable site characteristics and buffer zone requirements of 30 TAC §309.13.

This is an issue of fact. If it could be shown that the proposed treatment facility and subsurface area drip dispersal system do not comply with the unsuitable site characteristics and buffer requirement of 30 TAC §309.13, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

5. Whether the proposed facility will cause visual and noise pollution, thereby diminishing property values, quality of life, and property enjoyment.

This is an issue of fact. The responses state that TCEQ does not address issues regarding types of issues as a part of the wastewater permitting process. These issues are not relevant and material to the decision on the application.

The ED recommends that the Commission not refer this issue to SOAH.

6. Whether the draft permit will ensure adequately protective operations and maintenance of the authorized facilities.

This is an issue of fact. If it can be shown that the draft permit fails to ensure adequately protective operations and maintenance of the proposed facility, that information would be relevant and material to the decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

7. Whether the proposed vegetative cover is suited for the proposed site characteristics and whether the proposed irrigation activities are adequately protective of flora and fauna.

This is an issue of fact. If it can be shown that the proposed vegetative cover is inadequate and irrigation activities will not be adequately protective of flora and fauna, this information would be relevant and material to a decision on the permit application.

The ED recommends that the Commission refer this issue to SOAH.

8. Whether the draft permit should be issued for the requested term.

This is an issue of fact. The proposed draft permit will expire on September 1, 2019, however, if it could be shown that the term limit of the draft permit is inappropriate this information would be relevant and material to the decision on the permit application.

The ED recommends that the Commission refer this issue to SOAH.

9. Whether both the current and future uses and enjoyment of Rocky Creek and the Shield Ranch property would be adversely impacted by the TCEQ's granting of the application.

This is an issue of fact. If the permit is issued, it does not authorize any invasion of personal rights or any violation of federal, state or local laws or regulations. If it could be shown that the proposed wastewater treatment facility and irrigation practices interfere with the uses and enjoyment of neighboring properties, this information would be relevant and material to a decision on the permit application.

The ED recommends that the Commission refer this issue to SOAH.

10. Whether the effluent limitations of the draft permit for nutrients and 5-day biochemical oxygen demand are sufficient.

This is an issue of fact. If it can be shown that the proposed effluent limitations are not sufficient, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

11. Whether the potential for nuisance odor would impact the use and enjoyment of property of neighboring landowners.

This is an issue of fact. If it can be shown that nuisance odors would adversely impact the properties of neighboring landowners, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

12. Whether the uses of Rocky Creek would be impaired or harmed by a decrease in water quality, including the potential for exposure to bacteria and other contaminant constituents, resulting from the upstream discharge at the proposed wastewater treatment plant.

This is an issue of fact. The draft permit does not authorize the discharge of pollutants into water of the state. If it can be shown that Rocky Creek would be adversely impacted by the effluent irrigation activities authorized by the draft permit, this information would be relevant and material to the decision on the permit application.

The ED recommends that the Commission refer this issue to SOAH.

13. Whether the proposed irrigation activities will pose a threat to human health, livestock and other wildlife in the surrounding areas.

This is an issue of fact. If it can be shown that the proposed irrigation activities pose a threat to human health, livestock and other wildlife, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

14. Whether there is a need for the proposed facility and whether its location is in conformance with the state's regionalization policy.

This is an issue of fact. If it can be shown that the applicant has not provide sufficient information regarding need for the proposed facility and the draft permit is not in conformance with the state's regionalization policy, this information would be relevant and material to a decision on this permit application.

The ED recommends that the Commission refer this issue to SOAH.

15. Whether the soils within the irrigation areas can withstand the amount of treated effluent application proposed in the draft permit, and whether there has been an adequate soil evaluation at the proposed site.

This is an issue of fact. If it can be shown that the applicant has failed to provide an adequate soil evaluation and the soils within the irrigation areas cannot withstand the amount of treated effluent proposed in the draft permit, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

16. Whether there has been a sufficient review of the compliance history of each person listed at 30 TAC §222.37 (a) to support issuance of the requested permit.

This is an issue of fact. If it can be shown that the review of this permit application failed to consider the requisite compliance histories of the individuals listed by rule to support issuance of the permit, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

17. Whether there has been sufficient consideration of the public interest factors set forth in §32.101 of the Texas Water Code to support issuance of the draft permit.

This is an issue of fact. If it can be shown that there has not been sufficient consideration of the public interest factors set forth by statute, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

18. Whether the applicant has provided a sufficient site preparation plan.

This is an issue of fact. If it can be shown that the site preparation plan submitted by JPHD is insufficient, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

19. Whether the applicant has provided a sufficient recharge feature plan.

This is an issue of fact. If it can be shown that the recharge feature submitted by JPHD is insufficient, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

20. Whether the proposed design of the wastewater treatment system and dispersal system are adequate.

This is an issue of fact. If it can be shown that the proposed design of the wastewater treatment system and subsurface area drip dispersal system are not adequate, this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

21. Whether the applicant has provided a sufficient engineering report.

This is an issue of fact. However, it is not relevant and material to the decision on this permit application. JPHD was not required to submit an engineering report for the subsurface area drip dispersal system with its application; review of the engineering reports is a separate process from the review of the permit application. The applicant has not requested an authorization to construct as part of this application.

The ED recommends that the Commission not refer this issue to SOAH.

22. Whether there is sufficient vertical separation beneath the subsurface area drip dispersal system and the relevant underlying features.

This is an issue of fact. If it can be shown that there is not sufficient vertical separation proposed beneath the subsurface area drip dispersal system and the relevant underlying features of the irrigation area, then this information would be relevant and material to a decision on the application.

The ED recommends that the Commission refer this issue to SOAH.

23. Whether the proposed land irrigation activities are protective of surface water and comply with Texas Surface Water Quality Standards.

This is a mixed issue of fact and law, not relevant or material to a decision on the application. JPHD has applied to the TCEQ for a TLAP permit that authorizes the land application of treated effluent via a subsurface area drip dispersal system. This permit does not authorize the discharge of treated effluent into water of the state. The Texas Surface Water Quality Standards are implemented to protect surface water quality when issuing wastewater discharge permits, authorizing discharges into water of the state.² A discharge of to water in the state would constitute a violation of the draft permit. Additionally, the ED has determined that the draft permit complies with the requirements of Chapter 222 of the Commission rules to ensure that the subsurface area drip dispersal system will be protective of surface and groundwater.

The ED recommends that the Commission not refer this issue to SOAH.

VI. Duration of the Contested Case Hearing

If the Commission determines that this matter should be sent to SOAH for a contested case hearing, the Executive Director recommends a hearing duration of nine months from the preliminary hearing to the presentation of a proposal for decision to the Commission.

² 30 Tex. Admin. Code § 307.4 (a).

VII. Executive Director's Recommendation

The ED recommends the following actions by the Commission:

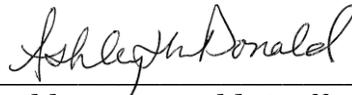
- (1) The ED recommends that the Commission find that Hamilton Pool Road Matters satisfies the requirements of 30 TAC §55.205 for a hearing request by group or association and grant the respective hearing requests.
- (2) The ED recommends the Commission find that Robert Ayers, and Christopher Spicer are affected persons under 30 TAC §55.203 and grant their respective hearing requests.
- (3) If referred to SOAH, first refer the matter to Alternative Dispute Resolution for a reasonable period.
- (4) If referred to SOAH, the ED recommends referring Issue Nos.1-4, 6-20 and 22 for a nine-month hearing.

Respectfully submitted,

Texas Commission on Environmental Quality

Richard A. Hyde, P.E.
Executive Director

Robert Martinez, Director
Environmental Law Division

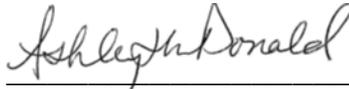


Ashley McDonald, Staff Attorney
Environmental Law Division
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Austin, TC 78711-3087
(512) 239-1283 phone
(512) 239-0626 fax

REPRESENTING THE EXECUTIVE
DIRECTOR OF THE TEXAS COMMISSION
ON ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on June 08, 2015, the original and seven copies of the “Executive Director’s Response to Hearing Request” for JPHD, Inc. Permit No. WQ0015201001 were filed with the TCEQ’s Office of the Chief Clerk and a complete copy was served to all persons listed on the attached mailing list via hand delivery, facsimile transmission, inter-agency mail, electronic submittal, or by deposit in the U.S. Mail.



Ashley McDonald, Staff Attorney
Environmental Law Division
State Bar No. 24086775

ATTACHMENT A

JPHD, Inc.
TCEQ Permit No. WQ0015201001-TLAP

Map Requested by TCEQ Office of Legal Services
 for Commissioners' Agenda

Site View Map



Texas Commission on Environmental Quality
 GIS Team (Mail Code 197)
 P.O. Box 13087
 Austin, Texas 78711-3087
 Date: 5/6/2015

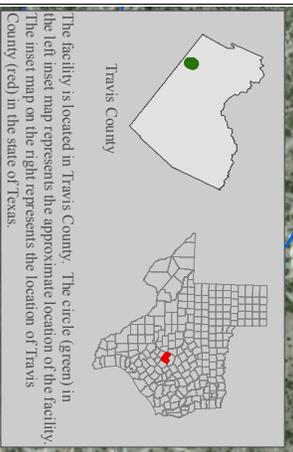
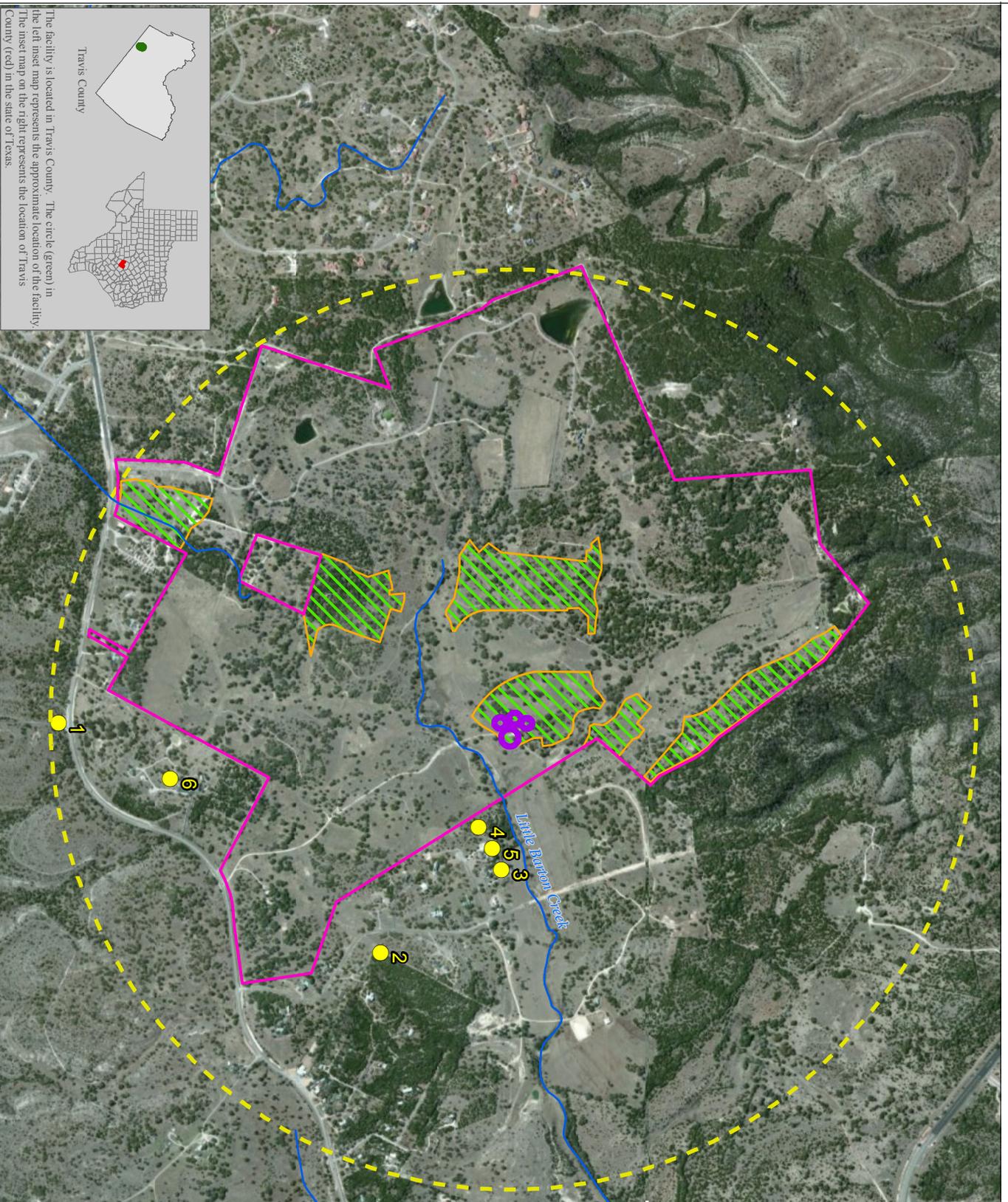


- WWTP Site (proposed)
- Applicant's Property Boundary
- Subsurface Drip Irrigation Fields

1 mile radial distance

Requesters

ID	Name
1	Robert Ayers (Shield Ranch)
2	Daniel Jones
3	Judy Hendricks
4	Mehrad Morabbi
5	Jessica Tennant Dick and
6	Kathleen Hanson



The facility is located in Travis County. The circle (green) in the left inset map represents the approximate location of the facility. The inset map on the right represents the location of Travis County (red) in the state of Texas.

Source: The location of the facility was provided by the TCEQ Office of Legal Services (OLS). OLS obtained the site location information from the applicant and the requestor information from the requestor. The background imagery of this map is from the current Environmental Systems Research Institute (ESRI) map service, as of the date of this map.

This map was generated by the Information Resources Division of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the Information Resource Division at (512) 259-0800.

ATTACHMENT B

F. Environmental audits:

N/A

G. Type of environmental management systems (EMSs):

N/A

Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A

ATTACHMENT C

**TECHNICAL SUMMARY AND
EXECUTIVE DIRECTOR'S PRELIMINARY DECISION**

DESCRIPTION OF APPLICATION

Applicant:	JPHD, Inc. TCEQ Permit No. WQ0015201001
Regulated Activity:	Domestic Wastewater Permit
Type of Application:	New Permit
Request:	New Permit- 0.15 MGD Interim I, 0.3 MGD Interim II, and 0.45 MGD Final phases
Authority:	Texas Water Code (TWC) § 26.027; 30 Texas Administrative Code (TAC) Chapters 222, 305, 309, 312, 319, and 30; and Commission policies.

EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **September 1, 2019**, according to 30 TAC Section 305.127(1)(C)(ii)(III), Conditions to be Determined for Individual Permits.

REASON FOR PROJECT PROPOSED

JPHD, Inc. has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit, TCEQ Permit No. WQ0015201001 to authorize the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.15 million gallons per day (MGD) in the Interim I phase, 0.3 MGD in the Interim II phase, and 0.45 MGD in the Final phase. The subsurface drip irrigation system will be located on 6 areas with a minimum total surface area of 104.79 acres divided into 36 zones. The proposed wastewater treatment facility will serve JPHD, Inc.

PROJECT DESCRIPTION AND LOCATION

The JPHD, LTD Wastewater Treatment Facility will be an activated sludge process plant operated in the extended aeration mode. In each phase of the draft permit, the treatment units will include bar screens, aeration basins, final clarifiers, aerobic digesters and chlorine contact chambers. The facility is not in operation.

JPHD, Inc.

Permit No. WQ0015201001

Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

Sludge generated from the treatment facility will be hauled by a registered transporter to City of Austin Walnut Creek Wastewater Treatment Facility, Permit No. WQ0010543011, to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ- authorized land application site or co-disposal landfill.

The wastewater treatment facility and disposal site will be located 3.2 miles west of the intersection of State Highway 71 and Hamilton Pool Road, on Hamilton Pool Road in Travis County, Texas 78738.

The wastewater treatment facility and disposal site will be located in the drainage basin of Barton Creek in Segment No. 1430 of the Colorado River Basin. No discharge of pollutants into water in the state is authorized by this permit.

SUMMARY OF EFFLUENT DATA

There is no effluent data because the facility has not been constructed.

DRAFT PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at an Interim I phase daily average flow not to exceed 0.15 MGD, an Interim II phase daily average flow not to exceed 0.3 MGD, and a Final phase daily average flow not to exceed 0.45 MGD. The subsurface drip irrigation system will be located on 6 areas with a minimum total surface area of 104.79 acres divided into 36 zones.

The permittee is required to provide at least three days of temporary storage for times when the facility is out of service due to an emergency or for scheduled maintenance.

Application rates shall not exceed 0.1 gallons per square foot per day. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermudagrass (warm season) and winter ryegrass (cool season) crops on the disposal site.

The effluent limitations in the draft permit, based on a daily average, are 10 mg/l biochemical oxygen demand (five-day), and 15 mg/l total suspended solids. The draft permit also contains a single-grab effluent limitation of 126 colony-forming units or most probable number of *E. coli* per 100 ml.

The effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

The permittee shall comply with the requirements of 30 TAC Section 309.13 (a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC Section 309.13(e).

In addition, the permittee shall comply with the requirements of 30 TAC Section 222.81(a), (b)

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and (d).

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. Sludge generated from the treatment facility is hauled by a registered transporter to the City of Austin Walnut Creek Wastewater Treatment Facility, Permit No. WQ0010543011, to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

SUMMARY OF CHANGES FROM APPLICATION

None.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the permit draft:

1. Application submitted which was received November 25, 2013 and additional information received April 3, 2014 and July 2, 2014.
2. Interoffice Memorandum from the Water Quality Assessment Team, Water Quality Assessment Section, Water Quality Division.

PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application, and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application. This notice sets a deadline for public comment.

JPHD, Inc.

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Statement of Basis/Technical Summary and Executive Director's Preliminary Decision

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment, and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's Response to Comments and Final Decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's Response to Comments and Final Decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact Phillip Urbany at (512) 239-4542.

Phillip Urbany
Municipal Permits Team
Wastewater Permitting Section (MC 148)

May 9, 2014
Date



PERMIT NO. WQ0015201001

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES
under provisions of Chapter 26
of the Texas Water Code

JPHD, Inc.

whose mailing address is

17024 Hamilton Pool Road
Austin, Texas 78738

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 4952.

General Description and Location of Waste Disposal System:

Description: The JPHD, Inc. Wastewater Treatment Facility will be an activated sludge process plant operated in the extended aeration mode. In each phase of this permit the treatment units will include bar screens, aeration basins, final clarifiers, aerobic digesters and chlorine contact chambers. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.15 million gallons per day (MGD) in the Interim I phase, 0.3 MGD in the Interim II phase and 0.45 MGD in the Final phase. The subsurface drip irrigation system will be located on 6 areas with a minimum total surface area of 104.79 acres divided into 36 zones. Application rates shall not exceed 0.1 gallons per square foot per day. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermudagrass (warm season) and winter ryegrass (cool season) crops on the disposal site.

Location: The wastewater treatment facility and disposal site will be located 3.2 miles west of the intersection of State Highway 71 and Hamilton Pool Road, on Hamilton Pool Road, in Travis County, Texas 78738. (See Attachment A)

Drainage Area: The wastewater treatment facility and disposal site will be located in the drainage basin of Barton Creek in Segment No. 1430 of the Colorado River Basin. No discharge of pollutants into water in the state is authorized by this permit.

This permit and the authorization contained herein shall expire at midnight on **September 1, 2019**.

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Conditions of the Permit: No discharge of pollutants into water in the state is authorized.

A. Effluent Limitations

Character: Treated Domestic Wastewater Effluent

Volume: Daily Average Flow – Interim I phase: 0.15 MGD, Interim II phase: 0.3 MGD, and Final phase: 0.45 MGD from the treatment system

Quality: The following effluent limitations shall be required:

<u>Parameter</u>	<u>Effluent Concentrations</u>			
	(Not to Exceed)			
	<u>Daily Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Single Grab</u>
	mg/l	mg/l	mg/l	mg/l
Biochemical Oxygen Demand (5-day)	10	15	25	35
Total Suspended Solids	15	25	40	60
<i>E. coli</i> , CFU or MPN	N/A	N/A	N/A	126

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

The effluent shall be chlorinated in a chlorine contact chamber to a residual of 1.0 mg/l with a minimum detention time of 20 minutes. If the effluent is to be transferred to a holding pond or tank, re-chlorination prior to the effluent being delivered into the irrigation system will be required. A trace chlorine residual shall be maintained in the effluent at the point of irrigation application.

B. Monitoring Requirements:

<u>Parameter</u>	<u>Monitoring Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Instantaneous
Biochemical Oxygen Demand (5-day)	One/week	Grab
Total Suspended Solids	One/week	Grab
pH	One/month	Grab
Chlorine Residual	Five/week	Grab
<i>E. coli</i>	One/month	Grab

The monitoring shall be done after the final treatment unit and prior to storage of the treated effluent. If the effluent is land applied directly from the treatment system, monitoring shall be done after the final treatment unit and prior to land application.

These records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the Commission for at least three years.

STANDARD PERMIT CONDITIONS

This permit is granted in accordance with the Texas Water Code and the rules and other Orders of the Commission and the laws of the State of Texas.

DEFINITIONS

All definitions in Section 26.001 of the Texas Water Code and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- b. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with a 1 million gallons per day or greater permitted flow.
- c. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
 - ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

3. Sample Type

- a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).
 - b. Grab sample - an individual sample collected in less than 15 minutes.
4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
 5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids which have not been classified as hazardous waste separated from wastewater by unit processes.
 6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING REQUIREMENTS

1. Monitoring Requirements

Monitoring results shall be collected at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling in accordance with 30 TAC §§ 319.4 - 319.12.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Texas Water Code, Chapters 26, 27, and 28, and Texas Health and Safety Code, Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record or other document submitted or required to be maintained under this permit, including monitoring reports, records or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, and records of all data used to complete the application for this permit shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, or application. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in determining compliance with permit requirements.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass which exceeds any effluent limitation in the permit.
- c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
- d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. One hundred micrograms per liter (100 µg/L);
 - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

- iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
- i. Five hundred micrograms per liter (500 µg/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

PERMIT CONDITIONS

1. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. 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.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation which has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and Texas Water Code Section 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, 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 Special Provisions section of this permit.
- h. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties).

3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the Texas Water Code Chapters 26, 27, and 28, and Texas Health and Safety Code Chapter 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in

charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in Texas Water Code Section 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - ii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the Texas Water Code § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal which requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

8. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

9. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

10. Notice of Bankruptcy.

- a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - i. the permittee;
 - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.
- b. This notification must indicate:
 - i. the name of the permittee;
 - ii. the permit number(s);
 - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.
3. Domestic wastewater treatment facilities shall comply with the following provisions:
 - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under Texas Water Code § 7.302(b)(6).
7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information specified as not confidential in 30 TAC § 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words

“confidential business information” on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities which generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
 - a. Whenever flow measurements 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 and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90 percent of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75 percent of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgement of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 169) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.
 - c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission’s policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
10. Facilities which generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
 - a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Environmental Cleanup Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
 - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
 - e. The term “industrial solid waste management unit” means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
 - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;
 - iv. Identity of hauler or transporter;
 - v. Location of disposal site; and
 - vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

11. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with Chapter 361 of the Texas Health and Safety Code.

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SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. **The disposal of sludge by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized by the TCEQ. This provision does not authorize Distribution and Marketing of sludge. This provision does not authorize land application of Class A Sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner which protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present in the sludge.
2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

B. Testing Requirements

1. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method, which receives the prior approval of the TCEQ for the contaminants listed in Table 1 of 40 CFR Section 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 11) within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to:

Director, Permitting and Remediation Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceed the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C.

TABLE 1

<u>Pollutant</u>	<u>Ceiling Concentration</u> (Milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following methods to ensure that the sludge meets either the Class A or Class B pathogen requirements.

- a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. The first 4 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. Below are the additional requirements necessary to meet the definition of a Class A sludge.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC Section 312.82(a)(2)(A) for specific information.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50 percent.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC Section 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC Section 312.82(a)(2)(C)(iv-vi) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of shall be treated in one of the processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of shall be treated in a process that has been approved by the U.S. Environmental Protection Agency as being equivalent to those in Alternative 5.

- b. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

Alternative 1 -

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition, the following site restrictions must be met if Class B sludge is land applied:

- i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.
- v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
- vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.
- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
- ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC Section 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following alternatives 1 through 10 for Vector Attraction Reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.

- Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Volatile solids must be reduced by less than 17 percent to demonstrate compliance.
- Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. Volatile solids must be reduced by less than 15 percent to demonstrate compliance.
- Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.
- Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.
- Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 9 -
- i. Sewage sludge shall be injected below the surface of the land.
 - ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
 - iii. When sewage sludge that is injected below the surface of the land is Class A with

respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10-

- i. Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
- ii. When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

- Toxicity Characteristic Leaching Procedure (TCLP) Test - once during the term of this permit
- PCBs - once during the term of this permit

All metal constituents and fecal coliform or Salmonella sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

<u>Amount of sewage sludge (*) metric tons per 365-day period</u>	<u>Monitoring Frequency</u>
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

() The amount of bulk sewage sludge applied to the land (dry weight basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Table 2

<u>Pollutant</u>	<u>Cumulative Pollutant Loading Rate (pounds per acre)*</u>
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

<u>Pollutant</u>	<u>Monthly Average Concentration (milligrams per kilogram)*</u>
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

*Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A or Class B pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with the Management Requirements in accordance with 30 TAC Section 312.44.
3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.
4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:
 - a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
 - b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.
 - c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:
 - a. The location, by street address, and specific latitude and longitude, of each land application site.
 - b. The approximate time period bulk sewage sludge will be applied to the site.
 - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.
2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

E. Record keeping Requirements

The sludge documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at

the facility site and/or shall be readily available for review by a TCEQ representative for a period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC Section 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
2. A description of how the pathogen reduction requirements are met (including site restrictions for Class B sludges, if applicable).
3. A description of how the vector attraction reduction requirements are met.
4. A description of how the management practices listed above in Section II.C are being met.
5. The following certification statement:

“I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC Section 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC Section 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment.”

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained.

The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC Section 312.47 for persons who land apply.

1. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC Section 312.47(a)(4)(A)(ii) or 30 TAC Section 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
2. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
3. The number of acres in each site on which bulk sludge is applied.
4. The date and time sludge is applied to each site.

5. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
6. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30 of each year the following information:

1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
2. The frequency of monitoring listed in Section I.C. which applies to the permittee.
3. Toxicity Characteristic Leaching Procedure (TCLP) results.
4. Identity of hauler(s) and TCEQ transporter number.
5. PCB concentration in sludge in mg/kg.
6. Date(s) of disposal.
7. Owner of disposal site(s).
8. Texas Commission on Environmental Quality registration number, if applicable.
9. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
10. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
11. Level of pathogen reduction achieved (Class A or Class B).
12. Alternative used as listed in Section I.B.3. (a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.
13. Vector attraction reduction alternative used as listed in Section I.B.4.
14. Annual sludge production in dry tons/year.
15. Amount of sludge land applied in dry tons/year.

16. The certification statement listed in either 30 TAC Section 312.47(a)(4)(A)(ii) or 30 TAC Section 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.
17. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
 - a. The location, by street address, and specific latitude and longitude.
 - b. The number of acres in each site on which bulk sewage sludge is applied.
 - c. The date and time bulk sewage sludge is applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.
 - e. The amount of sewage sludge (i.e., dry tons) applied to each site.

The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

**SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE
DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL**

- A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC Chapter 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a Municipal Solid Waste Landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.
- D. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR Section 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 11) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Remediation Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

- E. Sewage sludge shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.

F. Record keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year the following information:

1. Toxicity Characteristic Leaching Procedure (TCLP) results.
2. Annual sludge production in dry tons/year.
3. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.
4. Amount of sludge transported interstate in dry tons/year.
5. A certification that the sewage sludge meets the requirements of 30 TAC Chapter 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
6. Identity of hauler(s) and transporter registration number.
7. Owner of disposal site(s).
8. Location of disposal site(s).
9. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SPECIAL PROVISIONS:

1. This permit is granted subject to the policy of the Commission to encourage the development of areawide waste collection, treatment and disposal systems. The Commission reserves the right to amend this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an areawide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such areawide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
2. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category C facility must be operated by a chief operator or an operator holding a Category C license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift which does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.
4. Prior to construction of the 0.15 MGD Interim I phase, 0.3 MGD Interim II phase, and 0.45 MGD Final phase wastewater treatment facilities, the permittee shall submit, to the Texas Commission on Environmental Quality (TCEQ) Wastewater Permitting Section (MC 148) of the Water Quality Division, a summary submittal letter according to the requirements in 30 TAC Section 217.6(c). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with the requirements of 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the final permitted effluent limitations required on Page 2 of this permit.

5. Prior to construction of the subsurface area drip dispersal system, the permittee shall submit, to the TCEQ Wastewater Permitting Section (MC148) of the Water Quality Division, an engineering report, including plans and specifications, that meets the requirements in 30 TAC Chapter 222, Subsurface Area Drip Dispersal Systems, Subchapter D: Design Criteria.
6. Reporting requirements according to 30 TAC Sections 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge, whichever occurs first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 11) and the Application Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever occurs first, and prior to completion of each additional phase on Notification of Completion Form 20007.
7. The permittee shall comply with the requirements of 30 TAC Section 309.13 (a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC Section 309.13(e).
8. According to the requirements of 30 TAC Section 222.81(a), the permittee shall locate the subsurface area drip dispersal system a minimum horizontal distance of 100 feet from surface waters in the state. The permittee shall locate the subsurface area drip dispersal system a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water and 150 feet from private water wells as described in 30 TAC Section 309.13(c)(1). The permittee shall not locate the subsurface area drip dispersal system within a floodway according to the requirements of 30 TAC Section 222.81(d).
9. The permittee shall maintain Bermuda grass, overseeded with rye grass during cool season, on the disposal site. Application rates shall not exceed 0.1 gallons per square foot per day. The permittee is responsible for providing equipment to determine the application rate and maintaining accurate records of the volume of effluent applied. According to the requirements of 30 TAC Section 222.161(d), the permittee shall maintain records documenting all activities associated with maintaining the vegetative cover, like planting, over-seeding, mowing height, fertilizing, and harvesting. These records shall be maintained for a minimum of five years and be made available to TCEQ staff upon request.
10. Based on the requirements of 30 TAC Section 222.151, the subsurface drip irrigation system shall be designed and managed so as to prevent seepage and percolation out of the root zone, other than leaching in the amount required to maintain the health of the vegetative cover. Surfacing and ponding is prohibited. Creating a condition at the treatment facility or the drip dispersal zones that contributes to vector attraction or odor is prohibited.

11. The permittee will maintain the Bermuda grass overseeded with rye grass, on the disposal site. The irrigated crops shall be established and well maintained to provide year-round vegetative growth for effluent and nutrient uptake by the crop and to prevent pathways for effluent surfacing.
12. The subsurface drip irrigation system shall consist of a sufficient number of different dispersal zones. The minimum depth of soil above the drip irrigation lines shall be six inches, and the minimum depth of soil below the drip irrigation lines shall be twelve inches of usable soil. In the event of effluent surfacing due to damage to the drip irrigation lines, effluent application shall be shut-off to the drip irrigation zone, and public access to the zone shall be restricted.
13. The permittee shall design and install temporary storage that equals at least three days of the design flow of the facility for times when the subsurface area drip dispersal system is out of service due to an emergency or scheduled maintenance. In addition, the permittee shall pump and haul wastewater from the facility to prevent the discharge of treated or untreated wastewater if complete shutdown of the wastewater treatment facility becomes necessary or the storage capacity is exceeded.
14. Permanent transmission lines shall be installed from the treatment system to each drip irrigation zone of the subsurface drip irrigation system. According to 30 TAC Section 222.153, the permittee shall flush the subsurface area drip dispersal system from the dispersal zone and return the flush water to a point preceding the treatment system at least once every two months.
15. Effluent shall not be applied for irrigation when the ground is saturated.
16. The permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply for any area where treated effluent is stored or where there exist hose bibs or faucets. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.
17. The permittee shall maintain a long term contract with the owner(s) of the land application site which is authorized for use in this permit, or own the land authorized for land application of treated effluent.

18. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermudagrass (warm season) and winter ryegrass (cool season) crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least one time during the year. Harvesting and mowing dates shall be recorded in a log book kept on site to be made available to TCEQ personnel upon request.
19. The physical condition of the drip application fields will be monitored on a weekly basis. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation, etc., will be recorded in the field log kept onsite and corrective measures will be implemented within 24 hours.
20. Berms and/or swales shall be built upgradient of the drainfields. The surface of the drainfields shall be sloped to facilitate runoff.
21. Drip irrigation lines shall be installed on the contour and lateral slopes of the tubing shall not exceed 1 percent. The permittee can apply for a variance to this provision by providing justification in the detailed design criteria per Chapter 222 indicating how uneven application of effluent due to back draining will be avoided. The permittee shall notify the TCEQ Region 11 office 30 days prior to installation of the drip lines.
22. The permittee shall remove surface large stones and flagstones from the land application site where soils are sufficient and where soils are not sufficient, soils will be imported to ensure there is at least 12 inches of adequate rooting material beneath the drip lines. If imported soils are utilized, the permittee shall submit no later than 90 days prior to construction to the TCEQ Water Quality Assessment Team (MC 150) and the Wastewater Permitting Section (MC 148) of the Water Quality Division a plan for review/revision and approval describing how the imported soils will be incorporated into the native soils and how soil erosion will be prevented in the affected areas. The permittee shall notify the TCEQ Region 11 office 30 days prior to installation of the drip lines.
23. Each drainfield (zone) shall have at least one moisture sensing device placed at 12 inches below the drip lines that will automatically shut off irrigation to the drainfield when the soil becomes saturated.
24. The permittee shall analyze the irrigation effluent for nitrates, total Kjeldahl nitrogen (TKN) and total phosphorus from grab samples taken in January of the filtered effluent prior to injection into the dripper lines. Analysis results shall be provided with the soil analysis reports by September of each sampling year. Analysis results shall be provided to the TCEQ Regional Office (MC Region 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division.
25. The permittee shall obtain representative soil samples from the root zones of each drip

application area. Composite sampling techniques shall be used. Each composite sample shall represent no more than 40 acres with no less than 10 to 15 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth, type of crop and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches and 6 to 24 inches below ground level. The permittee shall sample and analyze soils in December to February of each year. Soil samples shall be analyzed within 30 days of procurement.

The permittee shall provide annual soil analyses of the land application area according to the following table:

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
pH	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	2:1 (v/v) water to soil mixture	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen, ammonium-nitrogen	From a 1 N KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.	20	mg/kg (dry weight basis)
Total Nitrogen	= TKN plus Nitrate-nitrogen		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1	mg/kg (dry weight basis)
Plant-available: Potassium (K) Calcium (Ca) Magnesium (Mg) Sodium (Na) Sulfur (S)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K) 10 (Ca) 5 (Mg) 10 (Na) 1 (S)	mg/kg (dry weight basis)
Amendment addition, e.g., gypsum	Recommendation from analytical laboratory		Report in short tons/acre in the year effected

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports with a map depicting the permanent sampling fields to the TCEQ Regional Office (MC Region 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

26. According to 30 TAC Section 222.163, Closure Requirements, the permittee shall close the system under the standards set forth in this section.
27. According to the requirements of 30 TAC Section 222.43, the permittee shall notify the TCEQ Regional Office (MC Region 11) for each of the following activities:
 - a. At least 30 days prior to the date the field layout and/or construction startup is scheduled to begin for the proposed subsurface drip irrigation system.
 - b. At least 30 days prior to the date that construction is projected to be complete.
 - c. Within 30 days after operation of the proposed subsurface drip irrigation system.
 - d. If soils are imported, at least 30 days prior to completion of the soil importing project.
28. According to the requirements of 30 TAC Section 222.45, the permittee shall submit a copy of the issued permit to the health department with jurisdiction in the area where the system is located before commencing operation of the proposed subsurface drip irrigation system. The permittee shall retain proof of delivery for the duration of the permit.
29. Holding or storage ponds shall conform to the design criteria for stabilization ponds with regard to construction and levee design and shall maintain a minimum freeboard of two feet according to 30 TAC Chapter 217, Design Criteria for Wastewater Treatment Systems.
30. The permit must include the standard special provisions for municipal permits, specifically those for subsurface area drip dispersal systems (SADDS).
31. This facility is located on the Edwards Aquifer Contributing Zone, as mapped by the TCEQ, and is subject to 30 TAC 213, Subchapter B.
32. The permittee shall comply with buffer zone requirements of 30 TAC Section §309.13(c) and 30 TAC §222.81(a)(1-2). A wastewater treatment plant unit and the subsurface area drip dispersal system (SADDS) must be located a minimum horizontal distance of 150 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site as provided by §290.41(c)(1)(C) of this title, spring, or other similar sources of public drinking water.
33. The permittee shall comply with the buffer zone requirements of 30 TAC Section §222.81(a)(3). A buffer of 100 feet minimum must be maintained from all surface water features.

34. The permittee shall either buffer the two off-channel ponds identified in Drip Field 3 by a minimum of 100-feet from wastewater application or shall fill in the ponds prior to construction of the drip fields. The materials used to fill in the ponds must be considered as imported soils and must meet the requirements of Permit Provision 23.
35. The permittee shall make the construction notices to the TCEQ Region 11 Office (Austin) in accordance with 30 TAC §222.43.
36. Any recharge features discovered during construction activities must be addressed in an updated and certified Recharge Feature Plan (RFP). The RFP must identify proposed Best Management Practices for the newly discovered feature. The updated certified RFP must be submitted to the TCEQ Water Quality Assessment Team (MC 150), and the TCEQ Region 11 Office (Austin) within 60 days.
37. The permittee shall plug wells W01 and W16 prior to construction of the drip fields and submit copies of the plugging report to the TCEQ Water Quality Assessment Team (MC 150) and TCEQ Region 11 Office (Austin) within 60 days of completion.
38. The permittee shall develop a Seeps/Springs Monitoring Plan and submit the plan to the TCEQ Water Quality Assessment Team (MC 150) for review and approval within 60 days of permit issuance.
 - a. At a minimum, the plan must include:
 - i. A procedure to conduct field checks at the irrigation fields and down-gradient of the fields to identify emerging springs or seeps. The field checks must be conducted by a Texas licensed professional engineer or geoscientist.
 - A. Prior to operation of the irrigation systems, the permittee shall sample a minimum of one existing seep or spring onsite to establish background groundwater quality. The sample(s) must be analyzed in accordance with ii.A below. Subsequent analyses of seeps or springs onsite must be compared to this background analysis.
 - B. Field checks must be conducted quarterly. If possible, the field checks must be within 3 days of a 0.5 inch or greater rain event.
 - C. The locations of the field checks must be recorded in a field log kept onsite for TCEQ inspection for 5 years.
 - D. The quarterly checks must continue for the life of the system.

- ii. A procedure to obtain grab samples of springs or seeps in the event that springs/seeps develop after irrigation.
 - A. The samples from the springs/seeps must be analyzed for chloride, specific conductivity, the complete nitrogen series [(NO₃ + NO₂ - N), Total Kjeldahl Nitrogen, ammonia-N], total phosphorus, and ortho-phosphate. The laboratory and analytical methods used must be NELAC accredited and comply with 30 Texas Administrative Code (TAC) Chapter 25.
 - B. The locations of the seeps/springs that were sampled must be recorded in a field log kept onsite for TCEQ inspection for 5 years, along with the results of the laboratory analyses.
 - C. Monitoring of emerging springs/seeps and of existing seeps must continue for the life of the system.
 - b. Permittee shall implement the plan upon approval by the Water Quality Assessment Team. The permittee or executive director may request modification of the approved plan if future information indicates that it would be necessary for the protection of the environment.
39. The permittee is authorized to haul sludge from the wastewater treatment facility, by a licensed hauler, to the City of Austin Walnut Creek Wastewater Treatment Facility, Permit No. WQ0010543011 or any other facility authorized by the TCEQ to accept sludge, for final processing and disposal.

The permittee shall keep records of all sludge removed from the wastewater treatment plant site and these records shall include the following information:

- a. The volume of sludge hauled;
- b. The date(s) that sludge was hauled;
- c. The identity of haulers; and
- d. The permittee, TCEQ permit number, and location of the facility to which the sludge is hauled.

These records shall be maintained on a monthly basis and shall be reported to the TCEQ Regional Office (MC Region 11) and the TCEQ Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

ATTACHMENT D

TCEQ INTRA-AGENCY TRANSMITTAL MEMO

DATE: March 25, 2015

TO: FINAL DOCUMENTS TEAM LEADER
OFFICE OF THE CHIEF CLERK
BUILDING F, MC-105

FROM: Ashley McDonald
ENVIRONMENTAL LAW DIVISION
BUILDING A, MC-173.

Attached: Executive Director's Response to Comments

Application Information

Program Area (Air, Water or Waste): **Water**

Permit No. **WQ0015201001** Name: **JPHD, Inc.** Docket/CID Item # (if known): _____

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY
2015 MAR 25 AM 11:29
CHIEF CLERKS OFFICE

OCC Action Required (check applicable boxes)

Date stamp and return copy to above-noted ELD Staff Attorney and:

FOR ALL PROGRAM AREAS: (required only when changes needed to official agency mailing list)

- Update** the mailing list in your file with the attached contact names and addresses
Include corrected or additional names and addresses for mailing list

FOR WASTE & WATER:

- Send Response to Comments Letter which solicits hearing requests and requests for reconsideration to the mailing list in your files
For Waste and Water this would occur in all circumstances when comments have been received for 801 applications
- Or
- Send Response to Comments Letter and Motion to Overturn Letter which solicits motions to overturn to the mailing list in your files
For Waste and Water this may occur when all comments have been withdrawn for 801 applications or when comments are received for applications that will not be set for agenda.

FOR AIR (NSR only):

- Send RTC with response to comments letter which solicits contested case hearing requests and requests for reconsideration to the mailing list in your files
For Air NSR applications this would occur only when there are pending contested case hearing requests (except no-increase renewals)
- Set for commission agenda and send RTC with agenda setting letter
This would occur when there are pending contested case hearing requests on a no-increase renewal and technical review is complete.
- Hold until a commission agenda date is requested and then send RTC with the Agenda Setting Letter
For Air applications this would occur when there are pending hearing requests on a no-increase renewal; but technical review is NOT complete. If this box is checked, ED staff must call the OCC Agenda Team Leader to arrange a specific agenda date.
- Place RTC in File - no further action required by OCC
For Air NSR applications this would occur when the matter is uncontested but comments were received, APD will send a copy with MTO letter

Other Instructions: _____

TCEQ PERMIT NO. WQ0015201001

APPLICATION BY	§	BEFORE THE
JPHD, INC. FOR TLAP	§	TEXAS COMMISSION
PERMIT NO.	§	ON
WA0015201001	§	ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR’S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (Response) on the application of JPHD, Inc. (JPHD) and the Executive Director’s (ED’s) preliminary decision. As required by 30 Texas Administrative Code (TAC) Section 55.156, before a permit is issued, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of the Chief Clerk received timely comment letters or formal comments at the public meeting from Mike Personett on behalf of the City of Austin, Jon White on behalf of Travis County Transportation & Natural Resources Department (Travis County), Eric Allmon on behalf of Hamilton Pool Matters (HPM), Adam Abrams on behalf of Save Our Springs Alliance (SOS), Edmond McCarthy and Robert Ayers on behalf of the Ayers Family and Shield Ranch (Shield Ranch), Ariel Axelrod, Stephen England, Mara Eurich, Kelly Davis, Jeff Gardner, Peter Golde, John and Molly Gurasich, Dick and Kathleen Malick Hansen, Judy Hendricks, Novella and Henry Heffington, Jenna James, Daniel Jones, Mark Kilgore, Charles and Doris Kraft, Ed and Sandy Lueckenhoff, Eugene Lowenthal, Noah Monikoff, Mehrad Morabbi, Paula Priour, Desi and Lisa Rhoden, Dr. Lauren Ross of Glenrose Engineering, Karen Stewart, Hank Stringer, Tim Van Ackeren, Hugh Winkler,

Thomas Weber, Matt Worrall. This response addresses all timely comments received, whether or not withdrawn. If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.texas.gov.

I. Background

A. Description of Facility

JPHD (Applicant) has applied to the TCEQ for a new permit that would authorize the disposal of treated domestic wastewater via subsurface drip irrigation on six areas with a minimum total surface area of 104.79 acres, divided into 36 zones. The draft permit authorizes the disposal of treated domestic wastewater effluent at an average flow not to exceed 150,000 gallons per day in the Interim I phase, 300,000 gallons per day in the Interim II phase and 450,000 gallons per day in the Final Phase. The application rate shall not exceed 0.1 gallon per square foot per day. The effluent limitations in the draft permit are: 10 mg/l five day biochemical oxygen demand (BOD₅) and 15 mg/l total suspended solids (TSS) based on the daily average flow; and 126 colony forming units (CFU) or most probable number (MPN) of *E. coli* based on a single grab sample. Additionally, the pH shall be between 6.0 and 9.0 standard units, and the effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes. If approved, the proposed wastewater treatment facility will serve JPHD, Inc. This permit will not authorize the discharge of pollutants into water in the state.

If approved, the wastewater treatment facility and the disposal site will be located 3.2 miles west of the intersection of State Highway 71 and Hamilton Pool Road, on Hamilton Pool Road, in Travis County, Texas 78738. The wastewater treatment facility and disposal site will be located in the drainage basin of Barton Creek in Segment No. 1430 of the Colorado River Basin.

B. Procedural Background

The application for a new permit was received November 25, 2013 and declared administratively complete on February 03, 2014. The Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) was published in the *Austin-American Statesman* on February 25, 2014. The Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD) was published in the *Westlake Picayune* and the *Lake Travis View* on August 07, 2014. The Notice of a Public Meeting was published in the *Lake Travis View* on November 6, 2014. A public meeting regarding this permit application was held on December 15, 2014 at Star Hill Ranch. The public comment period ended on December 15, 2014. 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.

C. Access to Rules, Laws and Records

Please consult the following websites to access the rules and regulations applicable to this permit:

- Secretary of State website: www.sos.state.tx.us;

- TCEQ rules in Title 30 of the Texas Administrative Code:
www.sos.state.tx.us/tac/;
- Texas statutes: <http://www.capitol.state.tx.us>;
- TCEQ website: <http://www.tceq.state.tx.us/>;
- Federal environmental laws and rules: www2.epa.gov/laws-regulations.

Commission records for this facility are available for viewing and copying and are located at TCEQ's main office in Austin, 12100 Park 35 Circle, Building F, 1st Floor (Office of Chief Clerk). For reporting environmental complaints regarding the JPHD wastewater treatment facility, please contact TCEQ's Region 11 Office, at (512)239-2929. The permit application, ED's preliminary decision, and draft permit are available for viewing and copying at the Bee Cave Public Library, 4000 Galleria Parkway, Bee Cave, Texas 78738.

II. Comments and Responses

Comment 1: (Self-Certification /Third Party Review of the Application)

Ariel Axelrod expressed concern regarding JPHD submitting an application without TCEQ certification and oversight. In addition, Eugene Lowenthal along with Ed and Sandy Lueckenhoff, stated that the applicant's engineer is subject to unavoidable bias, therefore, the TCEQ should require a third party review of all permit applications.

Response 1:

The TCEQ relies on applicants to submit complete and accurate applications.

The TCEQ permit application process requires that all applicants complete Item No. 10

in the Administrative Report of the application where they certify, under penalty of law, that the application including all attachments was prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The ED conducts a thorough administrative and technical review of all applications submitted. The ED's review of the JPHD application started when it was received on November 25, 2013. The Applications Team first reviewed the application for administrative completeness. During the administrative review, the Applications Team required additional information and sent JPHD a Notice of Deficiency on January 15, 2014; JPHD responded via letter dated January 23, 2014. The application was declared administratively complete on February 03, 2014 and the NORI was mailed to JPHD for publication and was mailed to the required landowners, county, state, and federal officials, and other interested persons for this permit application.

Next, the application was reviewed for technical completeness. The Water Assessment Sections staff Geologist and Agronomist reviewed the application for groundwater impact and soil analysis, then the application file and their recommendation memorandums were sent to the Wastewater Permitting Section's Municipal permits Team. The permit coordinator then conducted his review of the application file and developed a draft permit in accordance with applicable State and Federal statutes, regulations, and policies to protect water in the state. The draft permit was reviewed by a senior member of the team for accuracy and consistency. The application was also reviewed at an Executive Review Committee (ERC) meeting, which consists of staff from the TCEQ Water Quality Section and the Office of Legal Services.

A copy of the draft permit was also sent to the TCEQ Region 11 for its review of the permit limits.

Comment 2: (Compliance History)

HPM commented that JPHD failed to provide its compliance history in the application as required by TCEQ's rules.

Response 2:

An applicant is not required to submit a compliance history with its application. The TCEQ reviews the compliance history of every Applicant and facility when an application for a discharge permit is received.¹ Title 30 of the Texas Administrative Code Chapter 60, requires that the TCEQ rate the compliance history of every owner and operator of a facility that is regulated under any of the state's applicable environmental laws and create a compliance history report. Accordingly, JPHD's compliance history report was prepared and reviewed for this permit application. JPHD's compliance history is unclassified by default since the facility is not constructed.

A compliance history report shows the information used to determine a compliance history rating and how that rating was calculated, and therefore, how the classification was determined. These reports are available to the public. You can request a compliance history report by mail, at comphist@tceq.texas.gov or call the TCEQ at (512) 239-DATA (3283) or visit the TCEQ's online Compliance History database (<http://www11.tceq.texas.gov/oce/ch/>).

¹ Tex. Water Code §26.0281.

Comment 3: (Notice)

Matt Worrall stated that he did not receive a mailed Notice of the Receipt of Application and Intent to Obtain a Permit regarding JPHD's permit application.

Response 3:

Applicants for a domestic wastewater permits are required to publish two notices. The first notice, the Notice of Application and Intent to Obtain a Water Quality Permit (NORI), must be published no later than 30 days after the Executive Director deems an application administratively complete.² The Applicant published the NORI in the *Austin-American Statesman* on February 25, 2014.

The second notice, the Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD), must be published after the Executive Director has completed the technical review of the permit application and the Chief Clerk has mailed the preliminary decision to the applicant.³ The Applicant published the NAPD on August 7, 2014 in the *Lake Travis View* and the *Westlake Picayune*.

The Chief Clerk must mail both the NORI and the NAPD to individuals identified as adjacent landowners on maps that are provided by the applicant. Applicants for a new land application permits must provide a list of adjacent landowners and a map showing the location of these landowners. If a particular landowner is not notified by mail, it is possible that the property may not be immediately adjacent to the Applicant's property. Matt Worrall was not listed on the

² See, 30 TAC §39.418 (a)-(b) and 30 TAC §39.551(b)(1).

³ See 30 TAC §39.419 (a)-(b) and 30 TAC §39.551 (c).

Applicant's adjacent landowner map submitted with the permit application.

Comment 4: (Need for Permit/Term Limit)

The City of Austin, Travis County, HPM, SOS, Eugene Lowenthal, and Dr. Lauren Ross commented that the draft permit's ten-year term limit is excessive in duration. In addition, these commenters expressed concern that the JPHD had not shown sufficient need for proposed ten-year term limit of the permit.

Response 4:

The permit term for JPHD's draft permit is five years; the draft permit will expire on September 1, 2019. In accordance with TCEQ rules, a permit term shall not exceed ten years.⁴ The Executive Director's staff has made a preliminary determination that the draft permit's expiration date of September 1, 2019 is appropriate.

Comment 5: (Surface Water)

Daniel Jones, Mehrad Morabbi, Paula Priour, Lisa and Desi Rhoden, Karen Stewart, Matt Worrall, Matt Stringer, Charles and Doris Kraft, Ed and Sandy Lueckenhoff, Noah Monikoff and Hugh Winkler expressed concerns regarding the possibility of effluent from the JPHD facility reaching Little Barton Creek. In addition, Dr. Lauren Ross commented that the effluent will likely increase the trophic levels of the adjacent creeks. Shield Ranch expressed concern about the impacts of the effluent on the water quality of Rocky Creek and the waters that would traverse through the property of Shield Ranch. HPM commented that the proposed irrigation is not

⁴ 30 TAC §222.39; *See also*, 30 TAC §305.127 (relating to conditions to be determined for individual permits).

protective of surface water as required under the Texas Surface Water Quality Standards (TSQWS), and the proposed irrigation will result in a violation of Texas' Tier 1 and Tier 2 antidegradation standards.

Response 5:

JPHD applied for a new Texas Land Application Permit (TLAP), which authorizes the disposal of treated domestic wastewater through a subsurface drip irrigation system. This permit does not authorize JPHD to directly discharge into water in the state. A discharge to water in the state would constitute a violation of the draft permit, and could subject JPHD to enforcement. The draft permit also requires JPHD to comply with the rules in 30 TAC §309.13 (a) through (d) regarding unsuitable site characteristics for domestic wastewater effluent and plant siting, which were developed to protect surface and ground water by: prohibiting unprotected treatment units within the 100-year floodplain; prohibiting treatment units in wetlands; establishing buffers from sources of drinking water; and establishing liner requirements for surface impoundments overlying aquifer recharge zones.

Effluent limits in the draft permit comply with the standards set forth under 30 TAC Chapter 309. Provisions are included in the draft permit to prevent the movement of the effluent out of the root zone, and for maintenance of buffers between surface water and the subsurface irrigation areas. For example, Special Provision No. 33 in the draft permit requires that JPHD maintain a minimum buffer zone of 100 feet from all surface water features as required by 30 TAC § 222.81 (a).⁵ In addition, Special

⁵ JPHD Draft Permit, Special Provision s, Number 33, page 34; *see also* 30 TAC §222.81 (a).

Provision No. 34 in the draft permit requires JPHD maintain a minimum 100 foot buffer from the two off-channel ponds identified in Drip Field 3.⁶ Special Provision No. 20 in the draft permit requires that berms or swales be built upgradient of the drainfields and that the surface of the drainfields shall be sloped to facilitate runoff.⁷

Moreover, Special Provision No. 38 in the draft permit requires that JPHD develop a Seeps/Springs Monitoring Plan requiring that the sites adjacent to the application areas will be monitored quarterly for any emerging springs or seeps.⁸ Field checks will be performed on and downgradient from the drip irrigation the fields. If any springs or seeps are identified, the surfacing water will be collected and analyzed. Any spring or seep development found downgradient from the drip irrigation fields will be reported to the TCEQ Region 11 Office (Austin). If laboratory analysis indicates that wastewater is surfacing as a spring or seep, JPHD must implement corrective measures immediately to correct the discharge.

Provided JPHD operates and maintains the wastewater treatment facility and disposal site in accordance with the statutory and regulatory requirements and complies with the requirements in the draft permit, water in the state should be protected.

Comment 6: (Groundwater)

Travis County, SOS, HPM, Shield Ranch, John and Molly Gurasich, Dick and Kathleen Hansen, Novella and Henry Heffington, Judy Hendricks, Jenna James,

⁶ JPHD Draft Permit, Special Provisions, Number 34, page 35.

⁷ JPHD Draft Permit, Special Provisions, Number 20, page 32.

⁸ JPHD Draft Permit, Special Provisions, Number 38, page 35.

Daniel Jones, Ed and Sandy Lueckenhoff, Desi and Lisa Rhoden, Dr. Lauren Ross, Karen Stewart and Matt Worrall expressed concerns about the possibility of the effluent discharge impacting the quality of groundwater in the area. More specifically, Travis County and HPM stated that the Applicant failed to provide sufficient plans and specifications that would be protective of groundwater pollution as required by 30 TAC §222.77. Also, SOS and Dr. Lauren Ross commented that mapped groundwater wells in the proposed site's vicinity are open and uncased completions which represent a threat of groundwater contamination from effluent migration into the well bore.

Response 6:

The draft permit authorizes the disposal of wastewater via subsurface land application. Discharge of treated effluent to surface water or groundwater is not authorized. The draft permit includes requirements that minimize the potential for percolation of treated effluent beyond the rooting depth; this will ensure that the treated effluent is utilized by the cover crops and does not contaminate surface water or groundwater. Special Provision No. 11 in the draft permit requires that JPHD maintain Bermuda grass overseeded with rye grass, on the disposal site.⁹ The irrigated crops shall be established and well maintained to provide year-round vegetative growth for effluent and nutrient uptake by the crop and to prevent pathways for effluent surfacing.

In addition, Special Provision No. 32 of the draft permit requires that JPHD locate the subsurface area drip dispersal system a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water

⁹ JPHD Draft Permit, Special Provisions, Number 11, page 31.

and 150 feet from private water wells as described in 30 TAC § 309.13(c)(1).¹⁰

According to the information submitted with the application, JPHD will adhere to the required buffers for groundwater wells located within the proposed effluent application area and irrigation system.¹¹ All wells, except W01 and W16, will be protected with a 150 foot minimum buffer. Wells W01 and W16 will be capped and plugged as they are located within the proposed drip irrigation area. Special Provision No. 37 of the draft permit requires the permittee to plug wells W01 and W16 prior to construction of the drip fields and submission of copies of the plugging reports to the TCEQ with 60 days of completion.¹²

Comment 7: (Recharge Feature Plan)

The City of Austin and HPM commented that the Applicant has provided an insufficient recharge feature plan.

Response 7:

The ED has determined that the supplemental recharge feature plan submitted by JPHD on February 12, 2015 included a sufficient recharge zone plan in accordance with 30 TAC §222.79. JPHD submitted a certified recharge feature plan that: was signed and sealed by a licensed professional engineer; included a documented presence of recharge features on land owned by JPHD; listed the sources and methods the engineer, Mr. Daniel Ryan, used to identify the presence of any recharge features; provided a nutritive description of the site-specific geology and groundwater at the

¹⁰ JPHD Draft Permit, Special Provisions, Number 32 , page 32; *see also*, 30 TAC §309.13(c) (1) and 30 TAC §222.81 (a)(1-2).

¹¹ JPHD application, Domestic Worksheet 3.0, page 21 (JPHD Buffer Zone Map, Attachment K).

¹² JPHD Draft Permit, Special Provisions, Number 37, page 35.

facility; and identified measures to prevent impacts to groundwater from any recharge present.

In addition, Special Provision No. 36 of the draft permit requires that JPHD address any recharge features discovered during construction activities in an updated and certified Recharge Feature Plan (RFP).¹³ The RFP must identify proposed Best Management Practices for the newly discovered feature. The updated certified RFP was submitted to the ED February 12, 2015.

Comment 8: (Engineering Reports)

HPM commented that the Applicant has not provided a sufficient engineering report in accordance with 30 TAC §222.113.

Response 8:

JPHD was not required to submit an engineering report for the subsurface area drip dispersal system with its application for a TLAP because the ED reviews the engineering plans used for construction of the subsurface area drip dispersal system separately from the review process for the TLAP. Special Provision No. 5 of the draft permit requires JPHD to submit the engineering report prior to construction.¹⁴ The engineering report must include plans and specifications that meet the requirements in 30 TAC Chapter 222, Subsurface Area Drip Dispersal Systems, Subchapter D: Design Criteria.

Comment 9: (Buffer Zone Requirements)

¹³ JPHD Draft Permit, Special Provisions, Number 36, page 35.

¹⁴ JPHD Draft Permit, Special Provisions, Number 5, page 30.

The City of Austin, Travis County, HPM , Stephen England, and Gene Lowenthal expressed concern that JPHD will not be in compliance with required buffer zones for both surface and groundwater sources. SOS and Dr. Lauren Ross commented that the proposed well buffers are not shown on the irrigation map provided by JPHD in its application.

Response 9:

The ED reviewed the maps JPHD submitted with its application and determined that the proposed facility and application area will be in compliance with the siting requirements of 30 TAC §309.13 (a)-(d). The TCEQ rules require domestic wastewater treatment facilities to meet buffer zone requirements for the abatement and control of nuisance odors.¹⁵ These rules provide three options for applicants to use to satisfy the nuisance odor abatement and control requirement. An Applicant can meet this requirement by owning the buffer zone area, by obtaining a restrictive easement from the adjacent property owner (s) for any part of the buffer zone not owned by the Applicant, or by providing odor control. JPHD plans to meet the buffer zone requirements by owning the buffer zone area.¹⁶

Additionally, in order to protect surface and ground water resources, the draft permit requires JPHD to meet the buffer zone requirements of 30 TAC §222.81, which states that the permittee must locate the subsurface drip dispersal system a minimum horizontal distance of 100 feet from surface waters in the state; a minimum horizontal

¹⁵ 30 TAC §309.13 (c)(1); *see also*, 30 TAC §222.81(a) (relating to buffer zone requirements for subsurface area drip dispersal systems).

¹⁶ JPHD Permit Application, Domestic Administrative Report 1.1, page 16.

distance of 500 feet from public water wells, springs, or other similar sources of public drinking water; and 150 feet from private water wells. In addition, the draft permit restricts JPHD from locating the facility in a floodway.

According to JPHD's application, all wells within a one mile radius of the facility and application area, except for W01 and W16 will be buffered by at least 150 feet from any irrigation activities. None of the wells within the one mile radius of the facility and application area will be located in a floodway. According to JPHD's permit application, well W01, located in Drip Field 6 and well W16, located in Drip Field 5, will be plugged. Special Provision No. 37 of the draft permit requires the permittee to plug wells W01 and W16 prior to construction of the drip fields and submission of copies of the plugging reports to the TCEQ with 60 days of completion.¹⁷

Comment 10: (Edwards Aquifer)

SOS and Dr. Lauren Ross noted that JPHD's application incorrectly indicates the Edwards Aquifer as the underlying aquifer of the treatment facility and application site.

Response 10:

The Recharge Feature Plan submitted with the application identified the Edwards and Trinity Aquifers as the major aquifers under the project area. The Edwards was incorrectly identified in the permit application. JPHD submitted a revised Recharge Feature Plan to the TCEQ on February 12, 2015; this plan correctly identifies the underlying aquifer as the Trinity Aquifer.

¹⁷ JPHD Draft Permit, Special Provisions, Number 37, page 35.

Comment 11: (Soil Quality)

The City of Austin, HPM, Shield Ranch, SOS, Stephen England, Peter Golde, Dick and Kathleen Malick Hansen, Novella and Henry Heffington, Jenna James, Daniel Jones, Eugene Lowenthal, Paula Priour, Desi and Lisa Rhoden, Dr. Lauren Ross, Karen Stewart, Hank Stringer, and Hugh Winkler expressed concerns about the soil quality of the proposed irrigation area. In general the commenters stated that they are concerned about the absorption rate of the soils in and around the proposed irrigation fields, and where the effluent would go when the ground is saturated. In addition, SOS commented that the soil and crops in the proposed irrigation area will not uptake the nitrogen in the effluent under normal variations in weather, seasons, and growing cycles. Also, SOS and Dr. Lauren Ross commented that the soil sheet submitted by the Applicant is incorrect and that the 24 soil pit descriptions in the application indicate conditions that are not conducive to the proposed effluent irrigation operation. Additionally, SOS commented that the application does not include any boring logs that might provide site-specific information regarding irrigation soils.

Response 11:

For TLAP permits, the TCEQ requires Applicants to provide a soil map and soil analyses of the area to be used for effluent disposal. JPHD's application indicates that the major soils in the effluent application area are brackett (BID), tarrant (TaD), volente (VoD), and speck (SsD).¹⁸ The permeability of these soils is 0.20-0.63 inches

¹⁸ JPHD application, Domestic Worksheet 3.0-Land Disposal of Effluent, Item 7, page 22.

per hour. The available water capacities of these soils are 0.10-0.12 inches per inch of soil. The ED determined that based on the permeability and absorption rates of the designated soils a daily maximum application rate of 0.1 gallons per square foot per day is appropriate.

Additionally, the draft permit contains numerous provisions to ensure effluent distribution and adequate vegetative cover in the irrigation areas. Special Provision No. 18 requires that JPHD use cultural practices to promote and maintain the health and propagation of the Bermuda grass and winter rye grass crops and avoid plant lodging.¹⁹ Special Provision No. 23 requires that each drainfield have at least one moisture sensing device placed at 12 inches below the drip lines that will automatically shut off irrigation to the drainfield when the soil becomes saturated.²⁰ The soil descriptions contained in the Site Evaluation prepared by Joe Wells, P.E., for the site meet the requirements contained in 30 TAC §222.73. The soil conditions described as not conducive to the proposed effluent irrigation operation are similar to any soils in upland positions in that part of the county. These characteristics can be modified to make the soil more suitable. No boring logs to provide site-specific information regarding irrigation soils are required. Special Provision No. 8 prevents irrigation areas from being close to wells, springs or floodways.²¹ Special Provision No. 22 requires removal of large stones and flagstones from the land application site where soils are sufficient and where soils are not sufficient, soil will be imported to ensure there is at least 12 inches of adequate rooting material beneath the drip lines. Special

¹⁹ JPHD Draft Permit, Special Provisions, Number 18, page 32.

²⁰ JPHD Draft Permit, Special Provisions, Number 20, page 32.

²¹JPHD Draft Permit, Special Provisions, Number 8, page 30.

Provision No. 23 requires soil moisture sensing devices which prevent application when the ground is saturated.²² These provisions are included in the draft permit to ensure that the qualities of the soils are maintained throughout the application dispersal zones.

Comment 12: (Soil Testing and Measurements)

The City of Austin, HPM, SOS, Eugene Lowenthal and Dr. Lauren Ross commented that JPHD has not provided an adequate soil evaluation. As identified in the application, many of the irrigation areas are on slopes as steep as 15%, and, therefore, a complete soil investigation should be a required provision of the proposed permit.

Response 12:

A previous soil site investigation was conducted in an adjacent area demonstrating the soils were adequate for irrigation of wastewater with appropriate crops. This investigation was conducted by Mr. Joe Well, P.E. for the Travis County MUD No. 19 located West of Austin, and the development is located north of the intersection of Hamilton Pool Road and Crumley Ranch Road. Additionally, TCEQ staff determined that the soil evaluation submitted with the application complied with the requirements of 30 TAC §222.73 (regarding soil evaluations). The ED has determined that the average slope application of 6% proposed by JPHD should not present any potential for pollutants to enter groundwater.²³ While irrigation areas with sloped greater than 15% are discouraged, the applicant has proposed the use of areas

²²JPHD Draft Permit, Special Provisions, Numbers 22 and 23, page 22.

²³ JPHD permit application, Domestic Worksheet 3.3, Subsurface Area Drip Dispersal System

with high slopes only if needed in the final phase. The application of effluent in areas designated with slopes greater than 15% are to have established vegetative coverage before application.

The effluent application will be subsurface, so effluent runoff should not occur. Special Provision No. 10 prohibits surfacing of the effluent in accordance with 30 TAC §222.151(b). Special Provision No. 11 requires the establishment of Bermuda grass overseeded with ryegrass prior to effluent applications.²⁴ These grasses will reduce the erosion rate to values much lower than that of the native landscape and will reduce the potential for effluent surfacing. Special Provision No. 15 prevents application when the ground is saturated.²⁵ Special Provision No. 19 requires weekly monitoring of the drip application fields to prevent problems resulting from surface runoff, surficial erosion, and stressed or damaged vegetation.²⁶ Special Provision No. 22 requires the permittee to provide a plan for review and approval showing how soil erosion will be prevented before construction of the drip fields.²⁷

Comment 13: (Vegetation Quality)

Dick and Kathleen Hanson expressed concern that the massive amounts of effluent irrigation to the surrounding vegetation will impair and destroy native grasses. Dr. Lauren Ross expressed concern that the trees (40% mixture of juniper oak savannah) on the proposed irrigation site will have to be removed because of the introduction of a non-native turf system to be installed on the irrigation site. HPM

²⁴ JPHD Draft Permit, Special Provisions, Number 11, page 31.

²⁵ JPHD Draft Permit, Special Provisions, Number 15, page 31.

²⁶ JPHD Draft Permit, Special Provisions, Number 19, page 32.

²⁷ JPHD Draft Permit, Special Provisions, Number 22, page 32.

commented that the proposed cropping system will not be adequate to remove contaminants prior to those contaminants reaching groundwater or surface water. HPM also commented that JPHD has failed to provide a sufficient site preparation plan in accordance with 30 TAC §222.75. For example, JPHD has not demonstrated how the site will minimize rainfall run-on and compensate for restrictive horizons within the soil column; the Applicant has not adequately addressed the chemical and physical characteristics of the soil and material proposed to be imported; JPHD has not adequately addressed the planned removal of existing vegetation.

Response 13:

The ED has determined that the vegetation quality of the proposed disposal site is sufficient to uptake the treated effluent. The draft permit requires the disposal site be covered with Bermuda grass (warm season) and winter rye grass (cool season). The non-native coastal Bermuda and winter ryegrass required by the draft permit is adapted to higher moisture and higher nutrient sites than native grasses. As a result, these non-native grasses will likely out compete native grasses within the disposal sites, but are unlikely to spread beyond the boundaries of the application areas without irrigation because the native grasses are better adapted to lower available water and nutrients.

According to the information provided in JPHD's application, the juniper oaks will be removed to allow for the installation of the subsurface area drip dispersal system that will deliver the proposed 0.1 gallon per square foot per day effluent application in accordance with 30 TAC §222.83(a)(1). JPHD proposed to preserve

certain juniper oak trees located outside the application dispersal zones for aesthetic purposes. The ED has determined that preserving the junipers will not impact the nutrient and nitrogen uptake of the soils located within the application areas. The S-tables of crop nutrient requirements from Texas Agricultural Extension show that growth of coastal Bermuda grass plus winter rye grass should remove much more nitrogen than what will be in the effluent from the wastewater treatment facility. The low concentration of nitrogen in the effluent would make nitrogen the limiting factor in the rate of grass growth. These non-native grasses will be sufficient for absorbing the concentrated nitrogen in the effluent application.

Comment 14: (Mowing and Manicuring)

SOS commented that manicuring and mowing of the proposed irrigation areas will adversely affect the proposed vegetation’s already limited ability to uptake nitrogen.

Response 14:

Normal moving should not adversely affect the crop’s ability to uptake nutrients. On the contrary, mowing is a normal agronomic cultural practice that is used to maintain the health, vigor, and permanency of the grass stand. Special Provision No. 18 of the draft permit requires that JPHD use cultural practices, such as mowing, to promote and maintain the health and propagation of the Bermuda grass (warm season) and winter rye grass (cool season) crops and avoid plant lodging.²⁸ Also, the permittee is required to harvest the crops (cut and remove it from the field) at least one time

²⁸ JPHD Draft Permit, Special Provisions, Number 18, page 32.

during the year. The draft permit also requires that the harvesting and mowing dates be recorded in a log book and kept on site to be made available to TCEQ personnel upon request.

Comment 15: (Site Characteristics)

HPM commented that the characteristics of the facility and irrigation site make it unsuitable for subsurface drip irrigation in consideration of the factors set forth at 30 TAC §222.71 and 30 TAC §309.12. More specifically, HPM commented that the active geologic processes at the site such as erosion will prevent adequate protection of groundwater and surface water.

Response 15:

For TLAP permits, the TCEQ requires applicants to provide a soil map and soil analyses of the area to be used for effluent disposal. Special Provision No. 22 requires removal of large stones and flagstones from the land application site where soils are sufficient. Where soils are not sufficient, soils will be imported to ensure there is at least 12 inches of adequate rooting material beneath the drip lines.²⁹ Special Provision No. 23 requires soil moisture sensors which prevent application when the ground is saturated.³⁰ Special Provision No. 22 also requires the applicant to submit a plan for review/revision and approval describing how the imported soils will be incorporated into the native soils and how soil erosion will be prevented in the affected areas.³¹

²⁹ JPHD Draft Permit, Special Provisions, Number 22, page 32.

³⁰ JPHD Draft Permit, Special Provisions, Number 23, page 32.

³¹ JPHD Draft Permit, Special Provisions, Number 22, page 32.

These provisions taken together enhance the suitability of the soil in the application areas.

Comment 16: (Design Criteria)

HPM, SOS and Dr. Lauren Ross commented that JPHD has not proposed an adequate design for the wastewater treatment facility, effluent dispersal system and irrigation application system as required by 30 TAC Chapter 217. According to HPM, the deficiencies in the application include; failure to demonstrate that the design includes adequate storage for emergency situations, no demonstration of adequate back up power, and lack of adequate design characteristics to address the potential for wastewater to leak or seep into surface waters.. In addition, HPM commented that JPHD has not addressed how its distribution system would be adequately designed to address the risk posed by the proximity of the facility's distribution lines to nearby drinking water facilities.

Response 16:

The application shows that JPHD will be in compliance with the design criteria requirements of 30 TAC Chapter 217.³² Specifically, JPHD's design for storage equals at least three days of the design flow of the facility for times when the subsurface area drip dispersal system is out of service due to an emergency or scheduled maintenance.

The design calculations state that the wastewater treatment facility will be equipped with safety features to prevent the overflow or bypass of untreated wastewater. The wastewater treatment facility must have a backup generator capable

³² JPHD Permit Application, Domestic Technical Report 1.0, pages 1-2.

of running one blower, influent pump, clarifier and effluent pump. An automatic transfer switch must prevent an interruption of service. The Operational Requirements of the draft permit, Provision No. 4, provides that the permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.³³

Special Provision No. 32 of the draft permit requires JPHD to comply with the buffer zone distances in 30 TAC §309.13(c) and 30 TAC §222.81(a)(1-2).³⁴ The JPHD wastewater treatment plant units and the subsurface area drip dispersal system (SADDS) must be located a minimum horizontal distance of 150 feet from a private well and a minimum horizontal distance of 500 feet from a public water well , spring, or other similar sources of public drinking water, as provided by 30 TAC §290.41(c)(1)(C).

Comment 17: (System Failures/Design Flaws)

Eugene Lowenthal, Stephen England, Peter Golde, Dick and Kathleen Hanson, and Noah Monikoff expressed concern that the application does not adequately address the consequences of system failures and design flaws that would contribute to overflow or flooding of the irrigation areas. HPM commented that the Applicant has not shown that the design of the proposed treatment system, distribution system, and dispersal system are adequate as required by 30 TAC §222.111, §222.115 and §222.1. In addition, SOS and Dr. Lauren Ross commented that the irrigation areas are sized only to

³³ JPHD Permit Application, Operational Requirements, Number 4, page 11.

³⁴ JPHD Draft Permit, Special Provisions, Number 32, page 35.

accommodate daily average flows and do not take into account wet weather events or inflows into the sewage plant. Also, Dr. Lauren Ross commented that the pump and haul provision in the application is not sufficient because it does not allow for pump and haul accommodations for a lack of disposal capacity within the effluent irrigation fields.

Response 17:

The ED reviewed JPHD's application and determined that the proposed facility complies with the design requirements of 30 TAC Chapter 222 regarding the Design Criteria of Subsurface Area Drip Dispersal Systems. The draft permit contains provisions to regulate the disposal system and to prevent overflow or flooding of the irrigation area. Special Provision No. 19 of the draft permit requires JPHD to inspect the physical condition of the drip application fields.³⁵ The physical condition of the drip application fields will be monitored on a weekly basis. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation will be recorded in the field log kept onsite and corrective measures must be implemented within 24 hours.

Additionally, Special Provision No. 23 provides that the each drainfield zone shall have at least one moisture sensing device placed at least 12 inches below the drip lines that will automatically shut off irrigation to the drainfield when the soil becomes saturated.³⁶ Also, Special Provision No. 13 provides that the permittee shall pump and haul wastewater from the facility to prevent the discharge of treated wastewater if

³⁵ JPHD Draft Permit, Special Provisions, Number 19, page 32.

³⁶ JPHD Draft Permit, Special Provisions, Number 23, page 32.

complete shutdown of the wastewater treatment facility becomes necessary or the storage capacity is exceeded.³⁷

The TCEQ does not mandate a specific treatment process, and the owner of a facility is not required to submit collection system or treatment facility plans and specifications for approval prior to the commission issuing the facility's wastewater permit. ³⁸ Regardless of the treatment process used, the permittee must meet the effluent limits in its permit. The draft t permit requires a daily average effluent concentration of 10 mg/l BOD₅, 15 mg/l of TSS and a single grab effluent limitation of 126 colony forming units or most probable number of *E. coli* per 100 ml.³⁹ JPHD's proposed treatment process includes the use of a bar screen, aeration basin, clarifier, chlorine contact basin, and aerobic digester. The proposed treatment process in the application states that the wastewater will enter an influent lift station and be pumped to the plant where it will enter the aeration basin through a bar screen. The influent will then pass through the aeration zone and flow into the clarifier. From the clarifier the effluent will flow to a chlorine contact basin and then to an effluent storage tank. The effluent storage tank will provide three days of storage. The effluent will then be disposed of via subsurface drip disposal. The facility will also utilize a digester for sludge holding, prior to haul off.

If JPHD is granted a permit for a domestic wastewater treatment facility with a subsurface area drip dispersal system it is required to submit to the ED an engineering

³⁷ JPHD Draft Permit, Special Provisions, Number 13, page 31.

³⁸ 30 TAC §217.6(a).

³⁹ JPHD Draft permit, Effluent Limitations and Monitoring Requirements, page 2.

report, including the plans and specifications, that meets the requirements found in 30 TAC Chapter 222.

Comment 18: (Effluent Limits)

The City of Austin, HPM, Eugene Lowenthal and Dr. Lauren Ross commented that the proposed permit does not provide for adequate effluent quality that will be protective of surface and ground water as required by 30 TAC §222.85. In addition, Dr. Lauren Ross expressed concern that the effluent standards set forth in the proposed permit are insufficient since limits for total nitrogen and total phosphorus are not included. Dr. Lauren Ross commented that the application should include both a water balance study and nitrogen loading calculations. Peter Golde, Novella and Henry Heffington, Paula Priour, and Desi and Lisa Rhoden commented that the application incorporates insufficient pollutant removal parameters. SOS, Jeff Gardner and Dr. Lauren Ross commented that the application should incorporate best available technology (BAT) standards.

Response 18:

JPHD applied for a permit under section 30 of the Texas Administrative Code (TAC) Chapter 222 (relating to Subsurface Area Drip Dispersal Systems). The effluent limits in the draft permit comply with the rules in 30 TAC §222.85, which requires that the applicant must demonstrate that both surface and subsurface fresh water will not be polluted by the application of wastewater by the subsurface area drip dispersal system, which includes maintaining a pH level of the effluent within the limits of 6.0 and 9.0 standard units immediately prior to dispersal, disinfection of the effluent prior

to it entering the subsurface area drip dispersal system and a daily five-day biochemical oxygen demand (BOD₅) concentration and total suspended solid concentration that are less than 20 milligrams per liter each; however, 30 TAC § 222.85 does not require effluent limits for total nitrogen or total phosphorus.

As required by the TCEQ's application, JPHD included in its application a soil evaluation and soil sampling and testing as required by 30 TAC §222.73 . The applicant for a water quality permit is responsible for proposing the treatment processes that will be used at their wastewater treatment facility, subject to an engineering review by the TCEQ. To ensure sufficient uptake of the effluent application by the soils in the application area, Special Provision No. 24 of the draft permit requires the permittee to obtain representative soil samples from the land application areas and analyze them for total nitrogen and phosphorus. The TCEQ may initiate a permitting action to incorporate additional effluent limits, if necessary, based upon the results of these soil analyses.

The TCEQ does not have the authority to mandate a specific type of treatment process.⁴⁰ However, regardless of the treatment process used, a permittee must meet the effluent limits in its permit. The applicant for a water quality permit is responsible for proposing the treatment processes that will be used at their wastewater treatment facility, subject to an engineering review by the TCEQ. However, regardless of the treatment process used, a permittee must meet the effluent limits in its permit. Please see Response 17 for a discussion of the treatment process proposed by JPHD in the permit application.

⁴⁰ 30 TAC §217.6 (a).

Comment 19: (Effluent Limits-BOD₅)

HPM commented that JPHD's application proposed an effluent limit of 5 mg/l BOD₅ (Biochemical Oxygen Demand). The commenter states that the Executive Director drafted a proposed permit with a more lax effluent limitation of 10 mg/l as a daily average concentration of BODs, along with a maximum BOD₅ 7-Day average of 15mg/l. HPM asserts that the ED should have not relaxed the BOD₅ limitation in this manner considering the sensitive nature of the receiving waters.

Response 19:

JPHD, Inc. has acknowledged in a letter dated June 30, 2014 that the 5 mg/l BOD₅ limit requested in its permit application is incorrect. The draft permit incorporates the appropriate 10 mg/l BOD₅ effluent limitation as determined by the ED.⁴¹

Comment 20: (Effluent Application Rate)

Eugene Lowenthal, Dr. Lauren Ross, Peter Golde, Dick and Kathleen Hanson, Novella and Henry Heffington, Desi and Lisa Rhoden, Tim Van Ackeren, HPM and SOS expressed concerns regarding the rate at which the effluent will be applied to the irrigation fields. The City of Austin commented that the existing shallow soils over the caliche restrictive layer will likely result in an existence of preferential soil-water flow paths; therefore, the hydraulic application rate should be re-evaluated to ensure that no seepage or percolation of the effluent out of the root zone occurs. SOS and HPM

⁴¹ JPHD Draft Permit, Effluent Limitations and Monitoring Requirements, page. 2.

commented that the application does not provide sufficient storage capacity as required by 30 TAC §222.127.

Response 20:

The draft permit provides that the application rate shall not exceed 0.1 gallons per square foot per day.⁴² TCEQ's rules provide that for a subsurface area drip dispersal system located in Travis County the application rate is 0.1 gallons per square foot per day, when the applicant uses a vegetative cover of non-native grasses that are overseeded with cool season grasses in the winter months (October - March).⁴³

Preferential soil-water flow paths might be locally important very close to the emitters where saturation might occur during drip applications but should not be important in seepage or percolation of effluent out of the root zone because the effluent applications are prohibited when the soil is saturated. To determine when the soil is saturated, the draft permit requires the installation of moisture sensing devices throughout the drip irrigation field to ensure the lack of saturation.⁴⁴ Most of the large preferential flow features of the native soils result from cracking during dry conditions. With the continual applications of effluent in a drip application area, the soils should always be moist and will not exhibit cracking, and therefore preferential flow features should not develop.

Comment 21: (Monitoring Requirements)

⁴² JPHD Draft Permit, Special Provisions, Number 9, page 30.

⁴³ 30TAC § 222.83(a)(2).

⁴⁴ Draft Permit, Special Provision, Number 15, page 31 and Special Provision, Number 23, page 32.

Daniel Jones commented that he would like to know how the TCEQ plans to monitor the activities at the wastewater treatment facility. The City of Austin, Travis County and HPM commented that the monitoring requirements incorporated into the proposed permit were insufficient to ensure compliance by the facility operator. In addition, Travis County commented that the proposed permit should include a more comprehensive monitoring plan to detect operational problems with the subsurface drip irrigation system.

Response 21:

If the draft permit is issued, JPHD will be required to analyze its treated effluent after final treatment and prior to storage of the treated effluent and to retain testing records on a monthly basis at the site for inspection by authorized representatives of the Commission. Once the plant starts up or begins discharging, JPHD must comply with the monitoring and reporting requirements set forth in 30 TAC Chapter 319 which includes monitoring and reporting requirements, recordkeeping, parameters to be monitored, sampling and measuring requirements, quality assurance, and sampling and laboratory testing methods. In addition, Special Provision No. 3 of the draft permit requires that the permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability, which includes monitoring of the effluent flow and quality as well as appropriate grounds and building maintenance.⁴⁵

⁴⁵ JPHD Draft Permit, Special Provisions, Number 3, page 29.

Also, the TCEQ requires that the facility will be operated by a chief operator or operator holding a Category C license or higher.⁴⁶

If the draft permit is issued, JPHD will be required to notify the TCEQ if its effluent does not meet the permit limits according to the requirements in the permit.⁴⁷ Additionally, the TCEQ Regional staff may sample the effluent during routine inspections or in response to a complaint. Furthermore, the draft permit states that JPHD has a duty to comply with all conditions of the permit and that violation of the permit is grounds for enforcement action.⁴⁸ Information regarding complaints, investigations, notices of violation, enforcement, and other incidents is made available on the TCEQ's website at <https://www.tceq.texas.gov/complaints>.

Comment 22: (Operations and Maintenance)

HPM commented that JPHD has failed to show that the requested permit will ensure adequately protective operation and maintenance of the authorized facility as required by 30 TAC Chapter 222 Subchapter E. In addition, Thomas Weber expressed concern that the TCEQ is not requiring enough accountability from the operators of the wastewater treatment facility.

Response 22:

JPHD is responsible for operating the facility; however; the Applicant may contract with an individual operator, company, and other entity to operate the facility.

⁴⁶ JPHD Draft Permit, Special Provisions, Number 2, page 29.

⁴⁷ 30 TAC §305.125(9)(B)(ii).

⁴⁸ JPHD Draft permit, Permit Conditions 2.b, page 7.

Anyone who operates a domestic wastewater facility is required to hold a current wastewater operator registration issued by the TCEQ.

TCEQ rules require that the permittee ensure that the facility supplying treated domestic wastewater to the subsurface area drip dispersal system, and the subsurface area drip dispersal system are operated by a chief operator holding a valid Class A, B, or C wastewater operator license as defined in 30 TAC Chapter 30 (relating to Occupational Licenses and Registrations).⁴⁹ JPHD's permit application provides that the operator of the facility, Crossroads Utility Service, will provide a registered facility operator to operate the wastewater facility in compliance with the draft permit and TCEQ rules.⁵⁰

Comment 23: (Impacts to Human Health and Livestock)

Tim Van Ackeren, Mara Eurich, Charles and Doris Kraft expressed concerns about the presence of bacteria and the health risks to humans that rely on surrounding groundwater sources for drinking water and who enjoy contact recreation in the local creeks. Shield Ranch and Tim Van Ackeren expressed concern about the effects of the treated effluent on cattle and other wildlife that will possibly come into contact with the effluent.

Response 23:

As previously mentioned, the proposed permit does not authorize the discharge of pollutants to water in the state. TCEQ rules require the effluent quality of a

⁴⁹ 30 TAC Chapter 222 Subchapter E; *see also*, 30 TAC §30 Subchapter J (regarding registration requirements for wastewater operators and operations companies).

⁵⁰ JPHD permit application, Domestic Technical Report 1.1, pg. 4.

subsurface area drip dispersal system to be protective of both surface and subsurface fresh water.⁵¹ Since this is a subsurface area drip system, the public and wildlife, are not expected to come into contact with the effluent. However, as a protective measure, the draft permit incorporates disinfection of the effluent before it is delivered into the irrigation system and land applied.⁵² Chlorination of the treated effluent is required to provide adequate disinfection and reduce pathogenic organisms. JPHD's draft permit requires that the effluent be chlorinated with a minimum detention time of 20 minutes. According to the draft permit requirements, the chlorine residual must be monitored five times per week by grab sample. ⁵³ The draft permit contains effluent limits for bacteria, using *E.coli* as the bacterial indicator organism.⁵⁴

In addition, as discussed in responses 6 & 11 above, the soils within the application area will be sufficient to uptake the effluent without it coming into contact with local ground water wells. According to JPHD's application, the proposed facility will be in compliance with TCEQ's siting requirements.⁵⁵ The siting requirements do not allow the wastewater treatment plant units to be located in a 100-year floodplain, in wetlands, or within certain distances of drinking water sources. The siting requirements also prohibit unprotected wastewater surface impoundments over the recharge zone of aquifers. The ED has determined that based on the soil quality, and the locations and depths of local ground water wells, there should be no pollution of

⁵¹ 30 TAC §222.85 (a).

⁵² JPHD Draft Permit, Effluent Limitations and Monitoring Requirements, Part A, page 2.

⁵³ JPHD Draft Permit, Effluent Limitations and Monitoring Requirements, Part B, page 2.

⁵⁴ JPHD Draft Permit, Effluent Limitations and Monitoring Requirements, Part A, page 2.

⁵⁵ 30 TAC §309.13 (a)-(d)

local groundwater wells in the area if the permittee complies with the applicable rules and permit requirements.

Comment 24: (Storage of Hazardous Chemicals On-Site)

Mehrad Morabbi is concerned about storage of hazardous chemicals at the proposed facility.

Response 24:

The proposed permit, if approved, will require the Applicant to obtain final engineering design approval from the TCEQ before constructing the facility.⁵⁶ The Applicant's engineer must certify that the final design meets the TCEQ's design requirements, including requirements for safety, chemical handling and storage, and bleach storage. Also, the Applicant must comply with any applicable Occupational Health & Safety Administration requirements.

Comment 25: (Nuisance)

HPM, SOS, Stephen England, Peter Golde, John and Molly Gurasich, Judy Hendricks, Novella and Henry Heffington, Daniel Jones, Eugene Lowenthal, Mehrad Morrabi, Desi and Lisa Rhoden, Karen Stewart, Hank Stringer and Matt Worrall expressed concerns about noise, lights, increased traffic, and other aesthetic nuisances as a result of the construction of the JPHD wastewater treatment plant.

⁵⁶ JPHD Draft Permit, Operational Requirements 8(b), page 12, and Special Provision 4, page 29.

Response 25:

The TCEQ does not have jurisdiction to address these types of issues as a part of the wastewater permitting process. TCEQ's jurisdiction over the permitting process is established by the Texas Legislature and is limited to controlling the discharge of pollutants into, and protecting the quality of, water in the state. Therefore, noise, lights, traffic and undesirable aesthetics are not considered in the TCEQ's review. The draft permit would not limit anyone's ability to seek legal remedies regarding any potential trespass, nuisance, or other cause of action in response to the proposed facility's activities that may result in injury to human health or property or interfere with the normal use and enjoyment of property. Furthermore, if members of the public experience nuisance conditions from the facility, they may use the contact information listed in section II.C. above to notify the TCEQ of any problems. If the TCEQ finds that the facility is out of compliance with applicable laws or the draft permit, the facility may be subject to an enforcement action. The TCEQ's periodic facility inspections and review of JPHD's annual reports will also help identify potential violations.

Comment 26: (Use and Enjoyment of Property and Property Values)

Shield Ranch, Karen Stewart, and Hank Stringer stated that the operation of the JPHD wastewater treatment facility would substantially interfere with the current and future use and enjoyment of their properties. Also, commenters expressed concern about the effects of the proposed wastewater treatment plant on their property values.

Response 26:

The TCEQ does not have jurisdiction to review the effect, if any, the location of the wastewater treatment facility might have on property values and tax assessments of surrounding landowners when reviewing a permit for a domestic wastewater treatment plant.

The draft permit does not authorize any invasion of personal rights or any violation of federal, state or local laws. It also does not limit the ability of nearby landowners to use common law remedies for trespass, nuisance, or other causes of action in response to activities that may or actually do result in injury or adverse effects on human health or welfare, animal life, vegetation, or use and enjoyment of property, or that may or actually do interfere with the normal use and enjoyment of animal life, vegetation, or property.

As previously discussed, the ED has determined that if JPHD complies with the effluent limitations set forth in the proposed permit, there should be no effluent discharge from the facility that would interfere with an adjacent property owner's use and enjoyment of his/her property. Individuals are encouraged to report any concerns about nuisance issues or suspected noncompliance with the terms of the draft permit or other environmental regulation by using the contact information provided in section II. C. above. The TCEQ investigates all complaints received. If the facility is found to be out of compliance with the terms and conditions of its permit, it will be subject to investigation and possible enforcement action.

Comment 27: (Odor)

HPM, Shield Ranch, Stephen England, Peter Golde, John and Molly Gurasich, Judy Hendricks, Novella and Henry Heffington, Jenna James, Daniel Jones, Eugene Lowenthal, Mehrad Morrabi, Desi and Lisa Rhoden, Karen Stewart, Hank Stringer, and Matt Worrall expressed concerns about the potential of nuisance odors emanating from the proposed wastewater treatment facility.

Response 27:

TCEQ rules require domestic wastewater treatment facilities to meet buffer zone requirements for the abatement and control of nuisance odors according to 30 TAC Section 309.13(e). These rules provide three options for applicants to use to satisfy the nuisance odor abatement and control requirement. The Applicant can meet this requirement by owning the buffer zone area, by obtaining a restrictive easement from the adjacent property owner(s) for any part of the buffer zone not owned by the Applicant, or by providing odor control. JPHD intends to meet the buffer zone requirements by owning the buffer zone area.⁵⁷

If anyone experiences nuisance odor conditions or any other suspected incidents of noncompliance with the permit or TCEQ rules they may contact the TCEQ by using the contact information provided in section II.C. above. If the regional investigator documents a violation of TCEQ regulations or the permit, then appropriate action may be taken, including enforcement.

⁵⁷ JPHD application, Domestic Administrative Report 1.1, page 16.

Comment 28: (Regionalization)

Shield Ranch stated that the proposed JPHD wastewater facility is eligible for regionalization with the existing Travis County MUD No. 16-Rocky Creek Wastewater Treatment Facility. The City of Austin, Gene Lowenthal and Dr. Lauren Ross commented that the TCEQ should impose permit conditions (i.e., effluent limitations and operational standards) as strict or equal to the requirements set forth in the permit for Travis County MUD No. 16-Rocky Creek WWTP .

Response 28:

According to the Texas Water Code, when considering the issuance, amendment, or renewal of a permit to discharge waste, the Commission may deny or alter the terms and conditions of the proposed permit, amendment, or renewal based on consideration of need, including the expected volume and quality of the influent and the availability of existing or proposed areawide or regional waste collection, treatment...⁵⁸ This section is expressly directed to the control and treatment of conventional pollutants normally found in domestic wastewater. However, each permit application received by the TCEQ is reviewed on its own merit and the applicable rules related to that specific treatment and disposal requested in the application. The consideration of nearby permits can give a perspective of what is being proposed, but permit conditions vary among facilities and another facility's permit conditions will not be the sole basis for determining the limits on a similar or nearby facility's proposed permit.

⁵⁸ Tex. Water Code §26.0282.

Additionally, the Legislature has mandated the TCEQ to “encourage and promote the development and use of regional and area-wide waste collections, treatment, and disposal systems to serve the waste disposal needs of the citizens of the state and to prevent pollution and maintain and enhance the quality of the water in the state.”⁵⁹ The Domestic Wastewater Permit Application: Technical Report requires information concerning regionalization of wastewater treatment plants. JPHD was required to review a three-mile area surrounding the proposed facility to determine if there is a wastewater treatment plant or sewer collection lines with sufficient capacity to accept wastewater from JPHD. According to JPHD’s permit application, there are no treatment facilities or collection systems located within three miles of the proposed facility.⁶⁰

CHANGES MADE TO THE DRAFT PERMIT IN RESPONSE TO COMMENT

On February 12, 2015, JPHD filed a revised recharge feature plan (RFP) in response to comments received during the public meeting. The revised RFP eliminates an erroneous reference to the Edwards Aquifer underlying the project area. The ED has reviewed the revised RFP, and determined that there are no changes required to the draft permit.

⁵⁹ Tex. Water Code §26.081.

⁶⁰ JPHD application, Domestic Technical Report 1.1, pg. 11.

Respectfully submitted,

Texas Commission on Environmental Quality

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REPRESENTING THE
EXECUTIVE DIRECTOR OF THE
TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on March 25, 2015, the “Executive Director’s Response to Public Comment” for JPHD, Inc. Permit No. WQ0015201001 was filed with the Texas Commission on Environmental Quality’s Office of the Chief Clerk.



Ashley S. McDonald, Staff Attorney
Environmental Law Division
State Bar No. 24086775