

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AGENDA ITEM REQUEST
for General Permit Adoption

AGENDA REQUESTED: January 15, 2014

DATE OF REQUEST: December 20, 2013

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Charlotte Horn, (512) 239-0779

CAPTION: Docket No. 2013-1989-MIS. Consideration of the adoption of the renewal, with amendment, of the Texas Pollutant Discharge Elimination System (TPDES) general permit number TXG530000, authorizing the discharge of wastewater from on-site treatment systems connected to single family residences located in Harris County, Texas. Public notice of the proposed draft permit was published in the September 27, 2013 issue of the *Texas Register* (38 TexReg 6725). (Laurie Fleet, Kathy Humphreys) (Non-Rule Project No. 2013-032-OTH-NR)

L'Oreal Stepney, P.E.

Deputy Director

David W. Galindo

Division Director

Charlotte Horn

Agenda Coordinator

Copy to CCC Secretary? NO YES X

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** December 20, 2013

Thru: Bridget C. Bohac, Chief Clerk
Zak Covar, Executive Director

From: L'Oreal Stepney, P.E., Deputy Director
Office

Docket No.: 2013-1989-MIS

Subject: General Permit: Commission Approval for Adoption
Renewal and Amendment of the Harris County On-site Wastewater General
Permit
Non-Rule Project Number: 2013-032-OTH-NR

Summary and Background:

This is a renewal with amendment of a Texas Pollutant Discharge Elimination System (TPDES) general permit authorizing the discharge of wastewater from on-site treatment systems connected to single family residences located in Harris County, Texas. The renewal with amendment will replace the current permit when it expires on January 30, 2014.

The commission is required by the Texas Water Code (TWC) Section 26.0405 to issue a general permit to provide authorization for such facilities. This section of the TWC was adopted by the 76th Legislature, 1999, under House Bill 1574 authored by Rep. Fred M. Bosse. The statute was amended by the 77th Legislature, 2001, under House Bill 3111 authored by Rep. Zeb Zbranek.

Basic Requirements:

In accordance with TWC §26.0405(2)(B), a Memorandum of Agreement between Harris County and the Texas Commission on Environmental Quality (TCEQ) is being developed. By Memorandum of Agreement, Harris County will issue proper authorizations under this permit and will inspect, investigate, exercise proper enforcement authority, and otherwise monitor compliance with the permit.

A. Applicability: TPDES General Permit No. TXG530000 authorizes the discharge of wastewater from on-site treatment systems connected to single family residences located in Harris County, Texas. The discharge must be from an on-site treatment system located on property that was subdivided and developed prior to January 1, 1979. The property size must be insufficient to accommodate on-site disposal of all wastewater under Texas Health and Safety Code, Chapter 366 and 30 Texas Administrative Code (TAC) Chapter 285.

B. Permit Requirements: Wastewater discharges are subject to numeric limitations for flow, carbonaceous biochemical oxygen demand (5-day), total suspended solids, ammonia nitrogen, bacteria, dissolved oxygen, chlorine residual, and pH. The permit includes limitations that identify facilities that are not eligible for coverage

under this permit. All eligible applicants seeking authorization to discharge under this general permit shall submit a completed Notice of Intent (NOI).

- C. Fees:** Dischargers covered under this general permit are subject to a \$100 NOI application fee, but are not subject to pay an annual Water Quality Fee.

Number of current/expected authorizations:

There are currently no facilities authorized under this general permit. A significant number of additional NOIs are not expected.

Proposed changes from the current permit:

1. Removed effluent limits and definition for fecal bacteria since current regulations require *Escherichia coli* (*E. coli*) and Enterococci effluent limits.
2. Reduced the *E. coli* and Enterococci daily average and single grab effluent limits to be consistent with approved Total Maximum Daily Load Implementation Plans for segments covered by this general permit.
3. Added effluent limits for dissolved oxygen and chlorine residual as required by 30 TAC Chapter 311, Subchapter D, *Water Quality Management Within Lake Houston Watershed*.
4. Added a requirement to monitor flow at a frequency of once per six months. These measurements can be used to determine compliance with the effluent flow limit which exists in the currently authorized general permit.
5. Revised the sampling and reporting requirements and standard permit conditions to be consistent with 30 TAC §305.125(9), *Standard Permit Conditions*.
6. Added additional limitations on coverage related to compliance history rating of "unsatisfactory performer." Pursuant to the October 23, 2013 Commissioner's Order on the Livestock Manure Composting General Permit, WQG200000, the draft permit was similarly revised to clarify that an applicant who owns or operates a facility classified as an "unsatisfactory performer" is entitled to a hearing before the commission prior to denial or suspension of authorization.
7. Added a requirement that wastewater samples must be analyzed by a National Environmental Laboratory Accreditation Program certified laboratory.

Planned stakeholder involvement:

No stakeholder meeting was conducted.

EPA Review:

On July 22, 2013, TCEQ received a letter from the United States Environmental Protection Agency (EPA) stating they have no objection to the proposed draft general permit. No changes were made to the permit as a result of EPA review.

Public Comment

The public notice was published in the Houston Chronicle and the *Texas Register* on September 27, 2013. No public comments were received.

Potential controversial concerns and legislative interest:

Legislative interest or issues with the public are not anticipated.

Effect on the:

- A. Regulated community:** The regulated community will be required to monitor dissolved oxygen and chlorine residual. This additional monitoring is not expected to significantly affect the regulated community. The more stringent bacteria limit is also not expected to significantly affect the regulated community because this change did not change the design criteria.
- B. Public:** This permit amendment with renewal is not expected to have any effect on the public.
- C. Agency programs:** This permit amendment with renewal is not expected to have any effect on agency programs.

Key dates in the proposed general permit schedule:

Published notice in *Texas Register* and newspapers: September 27, 2013

Public comment period ended: October 28, 2013

Scheduled Commission Agenda Date: January 15, 2014

Statutory authority:

Texas Water Code (TWC), §26.121, which makes it unlawful to discharge pollutants into or adjacent to water in the state except as authorized by a rule, permit, or order issued by the commission;

TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state; and
TWC, §26.040, which provides the commission with authority to amend rules to authorize waste discharges by general permit.

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Commissioners
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December 20, 2013

Attachments: Draft permit and fact sheet

NOTE: *TR will submit electronic notice to the following after ED Briefing:*

Anne Idsal
Tucker Royall
Marshall Coover

**FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION
TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT
TXG530000**

Issuing Office: Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711

Prepared by: Laurie Fleet
Wastewater Permitting Section
Water Quality Division
(512) 239-4671

Date: May 28, 2013

Permit Action: Renewal and Amendment of General Permit TXG530000

I. Summary

The Texas Commission on Environmental Quality (TCEQ) is proposing to renew and amend a TPDES General Permit authorizing discharges from on-site wastewater treatment systems serving single family residences located within the San Jacinto River Basin in Harris County in the State of Texas.

II. Executive Director's Recommendation

The Executive Director has made a preliminary decision that this permit, if reissued, meets all statutory and regulatory requirements. It is proposed that the permit be issued to expire five years from the effective date in accordance with the requirements of 30 Texas Administrative Code (TAC) §205.5(a).

III. Permit Applicability

This general permit authorizes discharges from single family on-site sewage facilities (OSSFs) located within the following segments of the San Jacinto River Basin in Harris County: 1001 (San Jacinto River Tidal); 1002 (Lake Houston); 1003 (East Fork San Jacinto River); 1004 (West Fork San Jacinto River); 1005 (Houston Ship Channel/San Jacinto River Tidal); 1006 (Houston Ship Channel Tidal); 1007 (Houston Ship Channel/Buffalo Bayou Tidal); 1008 (Spring Creek); 1009 (Cypress Creek); 1010 (Caney Creek); 1013 (Buffalo Bayou Tidal); and 1014 (Buffalo Bayou above Tidal). The property must have been subdivided, and developed, before January 1, 1979 and the property size must be insufficient to accommodate on-site disposal of a wastewater under Chapter 366 of the Texas Health and Safety Code and 30 TAC Chapter 285. Additionally, the residence must be unable to obtain service from a regional or area wide waste collection/treatment system to be eligible for coverage under this general permit.

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TCEQ General Permit No. TXG530000

IV. Permit Limitations

1. As proposed, facilities regulated under this general permit are authorized to discharge wastewater that meets the following effluent limitations. Monitoring shall be conducted at the prescribed frequencies when discharge occurs:

Parameter	Daily Average Limitations	Single Grab Limitations	Sample Type	Monitoring Frequency
Carbonaceous Biochemical Oxygen Demand (5-day)	10 mg/L	35 mg/L	Grab	Once per six months
Total Suspended Solids	15 mg/L	60 mg/L	Grab	Once per six months
Ammonia Nitrogen	3 mg/L	15 mg/L	Grab	Once per six months
Bacteria (colonies per 100 ml)				
<i>E. coli</i> (*1)	63 (*2)	197	Grab	Once per six months
Enterococci (*3)	23 (*2)	57	Grab	Once per six months
Dissolved Oxygen	4.0 mg/L	4.0 mg/L	Grab	Once per six months
Chlorine Residual	1.0 – 4.0 mg/L	1.0 – 4.0 mg/L	Grab	Once per six months
pH (Standard Units)	6.0 – 9.0 SU	6.0 – 9.0 SU	Grab	Once per six months

(*1) When discharging into freshwater.

(*2) The daily average is a geometric mean of the values for all effluent samples collected in a 24 month reporting period.

(*3) When discharging into saltwater.

2. The monthly average discharge (flow) of effluent shall not exceed 500 gallons per day (gpd). Flow shall be measured once per six months by estimate.
3. There shall be no discharge of floating solids or visible foam other than in trace amounts, and no discharge of visible oil.

V. Changes from the Existing General Permit

1. Removed effluent limits and definition for fecal bacteria since current regulations require *E. coli* and Enterococci effluent limits.
2. Reduced the *E. coli* and Enterococci daily average and single grab effluent limits to be

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consistent with approved TMDL I-Plans for segments covered by this general permit.

3. Added effluent limits for dissolved oxygen and chlorine residual as required by 30 TAC § 311 Subchapter D, *Water Quality Management Within Lake Houston Watershed*.
4. Added a requirement to monitor flow at a frequency of once per six months. These measurements can be used to determine compliance with the effluent flow limit which exists in the current general permit.
5. Revised the sampling and reporting requirements and standard permit conditions to be consistent with 30 TAC § 305.125(9), *Standard Permit Conditions*.
6. Added additional limitations on coverage related to compliance history rating of "unsatisfactory performer." Pursuant to the October 23, 2013 Commissioner's Order on the Livestock Manure Composting General Permit, WQG200000, the draft permit was similarly revised to clarify that an applicant who owns or operates a facility classified as an "unsatisfactory performer" is entitled to a hearing before the commission prior to denial or suspension of authorization.
7. Added a requirement that wastewater samples must be analyzed by a NELAC certified laboratory, according to TWC § 5.134.

VI. Addresses

Questions concerning this draft general permit must be directed to:

Ms. Laurie Fleet
Wastewater Permitting Section (MC-148)
TCEQ
P.O. Box 13087
Austin, TX 78711-3087
(512) 239- 4671

Comments regarding this general permit must be sent to:

Chief Clerk's Office (MC-105)
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

Supplementary information on this Fact Sheet is organized as follows:

- VII. Legal Basis
- VIII. Regulatory Background
- IX. Permit Coverage
- X. Technology-Based Requirements
- XI. Water Quality-based Requirements
- XII. Procedures for Final Decision

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XIII. Administrative Record

VII. Legal Basis

Section 26.121 of the Texas Water Code (TWC) makes it unlawful to discharge pollutants into or adjacent to water in the state except as authorized by a rule, permit, or order issued by the commission. TWC §26.027 authorizes the commission to issue permits and amendments to permits, for the discharge of waste or pollutants into or adjacent to water in the state, and §26.040 provides the Commission with authority to develop and issue general permits.

The TCEQ developed regulations in 30 TAC Chapter 205, which form the basis for development of general permits. Chapter 205 describes when it is permissible to issue a general permit, the procedural requirements for the involvement of the public in the permitting process, how qualified dischargers can obtain authorization under a general permit, the manner in which permit terms are developed, how general permits are amended or renewed, and the fees that are assessed on dischargers authorized under the permit.

VIII. Regulatory Background

TWC §26.0405 requires the commission to adopt a general permit to regulate discharges from on-site wastewater treatment facilities (OSSF) from single family residences that are located in counties with a population greater than 2.8 million and are located on property that was subdivided and developed prior to January 1, 1979. TWC §26.0405 also requires that the property size must be insufficient to accommodate on-site disposal of all wastewater as required by Chapter 366 of the Texas Health and Safety Code and 30 TAC Chapter 285.

IX. Permit Coverage

1. To obtain coverage under this general permit, the discharger must submit a Notice of Intent (NOI) on a form approved by the executive director. The NOI shall include, at a minimum, the legal name and address of the owner and operator, the location of the discharge (as described by latitude and longitude), description of the effluent discharge route from the facility for a minimum distance of three miles, and the date the proposed discharge will commence. The discharger shall submit the NOI at least 30 days before discharging into or adjacent to water in the state.
2. The NOI must be submitted to the executive director or authorized agent by certified mail, return receipt requested. The applicant must also submit with the NOI, copies of the maintenance agreement and the county deed record for the property. The NOI shall be signed according to 30 TAC § 305.44 (relating to Signatories to Application).
3. The authorized agent or the executive director shall either confirm coverage by providing a notification and an authorization number to the applicant or notify the applicant that coverage under this general permit is denied.
4. The executive director or authorized may deny a NOI and may require the discharger to apply for and obtain an individual TPDES permit. Denial of an NOI or suspension of a

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discharger's authorization under this general permit shall also be conducted according to 30 TAC §205.4.

X. Technology-Based Requirements

The limitations and conditions of the general permit have been developed to comply with the technology-based standards of the Clean Water Act. The permit limitations included in the general permit are more stringent than the secondary treatment limits for CBOD₅ (25 mg/L) and suspended solids (ss) (30 mg/L) located in Code of Federal Regulations (CFR) 40, Part 133.102. The pH limitation of within 6.0 to 9.0 standard units is continued from the existing permit and is consistent with 40 CFR Part 133.102(c).

The required wastewater treatment facility design for this permit must meet effluent limits for enhanced secondary treatment levels with nitrification and the treatment must include primary settling, aerobic treatment, addition of chlorine, settling, and discharge to a subsurface rock filter trench. The design requirements are included in Appendix B of the general permit. The effluent limitations for enhanced secondary treatment with nitrification located in 30 TAC Chapter 309, Subchapter A (*Domestic Wastewater Effluent Limitations*) and 30 TAC Chapter 311, Subchapter D (*Water Quality Management Within Lake Houston Watershed*) are included in the draft permit and are as follows:

<u>Parameter</u>	<u>Daily Average</u>	<u>Single Grab</u>
TSS	15 mg/L	60 mg/L
CBOD ₅	10 mg/L	35 mg/L
Ammonia Nitrogen	3 mg/L	15 mg/L
pH	6 – 9 S.U.	6 - 9 S.U.
Chlorine Residual	1.0 – 4.0 mg/L	1.0 – 4.0 mg/L
Dissolved Oxygen	4.0 mg/L	4.0 mg/L

XI. Water Quality-Based Requirements

The Texas Surface Water Quality Standards found at 30 TAC Chapter 307 state that “surface waters will not be toxic to man, or to terrestrial or aquatic life.” The methodology outlined in the “Procedures to Implement the Texas Surface Water Quality Standards” is designed to insure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to insure that no source will be allowed to discharge any wastewater which: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

TPDES permits contain technology-based effluent limits reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other toxicity data bases to determine the adequacy of technology-based permit limits and the need for additional water-quality based controls.

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Part I, Section B1, of the general permit does not cover any single-family residences which are able to obtain service from a regional or area wide waste collection/treatment system. Part I, Section B2 states that the executive director may deny an application if it is determined that the discharge will not maintain existing uses of the receiving waters. Part I, Section B3 states that new sources or new discharges of constituents of concern to impaired waters (Clean Water Act 303(d) listed water bodies) are not authorized by this permit unless otherwise allowable under applicable state and federal law. Part I, Section B4 addresses discharges to impaired water bodies where there is a Total Maximum Daily Load Implementation Plan. Part I, Section B5 prohibits discharges that would adversely affect a listed endangered or threatened species or its critical habitat, and site-specific controls may be required to ensure protection of threatened and endangered species.

Part II, Section A of the general permit establishes limits in accordance with 30 TAC Chapter 311, Subchapter D (*Water Quality Management Within Lake Houston Watershed*), and requires that the effluent be monitored once every six months.

In accordance with 30 TAC § 307.5, and the TCEQ Implementation Procedures (January 2003) for the Texas Surface Water Quality Standards, an antidegradation review of the general permit was performed. It has been preliminarily determined that if permit requirements are properly implemented, no significant degradation is expected and existing uses will be maintained and protected.

A 4.0 mg/L dissolved oxygen (DO) limit is included in the permit as both a Daily Average and as a Single Grab limit. The 10 mg/L CBOD₅, 3 mg/L NH₃-N, and 4 mg/L DO effluent set is commensurate with the minimum requirements of the Houston Ship Channel Waste Load Evaluations (both WLE-1 and WLE-1R).

XII. Procedures for Final Decision

The memorandum of agreement between the EPA and TCEQ provides that EPA has no more than 90 days to comment, object, or make recommendations to the draft general permit before it is published in the *Texas Register*. According to 30 TAC Chapter 205, *General Permits for Waste Discharges*, when the draft general permit is proposed, notice must be published, at a minimum, in at least one newspaper of statewide or regional circulation. The commission may also publish notice in additional newspapers of statewide or regional circulation. Mailed notice must also be provided to the following:

- A. the county judge of the county or counties in which the discharges under the general permit could be located;
- B. if applicable, state and federal agencies for which notice is required in 40 CFR, §124.10(c);
- C. persons on a relevant mailing list kept under 30 TAC, §39.407, relating to Mailing Lists; and
- D. any other person the executive director or chief clerk may elect to include.

After notice of the general permit is published in the *Texas Register* and the newspaper, the public will have 30 days to provide public comment on the proposed permit. Any person, agency, or association may make a request for a public meeting on the proposed general permit to the executive director of the TCEQ before the end of the public comment period. A public meeting will be granted when the executive director or commission determines that a significant degree of

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public interest in the draft general permit exists. A public meeting is intended for the taking of public comment, and is not a contested case proceeding under the Administrative Procedure Act.

If the executive director calls a public meeting, the commission will give notice of the date, time, and place of the meeting, as required by commission rule. The executive director shall prepare a response to all significant public comments on the draft general permit raised during the public comment period. The executive director shall make the response available to the public. The general permit will then be filed with the commission to consider final authorization of the permit. The executive director's response to public comment shall be made available to the public and filed with the chief clerk at least ten days before the commission acts on the general permit.

XIII Administrative Record

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references.

A. 40 CFR

40 CFR § 123.25, 122.41-122.50, and 133.102

B. Texas Water Code

Chapter § 5.134, 26.027, 26.0405, and 26.121

C. TCEQ Regulations

30 TAC Chapters 305, 205, 307, 309, and 311

D. Miscellaneous

Texas Surface Water Quality Standards, 30 TAC § 307.1 - 307.10 (35 TexReg 6294, 7/22/10).

Procedures to Implement the Texas Surface Water Quality Standards, Texas Commission on Environmental Quality, January 2003.

TNRCC Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, TNRCC Document No. 98-001.000-OWR-WQ, May 1998.

Existing General Permit: TPDES General Permit No. TXG530000 issued January 30, 2009.

Memo from the TCEQ Water Quality Standards Team dated May 21, 2013.

Memo from the TCEQ Water Quality Assessment Team dated May 21, 2013.

Texas Commission on Environmental Quality

P.O. Box 13087 Austin, TX 78711-3087



GENERAL PERMIT TO DISCHARGE WASTEWATER

under provisions of Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This is an amendment and renewal of
TPDES General Permit No. TXG530000, issued on January 30, 2009.

Wastewater from on-site treatment systems connected to single family residences located within the San Jacinto River Basin in Harris County in the State of Texas

may be discharged directly or adjacent to exceptional, high, intermediate, limited, or minimal aquatic life use receiving waters as designated in the Texas Surface Water Quality Standards

only according to effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (commission), the laws of the State of Texas, and other orders of the commission. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire any property rights necessary to use the discharge route.

This permit and the authorization contained herein shall expire at midnight five years after the date of issuance.

EFFECTIVE DATE: January 30, 2014

ISSUED DATE:

For the Commission

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Part I. Permit Applicability and Coverage

Section A. Discharges Covered

1. This general permit regulates the discharges from single-family residences' on-site wastewater treatment systems that are located within segments: 1001 (San Jacinto River Tidal); 1002 (Lake Houston); 1003 (East Fork San Jacinto River); 1004 (West Fork San Jacinto River); 1005 (Houston Ship Channel/San Jacinto River Tidal); 1006 (Houston Ship Channel Tidal); 1007 (Houston Ship Channel/Buffalo Bayou Tidal); 1008 (Spring Creek); 1009 (Cypress Creek); 1010 (Caney Creek); 1013 (Buffalo Bayou Tidal); and 1014 (Buffalo Bayou above Tidal) of the San Jacinto River Basin in Harris County Texas. (See Appendix A. Detailed descriptions and maps of the on-site sewage target communities can be obtained from the authorized agent).
2. The discharge must be from an on-site treatment system located on property that was subdivided and developed prior to January 1, 1979. The property size must be insufficient to accommodate on-site disposal of all wastewater under Chapter 366 of the Health and Safety Code and 30 Texas Administrative Code (TAC) Chapter 285.

Section B. Limitations on Coverage

1. Single-family residences that are able to obtain service from a regional or area wide waste collection/treatment system are not eligible for coverage under this general permit.
2. The Executive Director shall deny an application for authorization under this general permit, and may require that the applicant apply for a Texas Pollutant Discharge Elimination System (TPDES) individual permit, if the Executive Director or authorized agent determines that the discharge will not maintain existing uses of the receiving waters. Additionally, the Executive Director may cancel, revoke, or suspend authorization to discharge under this general permit based on a finding of historical and significant noncompliance with the provisions of this general permit. The executive director shall deny or suspend a facility's authorization to discharge under this general permit based on a rating of "unsatisfactory performer" according to commission rules in 30 TAC § 60.3. An applicant who owns or operates a facility classified as an "unsatisfactory performer" is entitled to a hearing before the commission prior to having its coverage denied or suspended, in accordance with Tex. Water Code § 26.040(h). Denial of authorization to discharge under this general permit or suspension of a permittee's authorization under this general permit shall be done according to commission rules in 30 TAC Chapter 205, *General Permits for Waste Discharges*.
3. New sources or new discharges of constituent(s) of concern to impaired waters are not authorized by this permit unless otherwise allowable under applicable state and federal law. Impaired waters are those that do not meet applicable water quality standard(s) and are listed on the Clean Water Act §303(d) list. Constituents of concern are those constituents for which the water body is listed as impaired.

4. Discharges of constituent(s) to impaired water bodies for which there is a total maximum daily load (TMDL) implementation plan are not eligible for this permit unless they are consistent with the approved TMDL and the implementation plan. The Executive Director may amend this general permit or develop a separate general permit for discharges to these water bodies. For discharges not eligible for coverage under this permit, the discharger must apply for and receive an individual or other applicable general TPDES permit prior to discharging.
5. Discharges that would adversely affect a listed endangered or threatened species or its critical habitat are not authorized by this general permit. Federal requirements related to endangered species apply to all TPDES permitted activities, and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved.

Section C. Application for Coverage

1. New dischargers seeking authorization to discharge under this general permit shall submit a completed Notice of Intent (NOI) on a form approved by the executive director. The NOI shall include, at a minimum, the legal name and address of the owner and operator, the location of the discharge (as described by latitude and longitude), description of the effluent discharge route from the facility for a minimum distance of three miles, and the date the proposed discharge will commence. The NOI must be submitted by certified mail, return receipt requested, to the address indicated in the NOI. The discharger shall submit the NOI a minimum of 30 calendar days before discharging into or adjacent to water in the state.
2. By submitting the NOI, the applicant acknowledges that the conditions of this general permit are applicable to the proposed discharge and that the applicant agrees to comply with the requirements of this general permit. The applicant must also submit with the NOI, copies of the maintenance agreement and the county deed record for the property. The authorized agent or the executive director shall either confirm coverage by providing a notification and an authorization number to the applicant or notify the applicant that coverage under this general permit is denied.
3. Authorization under this general permit is not transferable and is site specific. If the owner or operator of the facility changes, the present owner and operator must submit a Notice of Termination (NOT), and the new owner and operator must submit a new NOI.
4. If the owner or operator becomes aware that it has failed to submit any relevant facts, submitted incorrect information or relevant information provided in the NOI changes, a Notice of Change (NOC) must be submitted to the executive director or authorized agent within 10 days of the change. This includes any other change with respect to the nature or operations of the facility or the characteristics of the discharge.

Section D. Termination of Coverage

A discharger may voluntarily terminate coverage under this general permit through the submittal of a NOT form approved by the executive director. An NOT shall be submitted when the owner or operator of the facility changes, the discharge becomes authorized under an individual permit or alternative general permit, the use of the property changes and is no longer subject to regulation under this general permit or the discharge becomes unnecessary. Authorization to discharge wastewater terminates on the day that an NOT is postmarked for delivery.

Section E. Authorizations Under a TPDES Individual Permit

1. Discharges eligible for authorization by this general permit may alternatively be authorized by an individual permit according to 30 TAC Chapter 305, *Consolidated Permits*.
2. If an individual permit is issued to a discharger that is currently authorized under this general permit, the permittee shall submit an NOT to the executive director or authorized agent. Authorization to discharge under this general permit terminates upon receipt of the NOT.

Section F. Permit Expiration

1. This general permit is effective for five years from the effective date. Authorizations for discharge under the provisions of this general permit may be issued until the expiration date of the general permit. This general permit may be amended, revoked, or canceled by the commission.
2. If the Executive Director proposes to reissue this general permit before its expiration date, the general permit shall remain in effect for those existing discharges covered by the general permit in accordance with 30 TAC Chapter 205. This general permit shall remain in effect for those discharges until the date on which the commission takes final action on the proposal to reissue this general permit. No new NOIs will be accepted or new authorizations honored for authorization under the general permit after the expiration date.
3. Upon issuance of a renewed or amended general permit, all permittees, including those covered under the expired general permit, shall submit an NOI within 90 days according to the requirements of the new general permit or obtain a TPDES individual permit.
4. According to 30 TAC § 205.5(d), if the commission has made a determination that the general permit will not be renewed at least 90 days before the expiration date, permittees authorized under this general permit shall submit an application for an individual permit before the expiration date. If the application for an individual permit is submitted before the general permit expiration date, authorization under this expiring general permit remains in effect until the issuance or denial of an individual permit or alternative general permit.

Part II. Permit Requirements

Section A. Effluent Limits

The following effluent limitations apply:

1. The monthly average discharge (flow) of effluent shall not exceed 500 gallons per day (gpd). Flow shall be measured once per six months by estimate.
2. The effluent discharged shall meet the following limitations.

Parameter	Daily Average Limitations	Single Grab Limitations	Sample Type	Monitoring Frequency
Carbonaceous Biochemical Oxygen Demand (5-day)	10 mg/L	35 mg/L	Grab	Once per six months
Total Suspended Solids	15 mg/L	60 mg/L	Grab	Once per six months
Ammonia Nitrogen	3 mg/L	15 mg/L	Grab	Once per six months
Bacteria (colonies per 100 ml)				
<i>E. coli</i> (*1)	63 (*2)	197	Grab	Once per six months
<i>Enterococci</i> (*3)	23 (*2)	57	Grab	Once per six months
Dissolved Oxygen	4.0 mg/L	4.0 mg/L	Grab	Once per six months
Chlorine Residual	1.0 – 4.0 mg/L	1.0 – 4.0 mg/L	Grab	Once per six months
pH (Standard Units)	6.0 – 9.0 SU	6.0 – 9.0 SU	Grab	Once per six months

(*1) When discharging into freshwater.

(*2) The daily average is a geometric mean of the values for all effluent samples collected in a 24 month reporting period.

(*3) When discharging into saltwater.

3. There shall be no discharge of floating solids or visible foam other than in trace amounts and no discharge of visible oil.

Section B. General Requirements

1. The rate of discharge shall be controlled to prevent flooding and erosion.
2. On-site disposal of sewage sludge is not authorized. Solid wastes, including cleanup wastes, shall be disposed of according to Chapter 361 of the Texas Health and Safety Code, 30 TAC Chapter 312, and other applicable rules of the TCEQ.
3. The discharge shall not cause any nuisance conditions to adjacent landowners along the discharge route.
4. The permittee shall provide the following noncompliance notifications:
 - a. The permittee shall take all steps necessary to prevent any adverse effect to human health or safety, or to the environment. Immediately upon the notification from the TCEQ's Houston Regional Office or authorized agent that the discharge presents a hazard to the uses of the receiving water, the discharger shall terminate the discharge. The discharger shall immediately cease discharging whenever it is discovered the discharge may endanger human health or safety, or the environment, and the noncompliance shall be reported to the TCEQ's Houston Regional Office and authorized agent within 24 hours of becoming aware of the noncompliance. The permittee shall also provide a written report to the Houston Regional Office, the authorized agent, and the TCEQ's Enforcement Division (MC-224) within five working days of the noncompliance. The report shall contain:
 - (1) description of the location of the discharge;
 - (2) the exact date and time the problem was first identified;
 - (3) the potential danger to human health or safety, or the environment;
 - (4) the immediate steps that were taken to correct the problem;
 - (5) steps planned or taken to mitigate any adverse effects; and
 - (6) plans to prevent the reoccurrence of similar problems during future discharges.
 - b. Any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported in writing to the TCEQ's Houston Regional Office, the authorized agent, and the TCEQ's Enforcement Division (MC-224) within five working days of the noncompliance.
 - c. Any noncompliance other than that specified in paragraphs (a) and (b) above must be submitted to the Harris County Authorized Agent and the TCEQ's Enforcement Division (MC-224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved Discharge Monitoring Report (DMR) (EPA Form 3320-1).

Section C. Design, Operation, and Maintenance Requirements

The discharger shall use the wastewater treatment facility design in Appendix B. The facility shall be operated and maintained in accordance with Appendix B.

Part III. Discharge Monitoring and Notification Requirements

Section A. Discharge Notification

Dischargers shall notify the TCEQ's Houston Regional Office and the Harris County Authorized Agent by telephone at least two days prior to commencing discharge. For emergency facility repair or replacement, the discharger shall notify the Houston regional office and the Harris County Authorized Agent as soon as possible.

Section B. Sampling Requirements

1. The discharger shall ensure that properly trained and authorized personnel monitor and sample the discharge.
2. The sampling point shall be after the filter media.
3. Monitoring and reporting requirements are as follows:
 - (a) Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
 - (b) The discharger shall retain all records related to the application, monitoring, or certification for a period of five years from the date of discharge. This period may be extended at the request of the executive director or authorized agent. The records shall be retained at the facility or be readily available for review by the executive director or authorized agent upon request.
 - (c) Records of monitoring activities shall include:
 - (1) date, time and place of sample or measurement;
 - (2) name of individual who collected the sample or made the measurement;
 - (3) date of laboratory analysis;
 - (4) identity of the individual and laboratory who performed the analysis;
 - (5) the technique or method of analysis; and
 - (6) the results of the analysis or measurement.
4. All sample collections shall be conducted according to recommendations in the latest edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and

published jointly by the American Public Health Association, the American Waterworks Association, and the Water Pollution Control Federation), or Environmental Protection Agency, "Methods for Chemical Analysis of Water and Wastes" (1979), or Environmental Protection Agency, "Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents" (1973).

5. Sample containers, holding times, preservation methods, and the physical, chemical, and microbiological analyses of effluents shall meet the requirements in 40 Code of Federal Regulations (CFR) Part 136, as amended. All analyses shall be conducted according to 40 CFR Part 136, as amended, or the latest edition of "Standard Methods for the Examination of Water and Wastewater."
6. All laboratory tests submitted to demonstrate compliance with this permit shall meet the requirements of 30 TAC Chapter 25, *Environmental Testing Laboratory Accreditation and Certification*.

Section C. Reporting Requirements

1. Analytical results for determining compliance with effluent limitations shall be recorded on a Discharge Monitoring Report (DMR) (EPA No. 3320-1), a TCEQ-approved self-generated form, or a copy of record, if using the eReporting function of the TCEQ eServices webpage. Effluent sampling shall be conducted in accordance with the monitoring frequencies specified in this general permit and shall be submitted on a monthly or annual basis, depending on the required sampling frequency, to the TCEQ Enforcement Division (MC 224) or by eDMR through the eReporting function of the TCEQ eServices webpage. The DMR for any given month shall be due by the 20th day of the following month and shall be signed in accordance with the requirements in Part IV.7 of the general permit. If noncompliance with a discharge limitation occurs, the permittee shall provide notification according to Part II.B.4 of the general permit
2. The permittee shall retain all records required by this permit, including monitoring records and records related to the application or any certification requirements for a period of three years from the date of record.

Part IV. Standard Permit Conditions

1. The permittee has a duty to comply with all conditions in this general permit. Failure to comply with any condition is a violation of the general permit and the statutes under which the general permit was issued. Any violation may be grounds for enforcement action, for terminating coverage under this general permit, or for requiring a permittee to apply for and obtain an individual permit.

2. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted discharge to maintain compliance with conditions of the general permit.
3. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) installed or used by the permittee to achieve compliance with conditions of the general permit. Proper operation and maintenance also includes adequate laboratory and process controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with conditions of the general permit.
4. The permittee shall submit, upon request of the executive director, any information that is necessary for the executive director to determine whether cause exists for revoking, suspending, or terminating authorization under this general permit. Additionally, the permittee shall submit, upon request of the executive director, copies of all records that the permittee is required to maintain as a condition of this general permit. The requested information or records shall be provided within a reasonable time and in no case later than 30 days from the date of the request.
5. The discharger shall give notice to the executive director and authorized agent before making physical alterations or additions to the permitted facility if alterations would result in a violation of the general permit requirements.
6. Inspection and entry by the executive director or authorized agent shall be allowed under TWC Chapter 26, Texas Health and Safety Code §§ 361.032-361.033 and 361.037; and Title 40 CFR § 122.41(i). The statement in TWC § 26.014 that entry of a regulated entity will occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection are not grounds for denial or restriction of entry to any part of the regulated entity, but merely describes the commission's or authorized agent's duty to observe appropriate rules and regulations during an inspection.
7. All NOIs, NOTs, and NOCs shall meet the requirements of 30 TAC § 305.44(a), *Signatories to Applications*. All reports and other information requested by the executive director or the Harris County Authorized Agent shall meet the requirements of 30 TAC §305.128, *Signatories to Reports*.
8. Authorization under this permit may be suspended or revoked for the reasons stated in 30 TAC § 205.4, *Authorizations and Notices of Intent*. The filing of notification by the discharger of planned changes or anticipated noncompliance does not stay any permit condition.
9. This general permit does not convey any property rights of any sort, or any exclusive privilege.

10. The discharger is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 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) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a general permit issued under CWA § 402(a)(3) or 402(b)(8); intentionally or knowingly tampering with, modifying, disabling, or failing to use pollution control or monitoring devices, systems, methods, or practices required under this permit; or intentionally or knowingly making or causing to be made, a false material statement, representation, or certification in, or omitting or causing to be omitted material information from, an application, notice, record, report, plan, or other document, including monitoring device data, filed or required to be maintained by this permit.

Part V. Fees

An NOI submitted to the executive director or authorized agent shall include an application fee of \$100. Dischargers covered under this general permit are not subject to pay an annual Water Quality Fee under TWC §26.0291 and according to 30 TAC Chapter 205, *General Permits for Waste Discharges*.

Part VI. Definitions

The following words and terms, used in this general permit, shall have the following meanings:

Authorized agent – For the purpose of this general permit, an authorized agent is a local governmental entity that has been authorized by the commission or executive director to implement Chapter 366 of the Texas Health and Safety Code; that has adopted a resolution under TWC Section 7.352 authorizing the county to exercise enforcement power under TWC Chapter 7, Subchapter H; and that has entered into an agreement with the commission to inspect, investigate, and otherwise monitor compliance with this general permit.

Bacteria concentration (*E. coli* or Enterococci) – Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a 24 month period. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a 24 month period, where n equal the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a 24 month period. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method.

Daily average limitations - The arithmetic average of results of analyses for a parameter from a minimum of four samples of the discharges that occur in a single calendar month. When results of analyses of four samples are not available in a single calendar month, the arithmetic average of the most recent results, not to exceed four, must be reported as the daily average concentration.

Discharge - To deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.

General permit - A permit, issued under the provisions of 30 TAC Chapter 205, authorizing the discharge of waste into or adjacent to water in the state for one or more categories of waste discharge within a geographical area of the state or the entire state as provided by TWC §26.040.

Grab sample - An individual sample collected in less than 15 minutes.

Monthly average flow - The arithmetic average of results of analyses of flow from a minimum of four measurements of the discharges that occur in a single calendar month. When results of analyses of four measurements are not available in a single calendar month, the arithmetic average of the most recent results, not to exceed four, must be reported as the monthly average flow.

Notice of Change or NOC - A written submittal to the executive director or authorized agent from a regulated entity authorized under a general permit that provides information on changes to information previously provided to the commission, or any changes with respect to the nature or operations of the facility or the characteristics of the discharge.

Notice of Intent or NOI - A written submittal to the executive director or authorized agent from an applicant that requests coverage under the terms of a general permit.

Notice of Termination or NOT - A written submittal to the executive director or authorized agent from a discharger authorized under a general permit that requests termination of coverage.

Operator – The person responsible for the overall operation of a treatment facility.

Owner – The person who owns a facility or part of a treatment facility.

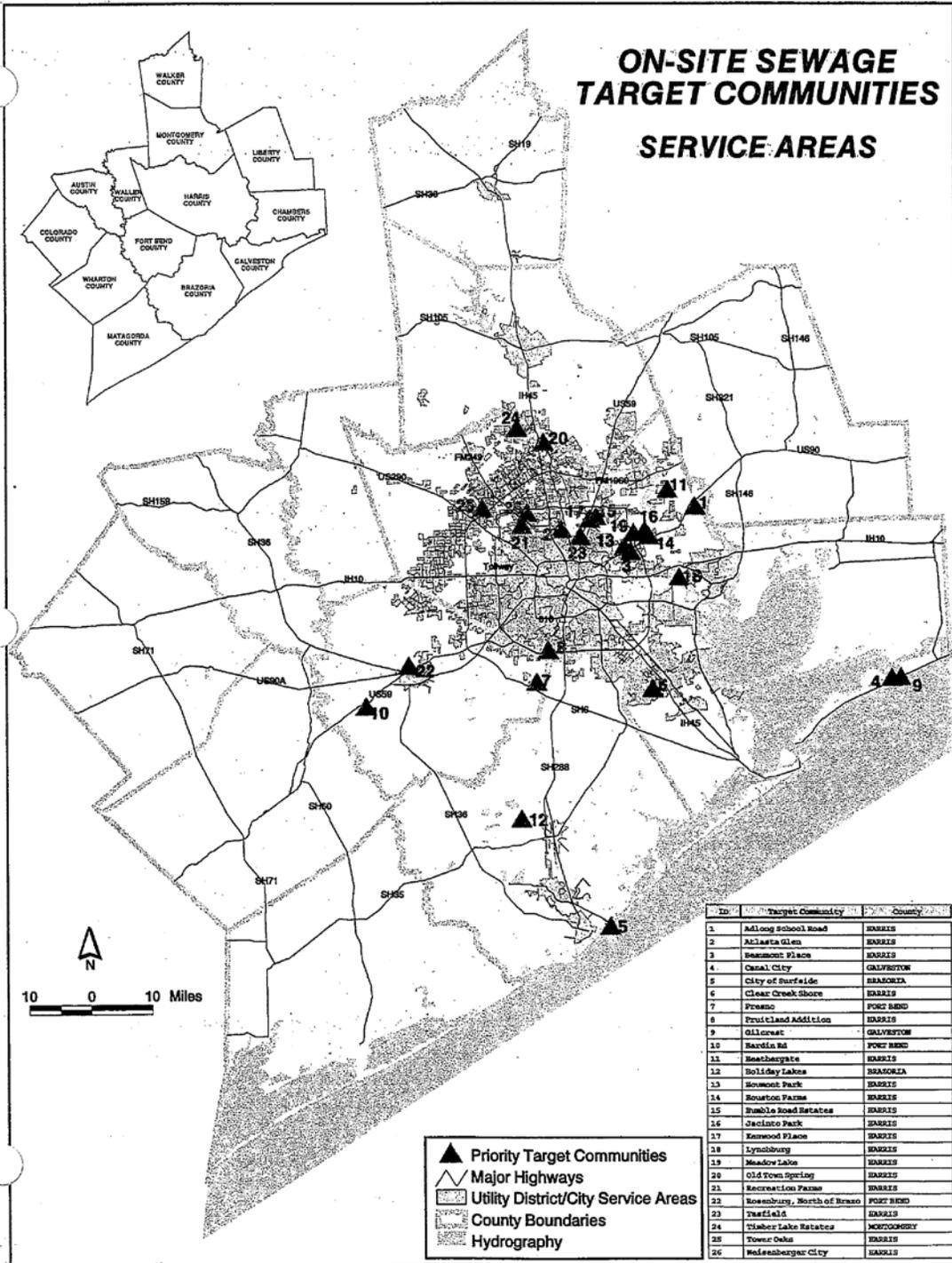
Texas Pollutant Discharge Elimination System (TPDES) - The state program for issuing, amending, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under Clean Water Act §§307, 402, 318 and 405, Texas Water Code, and Texas Administrative Code regulations.

Treatment Facility (facility) - Wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation or disposal of domestic sewage, including sludge handling or disposal facilities under the jurisdiction of the commission.

Water in the state - Groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico, inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

APPENDIX A

**ON-SITE SEWAGE
TARGET COMMUNITIES
SERVICE AREAS**



APPENDIX B

DESIGN DOCUMENTATION

**For a
PROTOTYPICAL SINGLE FAMILY DWELLING
ON-SITE WASTEWATER TREATMENT AND
DISPOSAL SYSTEM WITH A DISCHARGE CAPABILITY**

Under Provisions of

**Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code**

*D. Ray Young
09-13-2000*



Engineering Consultant

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Civil Engineering Consultants

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Email RCAHQ@aol.com

TABLE OF CONTENTS

1. Preliminary Engineering Report
2. Prototypical Site Plans
3. Prototypical Wastewater Treatment System Plans
4. Prototypical Wastewater Treatment System Sections
5. Prototypical Wastewater Treatment System Disposal Plan & Section

PRELIMINARY ENGINEERING REPORT

1.0 INTRODUCTION

The Harris County Public Infrastructure Department, Engineering Division, has authorized Richard Carter & Associates, Inc., to prepare a preliminary engineering report and supporting documentation for design and construction of on-site wastewater systems with discharge serving single family residences in Harris County, Texas.

The systems designed are to meet Texas Water Code, Chapter 26 criteria for discharge into a receiving stream. Additional county-specified criteria include economy of construction, operation and maintenance.

The areas considered for discharge into a receiving stream involve subdivisions with small residential lots which were developed prior to regulatory involvement in the design and operation of on-site wastewater systems. Current rules require large lot sizes capable of accommodating individual on-site wastewater systems.

2.0 STATEMENT OF THE PROBLEM

Harris County has a significant number of single family residential subdivisions that rely on individual water wells and on-site wastewater treatment and disposal systems for each lot in the subdivision. Many of the individual lots have malfunctioning on-site wastewater systems. The primary causes of system failure are:

1. Low permeability soils.
2. Seasonal soil saturation during the wetter months.
3. Nearly level topography with poor storm water runoff.
4. Insufficient land area for effluent disposal.

The specific problems being addressed by this report are single family residences that were constructed and occupied prior to July 1, 1978, and have insufficient land area for construction of an approved on-site wastewater system.

Prior to 1990, all on-site wastewater systems, by rule, were required to use subsurface means for effluent disposal. Most systems constructed used anaerobic (septic tank) treatment followed by pipe and gravel trenches or beds for final disposal.

Beginning in 1994, Harris County began requiring site evaluations instead of percolation tests for determination of the method of final disposal. The site evaluation procedure recognizes the existence of seasonal ground water indicators. The end result of this rule change, along with Texas Natural Resource Conservation Commission rules adopted in 1997, resulted in most of the new wastewater systems in Harris County being installed using aerobic treatment followed by disinfection and using surface application (spray irrigation) over living ground cover as final treatment and disposal.

3.0 EXISTING SITE CONDITIONS

With few exceptions, the general soil types for Harris County are characterized by poor internal drainage, low permeability and nearly level topography.

A significant part of the county lies within the 100-year floodplain. Generally, storm runoff from individual lots is by sheet flow across the lot into an open road ditch. The road ditches connect to larger publicly maintained ditches or bayous. Road ditch runoff is slow due to nearly flat topography. Localized street flooding due to slow road ditch runoff is a frequent occurrence. Such flooding contributes to soil saturation on individual lots.

PRELIMINARY ENGINEERING REPORT

Average annual rainfall at Houston's Bush Intercontinental Airport is 47 inches. The rainfall is well distributed during the year, except for the months June through August, which tend to be drier. Septic systems with subsurface disposal often function well during the summer months but fail during the wetter months, with failures becoming most common from December to April.

The existing residential subdivisions most likely to be candidates under the proposed discharge permit process share the two critical factors of small lot sizes and unsuitable soils for on-site disposal.

4.0 DISCUSSION OF TREATMENT AND DISPOSAL PROCESSES

The proposed treatment and disposal process includes primary settling (septic tank), aerobic treatment unit, chlorine addition, chlorine contact/settling, discharge to a subsurface rock filter trench and final discharge into a roadside ditch. The proposed process schematic is shown in attached Sheets 1 and 2. The process treatment units are expected to provide the following effluent quality at the various stages of treatment if they are operated properly.

STAGE	CBOD	TSS	NH3-N	Fecal Coliform
Raw Wastewater	150-250 mg/l	240 mg/l	45 mg/l	> 2,000,000 CFU
Primary Effluent	100 mg/l	120 mg/l	45 mg/l	> 2,000,000 CFU
Aerobic Unit Effluent	20 mg/l	20 mg/l	< 1 mg/l	>200,000 FCU
Chlorine Contact Effluent	10 mg/l	10 mg/l	< 1 mg/l	< 200 CFU
Rock Filter Trench Effluent	< 5 mg/l	< 5 mg/l	< 1 mg/l	< 10 CFU

In addition, consideration has been given to the variation of effluent quality under short-term adverse loading and operating conditions, including loss of power to the treatment system, introduction of toxicants in the influent, excessive peak flow rates and/or loss of chlorine feed. Based on the minimal need for pumping, the number of stages and the simplicity of the primary and final stages of the process, it is believed that for short periods of upset, the process will be able to meet the required 10 mg/l BOD, 15 mg/l TSS, 3 mg/l NH₃-N and 200 FC requirements.

In addition to providing a high level of treatment, the final stage rock filter trench will provide a minimum of 250 square feet of absorption trench between the chlorine contact tank and the point of discharge into a roadside ditch. During dry weather, it is anticipated that much of the effluent from the chlorine contact tank will be absorbed into the soil walls.

Prototypical planning materials are shown in the attached drawings and are as follows:

Sheet Number	Description
1	Site Plan 50' X 100' Lot, 900 sq ft Residence
2	Site Plan 50' X 100' Lot, Single Wide Mobile Home
3	Wastewater Treatment System Plan ~ Option 1
4	Wastewater Treatment System Plan ~ Option 2
5	Wastewater Treatment System Sections
6	Wastewater Treatment System Disposal and Discharge

5.0 OPERATION & MAINTENANCE

Operational requirements and performance of the process units is predictable because there are over 2,800 aerobic units installed in Harris County at this time. Effluent sampling data from the aerobic treatment pump tanks indicates that the expected 20 mg/l BOD and 20 mg/l TSS is attainable. Harris County intends to oversee the operation of the on-site discharge units.

PRELIMINARY ENGINEERING REPORT

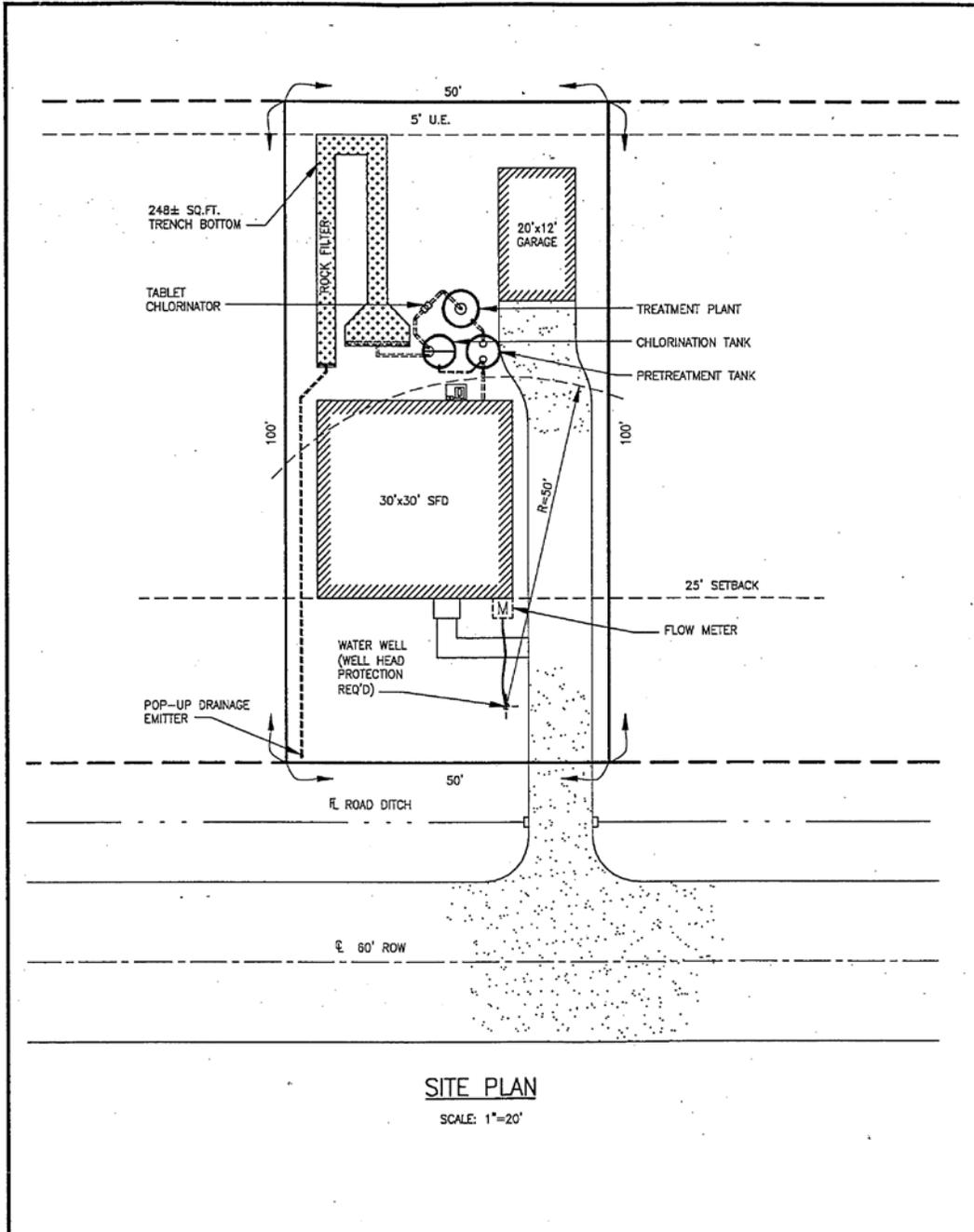
The normal frequency of operator attention for on-site aerobic units is once every three months, with the homeowner being responsible for adding chlorine tablets to the chlorine feeder between operator visits. It is anticipated that an operator will need to visit each site once a month to collect samples, check operations, pump sludge out of the chlorine contact tank as well as make process adjustments.

It is proposed that monthly effluent quality sampling be limited to BOD(total) and Fecal Coliform in order to keep operating costs to the homeowner at a more affordable level.

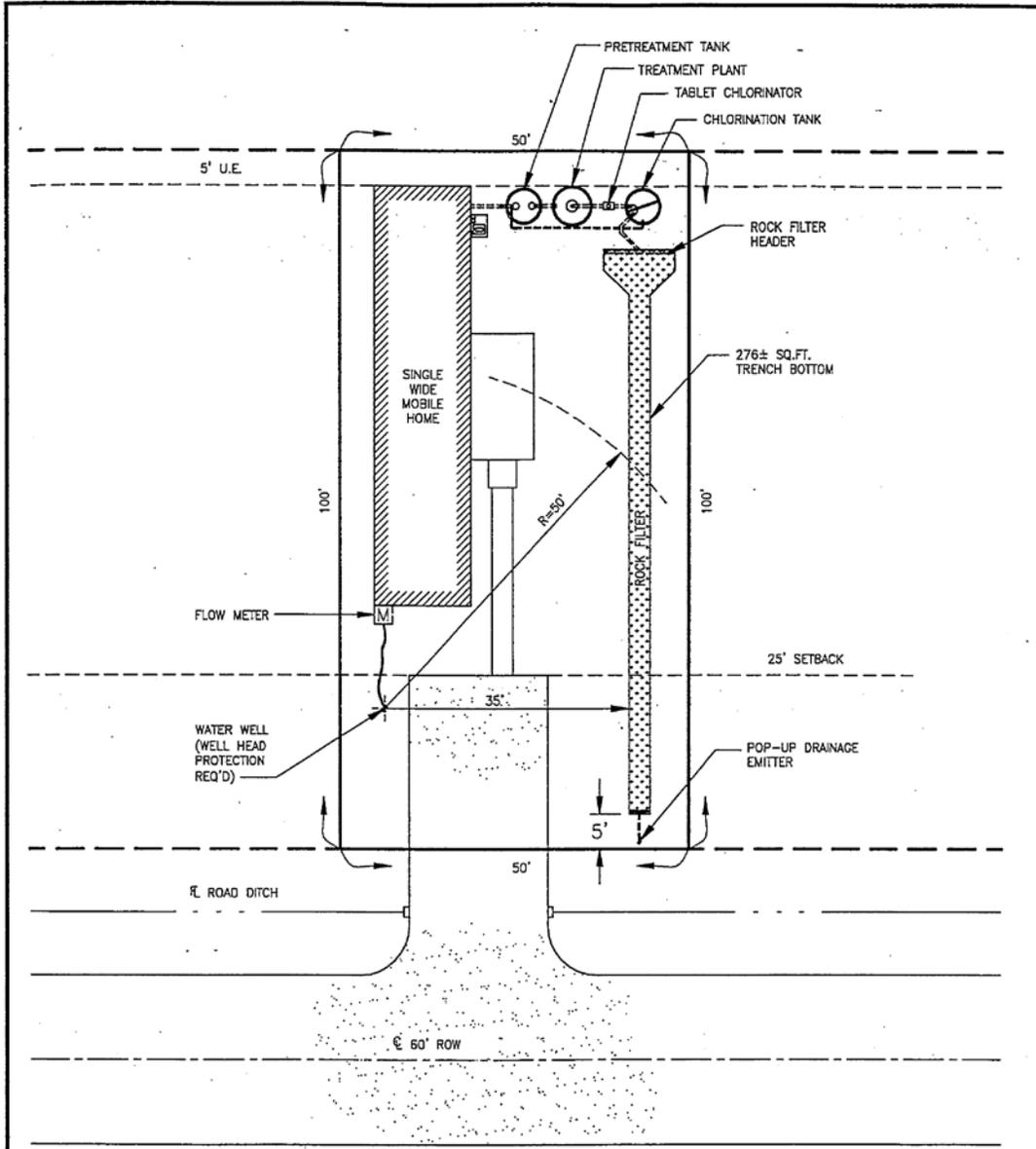
6.0 COST CONSIDERATIONS

Current costs to install an aerobic spray system in Harris County for a new residence are in the \$4,500 to \$5,000 range. The proposed on-site/discharge process does not have an irrigation system, but will have the additional rock filter trench to install. Since the proposed systems will replace existing failed systems where space may be extremely limited and some demolition may be required, the estimated cost of installing an on-site/discharge treatment system is \$6,000 to \$10,000 per home.

Monthly operating costs are expected to run \$35 to \$40 per unit, which is about twice the cost of a monthly municipal sewer bill.



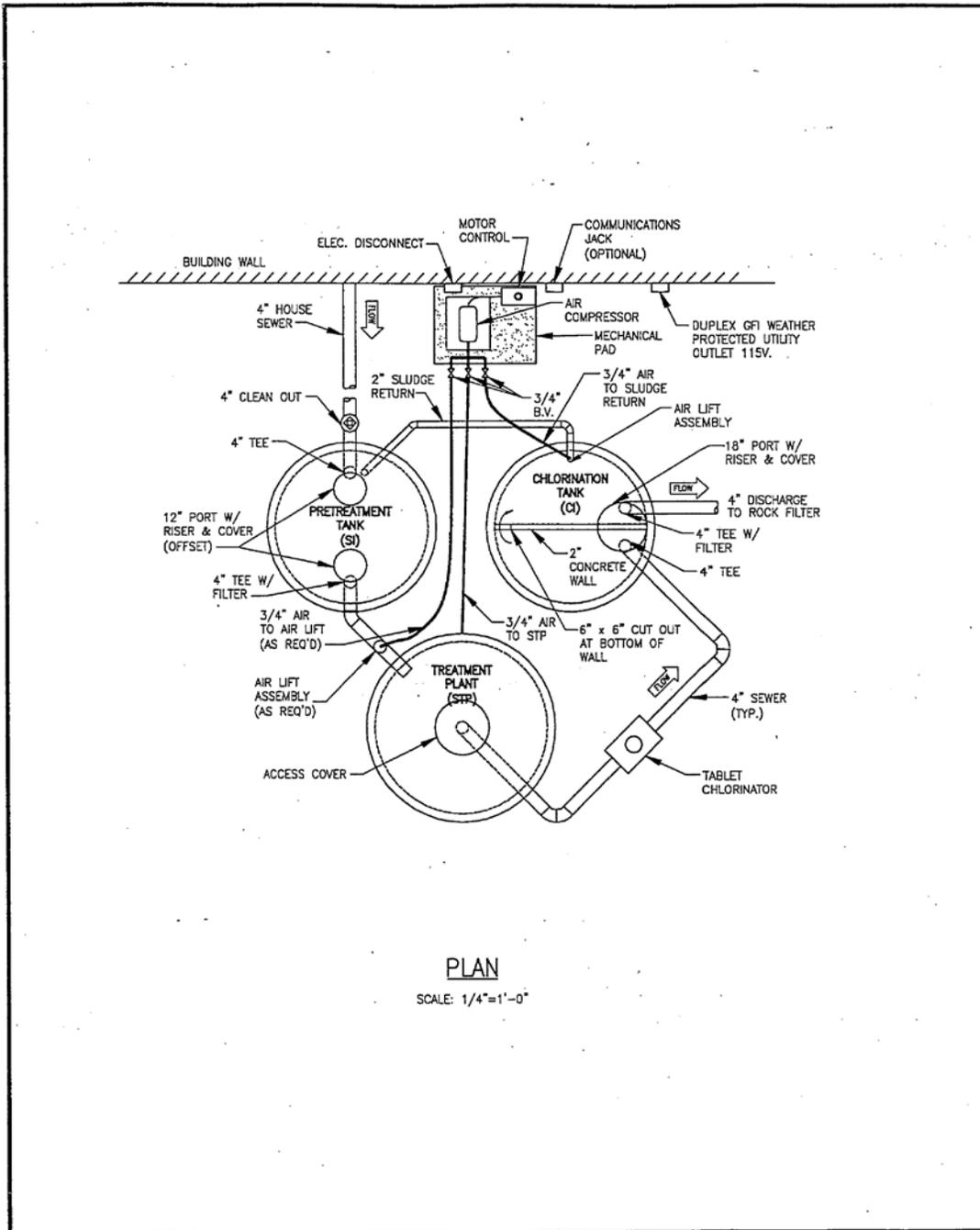
WASTEWATER TREATMENT SYSTEM -- SINGLE FAMILY DWELLING					SHEET: 1 OF 6
DRAWN BY: SCT	DESIGN BY: DRY	CHECKED BY: RC	DATE: 09/12/00	JOB NO.: 4009.1	



SITE PLAN

SCALE: 1"=20'

WASTEWATER TREATMENT SYSTEM – SINGLE WIDE MOBILE HOME					SHEET: 2 OF 6
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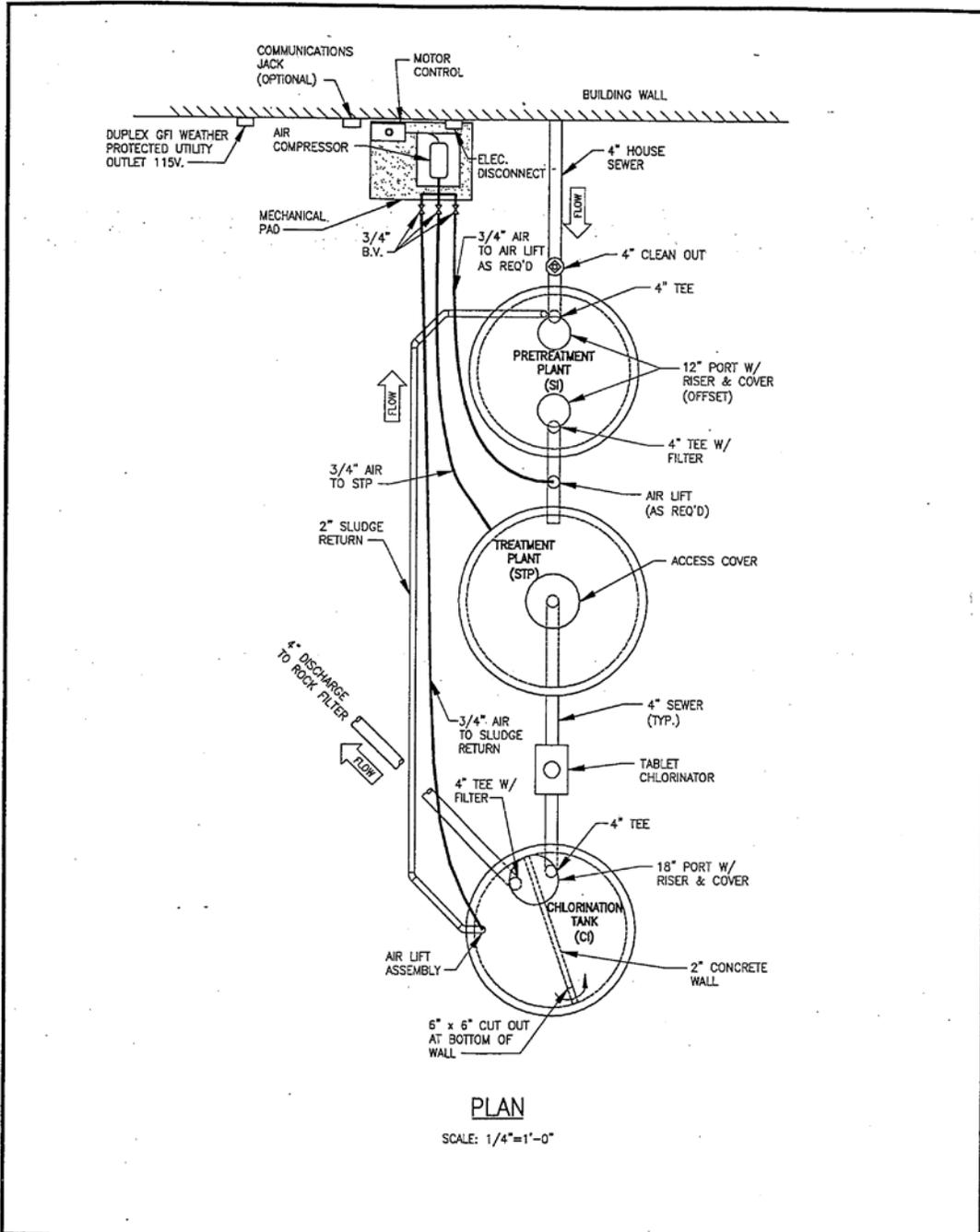
PLAN

SCALE: 1/4"=1'-0"

WASTEWATER TREATMENT SYSTEM PLAN – OPTION 1

SHEET:
3
OF
6

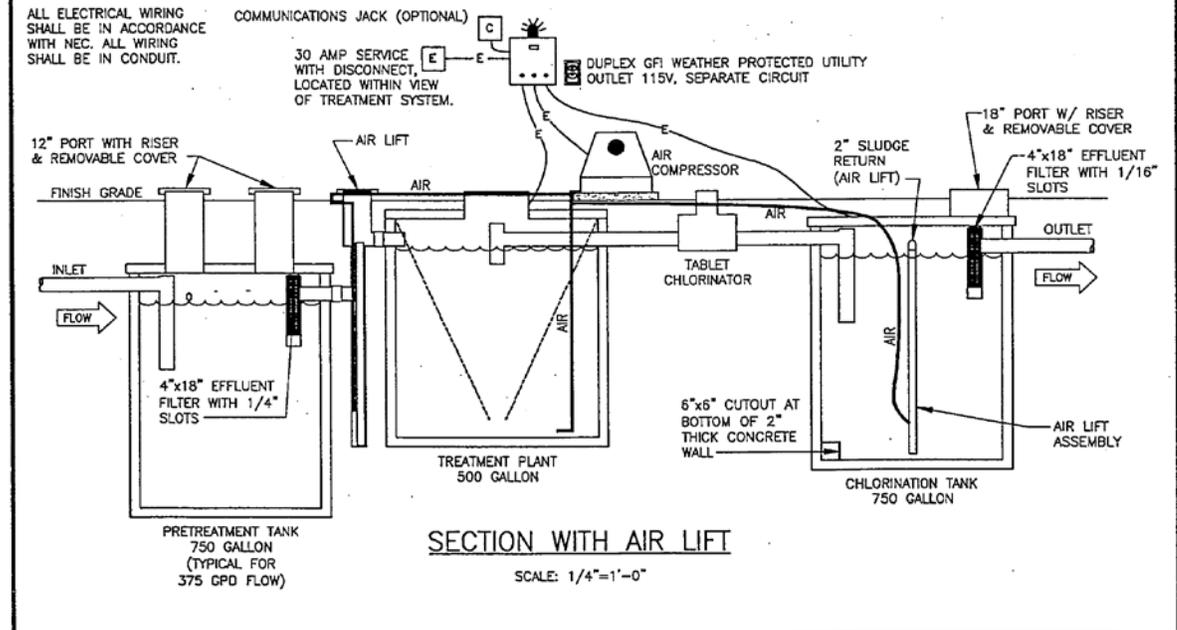
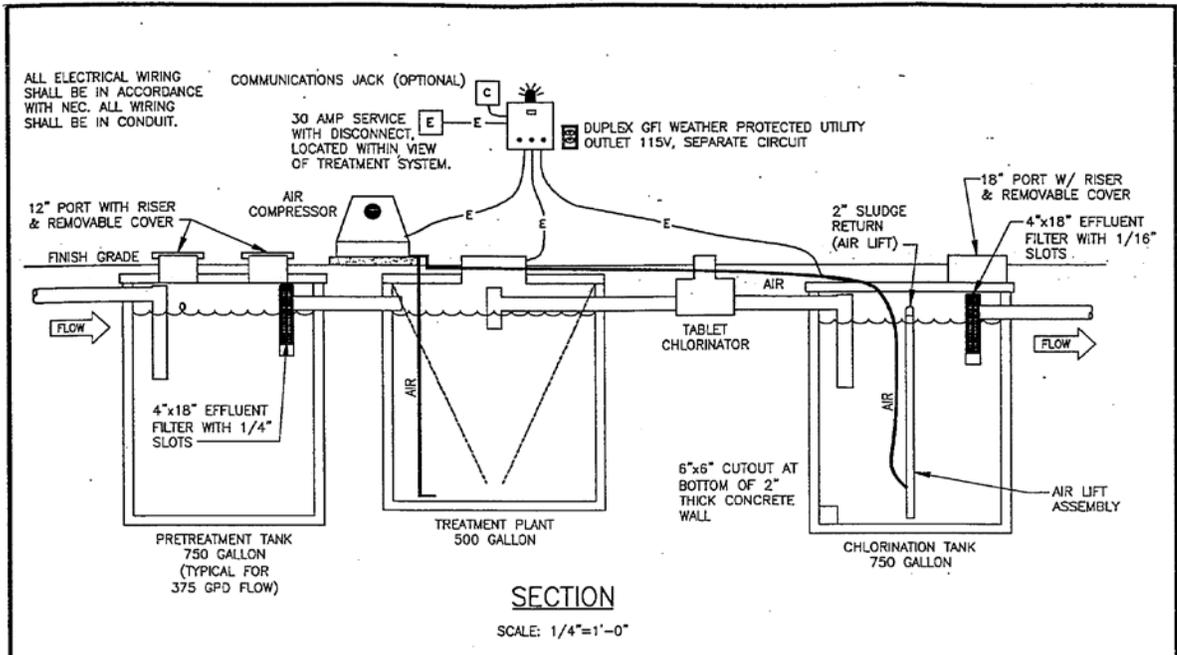
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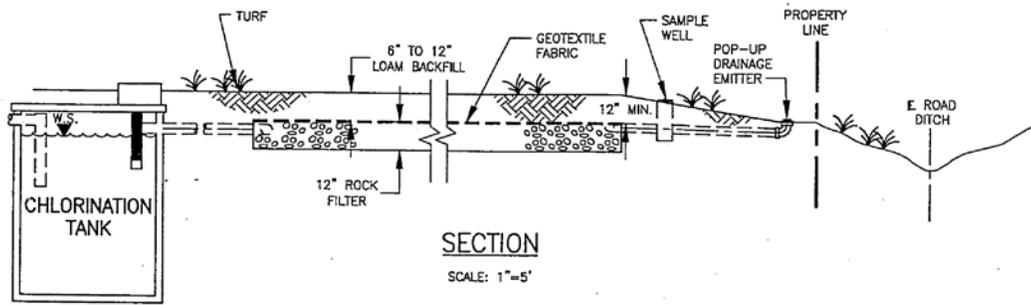
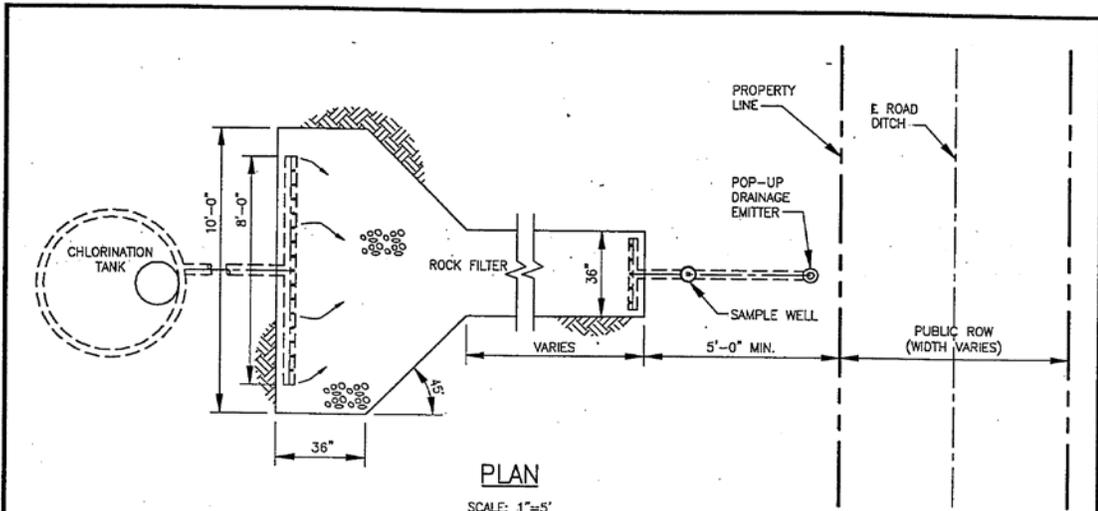
PLAN

SCALE: 1/4"=1'-0"

WASTEWATER TREATMENT SYSTEM PLAN – OPTION 2					SHEET: 4 OF 6
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WASTEWATER TREATMENT SYSTEM SECTION					SHEET: 5 OF 6
DRAWN BY: SCT	DESIGN BY: DRY	CHECKED BY: RC	DATE: 09/12/00	JOB NO.: 4009.1	



- NOTE:**
1. ROCK GRADATION : 3/4" TO 1 1/2"
 2. POP-UP DRAINAGE EMITTER OVERFLOW ELEV. TO BE MINIMUM OF 2" BELOW CHLORINATION TANK STATIC WATER SURFACE ELEVATION.
 3. POP-UP DRAINAGE EMITTER TO BE MINIMUM OF 12" ABOVE FLOW LINE OF ROAD DITCH.

WASTEWATER TREATMENT SYSTEM DISPOSAL AND DISCHARGE					SHEET:
DRAWN BY: SCT	DESIGN BY: DRY	CHECKED BY: RC	DATE: 09/12/00	JOB NO.: 4009.1	6
					OF
					6

**DOCKET NO. 2013-1989-MIS
General Permit No. TXG530000**

IN THE MATTER OF AMENDING AND	§	BEFORE THE TEXAS
RENEWING THE TPDES GENERAL	§	COMMISSION ON
PERMIT TO AUTHORIZE DISCHARGE	§	ENVIRONMENTAL
OF WASTEWATER FROM ON-SITE	§	QUALITY
TREATMENT SYSTEMS CONNECTED	§	
TO SINGLE FAMILY RESIDENCES	§	
LOCATED IN HARRIS COUNTY, TEXAS	§	
	§	

COMMISSION RESOLUTION AMENDING AND RENEWING THE GENERAL PERMIT

WHEREAS, under Texas Water Code (TWC), § 26.121, no person may discharge waste or pollutants into or adjacent to any water in the state except as authorized by a rule, permit, or order issued by the Texas Commission on Environmental Quality (TCEQ or Commission);

WHEREAS, under TWC, § 26.027, the TCEQ has the authority to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state;

WHEREAS, under TWC, § 26.040, the TCEQ has the authority to issue a general permit to authorize the discharge of waste into or adjacent to waters in the state;

WHEREAS, renewal, with amendment, of a Texas Pollutant Discharge Elimination System (TPDES) General Permit Number TXG530000 authorizing the discharge of wastewater from on-site treatment systems connected to single family residences located in Harris County, Texas, was drafted and proposed by the executive director and is attached as Exhibit A;

WHEREAS, the TCEQ received no public comments on the general permit;

WHEREAS, the Commission has reviewed, in accordance with Texas Natural Resources Code § 33.205 and 30 TAC § 205.5(f), the changes to the General Permit for consistency with the Texas Coastal Management Program (CMP) and has found that the General Permit is consistent with applicable CMP goals and policies, and that the General Permit will not adversely affect any applicable coastal natural resource areas as identified in the CMP;

WHEREAS, the Commission has determined in accordance with TWC § 26.040(a)(1)-(4) that the General Permit would authorize dischargers who engage in the same or substantially similar types of operations, discharge the same types of waste,

are subject to the same requirements regarding effluent limitations or operating conditions, and are subject to the same or similar monitoring requirements;

WHEREAS, the Commission finds, in accordance with TWC, § 26.040(a)(5), that the General Permit would apply to dischargers who are more appropriately regulated under a general permit than under individual permits and that:

(A) The General Permit has been drafted to assure that it can be readily enforced and that the Commission can adequately monitor compliance with the terms of the general permit; and

(B) The category of discharges covered by the General Permit will not include a discharge of pollutants that will cause significant adverse effects to water quality;

THEREFORE, by this resolution, the Commission issues the General Permit, attached as Exhibit A, as recommended by the executive director and as approved by the Commission during its January 15, 2014, public meeting.

Furthermore, the Commission directs staff to make any nonsubstantive changes to the general permit to satisfy *Texas Register* format requirements and requests that the general permit be made available to the public in accordance with the requirements of TWC, § 26.040(d) and 30 TAC § 205.3(e).

It is so **RESOLVED**.

Date of Adoption:

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Bryan W. Shaw, Ph.D., Chairman
For the Commission