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**SOAH DOCKET NO. 473-25-14204
PUC DOCKET NO. 54334**

APPLICATION 821 INVESTMENTS	§	BEFORE THE STATE OFFICE
LLC AND LAKESHORE UTILITY	§	
COMPANY FOR SALE, TRANSFER,	§	OF
OR MERGER OF FACILITIES AND	§	
CERTIFICATE RIGHTS IN	§	ADMINISTRATIVE HEARINGS
HENDERSON COUNTY	§	

EXHIBIT DC-1

PREFILED DIRECT TESTIMONY OF

DAVID H. CRAIG

**ON BEHALF OF
821 INVESTMENTS LLC**

Filed June 3, 2025

PREFILED DIRECT TESTIMONY OF DAVID H. CRAIG

Table of Contents

I.	Witness Identification	Page 4
II.	Purpose of Direct Testimony	Page 4
III.	Background Information	Page 5
IV.	Compliance With Notice Requirements	Page 8
V.	Financial Capabilities of 821 Investments LLC	Page 9
VI.	Managerial Capabilities and Experience of 821 Investments LLC	Page 10
VII.	Technical Capabilities of 821 Investments LLC	Page 12
VIII.	Adequacy of Existing Wastewater Service	Page 13
IX.	Infeasibility of Obtaining Wastewater Service from Nearby Providers	Page 14
X.	Environmental Benefits and Effects on Land	Page 15
XI.	Probable Improvement of Service or Lowering of Costs	Page 15
XII.	Conclusion	Page 15

EXHIBITS	Page No.
Exhibit DC-2: General Location Map of CCN Transfer Area	Page 6
Exhibit DC-3: Detailed Map of CCN Transfer Area	Page 6
Exhibit DC-4: Point La Vista Wastewater Facility Permit	Page 6
Exhibit DC-5: List of “Outside CCN” Customers	Page 6
Exhibit DC-6: J.F. Fontaine & Assoc. Engineering Capacity Study	Page 12
Exhibit DC-7: TCEQ Inspection Letter	Page 14
Exhibit DC-8: City of Log Cabin Letter	Page 14

PREFILED DIRECT TESTIMONY OF
DAVID H. CRAIG
ON BEHALF OF 821 INVESTMENTS LLC

I. WITNESS IDENTIFICATION

Q: Please state your name for the record.

A: David H. Craig

Q: On whose behalf are you testifying in this proceeding?

A: The co-applicant, 821 Investments LLC ("821 Investments").

Q: How are you currently employed?

A: I am the Managing Member of 821 Investments and managing member of DJD Cedar Creek LLC which is the managing member of 821 Investments. I am also the CEO of Craig International Inc. an affiliate of DJD Cedar Creek LLC, and an investor in 821 Investments. Craig International Inc. is a major real estate developer in the DFW market with projects located in the City of McKinney in Collin County and the City of Denison in Grayson County.

Q: What kind of business does 821 Investments engage in?

A: 821 Investments is a land development company currently focused on projects in the southern portion of Cedar Creek Reservoir, including the Point La Vista residential subdivision which is the subject of the CCN sale-transfer-merger ("STM") application in this case. 821 Investments is also developing the Emerald Bay residential subdivision (formerly known as Leo's Landing) immediately to the south of Point La Vista.

II. PURPOSE OF DIRECT TESTIMONY

Q: What is the general purpose of your direct testimony?

A: The general purpose of my testimony is to provide supporting information on 821 Investments' STM application for the Point La Vista subdivision wastewater service area and wastewater treatment facility. The application in this case requests the transfer of the

wastewater CCN from the other co-applicant Lakeshore Utility Company (“Lakeshore”) to 821 Investments.

Q: How would you generally summarize the nature of your testimony?

A: As discussed in my testimony, 821 Investments meets all regulatory criteria for the transfer of the wastewater CCN for the Point La Vista subdivision and wastewater treatment facility. My testimony further discusses how 821 Investments will be able to provide continuous and adequate wastewater service to the transferred service area.

Q. Was your testimony prepared by you or under your direct supervision?

A. Yes.

Q. What is the basis for your direct testimony in this case?

A. My personal involvement in the subject STM application as managing member of DJD Cedar Creek LLC, which in turn is the managing member of 821 Investments. As part of my corporate responsibilities with 821 Investments, I am personally familiar with the history of 821 Investments’ agreement with Lakeshore to acquire the Point La Vista wastewater facility and I am also familiar with all PUC filings in this PUC docket. My history as founder of Craig International, a major real estate developer of large master planned communities in Texas, also provides me with a great deal of knowledge and experience about providing wastewater utility service.

Q. Have you prepared any exhibits in connection with your testimony?

A. Yes. My evidentiary exhibits are listed in the Table of Contents to my testimony and discussed in my testimony.

III. BACKGROUND INFORMATION

Q: Why is 821 Investments requesting transfer of the Point La Vista wastewater CCN area from Lakeshore?

A: Under Texas law, a transaction to transfer a wastewater utility’s facilities and customers requires PUC approval for transfer of the CCN service area through the filing of a STM application. When I initially acquired an investment interest in 821 Investments in 2023, 821 Investments had already agreed with Lakeshore to acquire Lakeshore’s wastewater

1 facility. On November 10, 2022, 821 Investments and Lakeshore joined in filing the
2 STM application which is the subject of this case. Although I was initially a passive
3 investor in 821 Investments which owned land in and near the Point La Vista subdivision,
4 in order to safeguard my investment and ensure that my developments would have good
5 quality and reliable wastewater service, I and my partners acquired a 42% controlling
6 ownership interest in 821 Investments and in July of 2024 I took active control of 821
7 Investments as managing partner.

8 **Q: What CCN service area is being requested for transfer from Lakeshore to 821**
9 **Investments?**

10 A: The requested transfer area is an approximate 154-acre tract, the location of which is
11 shown on the General Location Map attached to my testimony as Exhibit DC-2 and
12 shown in more detail in the Detail Map attached to my testimony as Exhibit DC-3. Both
13 maps are taken from the STM application on file in this docket.

14 **Q: Please briefly describe the TCEQ permit for the Point La Vista wastewater facility.**

15 A: TCEQ Permit No. WQ0014845001 issued on March 15, 2017 authorizes the wastewater
16 facility to dispose of treated domestic wastewater effluent at a daily average flow of up to
17 19,250 gallons per day (“gpd”) via surface irrigation of 4.23 acres on non-public access
18 agricultural land at a maximum application rate of 5.1 acre-feet per year per irrigated
19 acre. The permit was issued to Sentry Title Company as it is the holding or parent
20 company of Lakeshore Utility and the title owner of the wastewater facility. Lakeshore is
21 the utility operating company for Sentry. A copy of the permit is attached to my
22 testimony as Exhibit DC-4. The permit expires on December 1, 2026, but I understand
23 that prior to renewal of the permit, Lakeshore intends to file an application at TCEQ for
24 renewal and amendment of the permit to expand the irrigation area and thus the capacity
25 of the facility.

26 **Q: How many wastewater customers are currently served by the wastewater facility?**

27 A: There are approximately 250 customers in Point La Vista or in other adjacent
28 subdivisions being served by the facility. Of this total number of current customers, 124
29 do not reside within the requested transfer area but are located within one-fourth mile of
30 Lakeshore’s existing wastewater CCN area and are being served by the Point La Vista
31 wastewater facility. A list of those “outside CCN” customers and the four subdivisions

1 in which they reside are provided in Exhibit DC-5 (which has been redacted to protect the
2 privacy interests of the customers). That list shows the number of customers in the four
3 subdivisions as follows: Clearwater Bay (71 customers); Dorchester (16 customers);
4 Pearl Harbor (31 customers); Clear Point Estates (6 customers).

5 **Q: What is the nature of the customers obtaining wastewater service from the facility?**

6 A: The current customers are entirely residential and are primarily part-time residents
7 because their homes serve as secondary lakeside vacation homes occupied primarily
8 during the summer months. Therefore, the service demands placed on the wastewater
9 facility are less than that of other wastewater facilities serving fulltime residents.
10 Moreover, the Lakeshore customers utilize grinder pumps that process waste solids at
11 their home site and are disposed of by a sludge hauling service rather than being sent to
12 the wastewater facility for treatment. This greatly reduces physical demands on the
13 facility as compared to typical wastewater facilities. Although the facility is permitted for
14 up to 19,250 gpd, it has the physical capability of processing up to 48,000 gpd. The
15 limiting factor for the facility's capacity is the authorized size of the irrigation acreage.
16 These facts are relevant to an evaluation of the treatment capacity of the wastewater
17 facility that I will discuss later in my testimony.

18 **Q: How many wastewater customers will 821 Investments serve after PUC approval of**
19 **the STM in this case?**

20 A: 821 Investments is in the process of developing land in the Emerald Bay subdivision just
21 to the south of the Point La Vista transfer area. The platted plans call for no more than 73
22 new residential lining units equivalent ("LUE") customer connections including an
23 amenity center within Emerald Bay that will receive wastewater service from the
24 wastewater facility. In fact, Lakeshore Utility is currently in the process of implementing
25 expansion of the wastewater treatment facility to ensure that there is adequate capacity to
26 serve new customers in Emerald Bay. However, in the present case, 821 Investments is
27 not seeking PUC approval to serve the new customers in Emerald Bay as that
28 authorization will be sought in a wastewater CCN expansion permit to be filed at the
29 PUC following the PUC's approval of the STM application in this docket.

30 **Q: Will the wastewater rates being charged customers change as a result of this STM**
31 **proceeding?**

1 A: No, this docket does not involve a rate change and the customer rates currently being
2 charged will continue to be charged after PUC approval of the STM application in this
3 docket. However, the wastewater service rates have not changed since 2011, and the
4 utility is in need of a rate increase to fund ongoing capital investment, operation and
5 maintenance needs and to support current day costs. Therefore 821 Investments also
6 plans to file for a rate increase and tap fee on new accounts following PUC approval of
7 the STM application in this docket. However, before we can apply for an expansion of
8 the CCN service area to encompass all existing and new customers, and before we apply
9 for a change in wastewater fees and rates, the STM application in this docket needs to be
10 approved.

11 **Q: Will your testimony address all applicable PUC requirements for a STM**
12 **application?**

13 A: Not specifically. A number of those applicable PUC regulatory requirements are
14 addressed in stipulations filed by the Parties in this case. See PUC Interchange Item No.
15 100 filed on May 9, 2025 in this docket. Those stipulations are based on evidence
16 already received into the record of this case and described in the PUC administrative law
17 judge's ("ALJ") proposal for decision which recommended approval of the requested
18 STM. See PUC Interchange Item No. 79 filed on December 3, 2024 in this docket. My
19 testimony addresses those regulatory issues that arguably have not been stipulated to.

20 **IV. COMPLIANCE WITH NOTICE REQUIREMENTS**

21 **Q: Did 821 Investments provide all public notices as required by PUC rules?**

22 A: Yes. On May 9, 2023, Lakeshore filed the affidavits of its authorized representatives
23 Bret W. Fenner and Tim Whatley attesting that notice was provided to all current
24 customers, neighboring utilities, and affected parties on May 4 and 5, 2023. See PUC
25 Interchange Item 26 in this docket. On June 12, 2023, Lakeshore filed a publisher's
26 affidavit attesting to the publication of notice of the application in the *Athens Review*, a
27 newspaper of general circulation in Henderson County on February 9 and 16, 2023. See
28 PUC Interchange Item 32 in this docket. On July 14, 2023, Lakeshore filed the affidavit
29 of Mr. Whatley attesting that there are no owners of a tract of land that is at least 25 acres

1 in size and is wholly or partially included in the requested transfer area. See PUC
2 Interchange Item 36 in this docket. Finally, in Order No. 10 filed on August 10, 2023,
3 the PUC's ALJ found that the notice, as supplemented, was sufficient. See PUC
4 Interchange Item 38 in this docket.

5 **V. FINANCIAL CAPABILITIES OF 821 INVESTMENTS**

6 **Q: Is 821 Investments financially capable of providing continuous and adequate**
7 **wastewater service to the CCN transfer area and to all existing customers?**

8 A: Certainly. First, the PUC staff reviewed the June 30, 2023 financial statements of 821
9 Investments and determined that the company has a debt-to-equity ratio that is less than
10 one, thus satisfying the leverage test. PUC staff also determined that the company has
11 cash on hand to cover projected operations and maintenance shortages during the first
12 five years of operations following approval of the transaction, thus satisfying the
13 operations test. See the PFD at Interchange Item 79 at page 7 (December 3, 2024) and
14 PUC Staff memo at Interchange Item 42 (September 21, 2023).

15 **Q: Does 821 Investments have the financial capability and stability to pay for the**
16 **facilities necessary to provide continuous and adequate wastewater service to the**
17 **requested transfer area?**

18 A: Yes. The owners of 821 Investments (who I am referring to as "my partners") have
19 invested over \$6 million and personally guaranteed bank financing to acquire
20 Lakeshore's wastewater facility and to develop Emerald Bay. My partners and I have
21 assets in the multi-millions of dollars and over one hundred years of financial track
22 record in successfully developing properties in Texas, including bringing the financial
23 resources needed to provide and manage water and wastewater utility services to our
24 development projects. Any needed capital improvements and O&M needs for the subject
25 wastewater services will be addressed with more-than-adequate financial resources.
26 Examples of financial investments already made by 821 Investments to help ensure the
27 success of wastewater utility service for the Point La Vista and Emerald Bay
28 developments include establishment of bank accounts to exclusively handle all
29 wastewater utility revenues and expenses; website design; custom billing software;

1 customer service phone and hotlines; automation of new customer forms and
2 establishment of vendor accounts. Therefore, there is no need to require 821
3 Investments to provide a bond or other financial assurance to ensure continuous and
4 adequate service.

5 **Q: Are you aware of rumors in the local community about contractors not being timely**
6 **paid by 821 Investments?**

7 A: Yes, I am aware of those rumors. We became aware that some contractors were not
8 timely paid by 821 Investments prior to taking over management of the company.
9 Immediately upon taking over management of 821 Investments, I personally reached out
10 to all known contractors to pay their overdue invoices. Since I have taken over
11 management of 821 Investments, all contractor invoices have been promptly paid and
12 sufficient funds are available to timely pay all contractor invoices.

13 **VI. MANAGERIAL CAPABILITIES OF 821 INVESTMENTS**

14 **Q: Does 821 Investments have the managerial capabilities to provide continuous and**
15 **adequate wastewater service to the CCN transfer area and to all existing customers?**
16

17 A: Yes. As I previously testified, I am the founder and CEO of Craig International which is a
18 major development company with numerous high-end commercial and residential
19 developments in North Texas. Examples of major development projects which I manage
20 and in which I have had or have substantial ownership interests include the following:

21 Craig Ranch in McKinney which encompasses over 2,200 acres of single family
22 residential, multi-family, and commercial properties and the nearby District 121 which is
23 a mixed use development adjacent to Craig Ranch.

24 The TPC Craig Ranch golf course which became the host for the annual Byron Nelson
25 PGA Tour golf tournament five years ago.

26 Preston Harbor, a 3,200-acre master-planned development on Lake Texoma in Denison,
27 Texas. I negotiated an extensive development agreement with the City of Denison that
28 includes over \$80 million in offsite water and sewer infrastructure to customer

1 connections along with a very large lift station on the property that provides sewer
2 service to over 10,000 families. In addition to the city lift station within the Preston
3 Harbor development, we have over ten other lift stations, gravity lines and force mains
4 that all function together to provide the sewer needs of the development.

5 McKinney Corporate Center, a master-planned office, residential, medical, and retail
6 development in Craig Ranch, McKinney TX

7 My many years of land development experience include planning for and providing
8 water and wastewater utility services for my development projects. I and my team at 821
9 Investments, including Ron Abney our senior project manager overseeing the Point La
10 Vista and Emerald Bay developments, have the qualifications and experience needed to
11 ensure continuous and adequate wastewater service to the wastewater transfer area
12 applied for in this case.

13 **Q: You mentioned your senior project manager for Point La Vista and Emerald Bay**
14 **developments, Ron Abney. What experience does he have in overseeing or operating**
15 **wastewater utility services?**

16 A: Mr. Abney has 35 years of experience in managing and operating development projects
17 in Texas, Oklahoma, California, Oregon, Washington, and Montana providing of water
18 and wastewater utility services. He has overseen the construction of a multi-million-
19 dollar sewer treatment plant and management of daily operations as Executive Officer of
20 Tribal Operations for Choctaw Nation previously. His area of responsibility
21 encompassed all construction and facilities maintenance for the Choctaw Nation, which
22 included water and wastewater infrastructure. Mr. Abney will provide weekly oversight
23 of the plant operator Aqua Services LP to ensure that proper maintenance is maintained,
24 capital improvement needs are addressed, responses are promptly made to customer
25 service issues, as well as being responsible for all required regulatory reporting and
26 recordkeeping.

27 **Q: You mentioned that the wastewater facility operator will be Aqua Services LP. Has**
28 **Aqua Services LP already been engaged, and what experience does Aqua Services**
29 **LP have in operating wastewater facilities?**

1 A: Aqua Services LP has already been engaged by 821 Investments to be the operator of the
2 Point La Vista wastewater facility. Aqua Services LP is a TCEQ-registered wastewater
3 operations company and employs TCEQ-licensed wastewater treatment facility operators.
4 Aqua Services has 12 years of experience in operating wastewater facilities in Texas,
5 specifically Henderson County, where the Point La Vista facility is located and has
6 operated the nearby City of Log Cabin's wastewater facility for the past ten years. Aqua
7 Services has also managed the City of Murchison wastewater facility for the past two
8 years and assisted Lakeshore Utility in providing water and sewer services for the last six
9 years. Major wastewater projects Aqua Services has assisted on include a \$350,000
10 sewer plant rehabilitation for the City of Log Cabin, a \$200,000 primary sewer tank
11 rehabilitation project for the City of Brownsboro, and a \$120,000 rehabilitation project
12 for the City of Overton wastewater treatment plant aeration basin.
13

14 **VII. TECHNICAL CAPABILITIES OF 821 INVESTMENTS**

15 **Q: Does the Point La Vista wastewater facility have the technical capability to provide**
16 **continuous and adequate wastewater service to the CCN transfer area and to all**
17 **existing customers?**

18 A: Yes. As I previously testified, the wastewater facility is designed and constructed to
19 process up to 48,000 gpd of wastewater and is permitted for 19,250 gpd. This flow
20 volume is based on the 4.23 acres of irrigated land authorized by the permit. Lakeshore
21 engaged the engineering firm J.F. Fontaine & Associates Inc. to evaluate the wastewater
22 facilities current capacity to serve the 250 existing and potential future customers'
23 connections in Emerald Bay and to conduct a facility capacity study. A copy of that
24 capacity study is attached to my testimony as Exhibit DC-6. The engineering study
25 indicates that the current wastewater flows are about 12,000 gpd, so for 250 existing
26 customers there is a per-connection demand of 48 gallons per day. With a design
27 capacity of 48,000 gpd, the facility has sufficient capacity to serve up to 1,000 customer
28 connections assuming a per connection actual demand of 48 gpd per connection. While a
29 48 gpd per connection demand figure may seem lower compared to other wastewater
30 facilities, it is explained by the fact that only approximately 60% of the Point La Vista
31 customers occupy their homes full-time, while other customers residing only occasionally

(i.e., during the summer vacation months). Over the past five years, the Point La Vista wastewater facility has experienced no more than ten new customers per year. As indicated in the Fontaine study, the current irrigation acreage is sufficient to handle the current demands on the facility. Moreover, as I previously testified, Point La Vista customers have their own on-site grinder pumps to process waste solids so these are not sent to the facility. This thereby greatly reduces the physical demands on the facility and any resulting operations and maintenance needs.

Q: Could 821 Investments expand the capacity of the wastewater facility if needed?

A: Yes. 821 Investments has an additional 1.6-acre tract within the existing site that can be used for irrigation of treated effluent which is already under expansion in partnership with Lakeshore Utility. The Fontaine engineering study addresses this possibility in Section 3 of their report where Fontaine concludes adding 73 new customer connection LUEs in Emerald Bay, there would be sufficient irrigation acreage to accommodate 116 new connections at an assumed demand of 125 gpd per connection, and that there would be sufficient irrigation acreage to accommodate 303 new connections at an assumed actual demand figure of 48 gpd per connection.

Q: Could 821 Investments expand the capacity of the wastewater facility even further if needed?

A: Yes. 821 Investments has a right of first refusal to acquire an additional 4.5 acres of land which can be purchased and converted into an irrigation area if growth requires. This would allow for an additional 20,490 gallons per day of average flow. In short, so long as the wastewater treatment demands remain below its design capacity of 48,000 gpd, the facility has more-than-adequate capacity to serve all existing and anticipated customers both in Point La Vista, Emerald Bay and the three other subdivisions in which the wastewater plant's current customers reside.

VIII. ADEQUACY OF EXISTING WASTEWATER SERVICE

Q: Is the existing wastewater service adequate for the CCN transfer area and all existing customers?

1 A: Yes. Lakeshore has had zero violations listed in TCEQ's compliance database. TCEQ
2 inspected the treatment facility in July 2019 during peak usage season and no violations
3 were reported. TCEQ again conducted an investigation to evaluate compliance with
4 applicable requirements for wastewater treatment on February 23, 2023, and no
5 violations were documented during the investigation. A copy of the TCEQ inspection
6 letter is attached to my testimony as Exhibit DC-7. TCEQ's complaint records, which
7 date back five years show no complaints against Lakeshore and there is no evidence in
8 the record that Lakeshore has failed to comply with any PUC or TCEQ order. As noted
9 in the Adequacy of Existing Service section of the PUC judge's Proposal for Decision of
10 December 3, 2024, Lakeshore has not had any complaints, violations, or deficiencies
11 regarding the sewer system and facility. In addition, the Proposal for Decision states that
12 "No capital improvements are necessary for 821 Investments to continue providing
13 continuous and adequate service to the requested area."

14 **Q: Is the facility too old to provide continuous and adequate service?**

15 A: Not at all. Although the facility is said to have a useful 50-year life, that designation is
16 used for planning, budgeting and depreciation accounting and does not mean the entire
17 system will need to be replaced after 50 years. Over the last ten years, the facility has
18 had all major components regularly serviced and upgraded or replaced as needed. These
19 upgrades or replacements include the irrigation pump and electrical controls; the
20 sprinkler heads; the gear box; paddle wheel bearings, blocks, and spider gears; and motor
21 and electrical control system.

22 23 **IX. INFEASIBILITY OF OBTAINING SERVICE FROM NEARBY PROVIDERS**

24 **Q: Is there a nearby wastewater service provider who can provide service in lieu of 821**
25 **Investments?**

26 A: No. The only possible wastewater service provider nearby is the City of Log Cabin
27 which has a wastewater facility. We inquired of the City of Log Cabin about their ability
28 to provide wastewater service and they sent a letter stating that they did not have
29 available capacity. A copy of the City of Log Cabin letter is attached to my testimony as
30 Exhibit DC-8.

1 **Q: Would connecting to Log Cabin's system or some other retail public utility be**
2 **advantageous to the current customers?**

3 A: No. Obtaining wastewater service from an adjacent retail public utility would increase
4 costs for the current customers because new interconnect facilities would need to be
5 constructed and paid for. In addition, Log Cabin's current infrastructure needs
6 substantial capital improvements. Therefore, it is not feasible to obtain wastewater
7 service from an adjacent retail public utility.
8

9 **X. ENVIRONMENTAL BENEFITS AND EFFECTS ON LAND**

10 **Q: If 821 Investments obtains PUC certification of the transfer area, will there be any**
11 **adverse effects on the land or the environment?**

12 A: No. All wastewater service will be provided by the existing wastewater facility, and no
13 new construction will be necessary except for the new 1.6-acre irrigation tract for which
14 the wastewater lines have already been installed. Therefore, there will be no impact on
15 the land or the environment as no additional construction will be needed.

16 **Q: Would use of the wastewater facility provide any environmental benefits?**

17 A: Yes. Without the wastewater facility, the only feasible option for treating wastewater is
18 through on-site septic systems which have much more risk of environmental harm such
19 as contamination of groundwater and surface water.
20

21 **XI. PROBABLE IMPROVEMENT OF SERVICE OR LOWERING OF COSTS**

22 **Q: If 821 Investments obtains PUC certification of the transfer area, will there be any**
23 **improvement of service or lowering of costs to customers?**

24 A: Yes. As described above in my testimony, 821 Investments brings substantial new
25 managerial experience and financial resources that Lakeshore does not have access to in
26 our opinion. 821 Investments has systems in place to timelier respond to customer
27 inquiries and service complaints. Customer costs would not be impacted as the same
28 tariffed rates currently being charged by Lakeshore will continue to be charged by 821
29 Investments. Wastewater rates and fees will not be altered unless and until the PUC

1 approves a rate change in a rate case that may be filed after the present STM application
2 is approved.

3 **XI. CONCLUSION**

4 **Q. How would you sum up 821 Investments position in this case?**

5 A. 821 Investments has the financial, managerial, and technical capabilities to provide
6 continuous and adequate wastewater service to the requested transfer area and to all
7 current customers located outside the transfer area. 821 Investments is committed to
8 expending whatever resources are needed to provide high quality and reliable wastewater
9 service in accordance with PUC and TCEQ rule requirements. Although Lakeshore has
10 done a generally good job of owning and operating the Point La Vista wastewater facility
11 within the limits of its financial resources, 821 Investments will bring substantial new
12 managerial capabilities and financial resources to ensure that the customers receive even
13 better service.

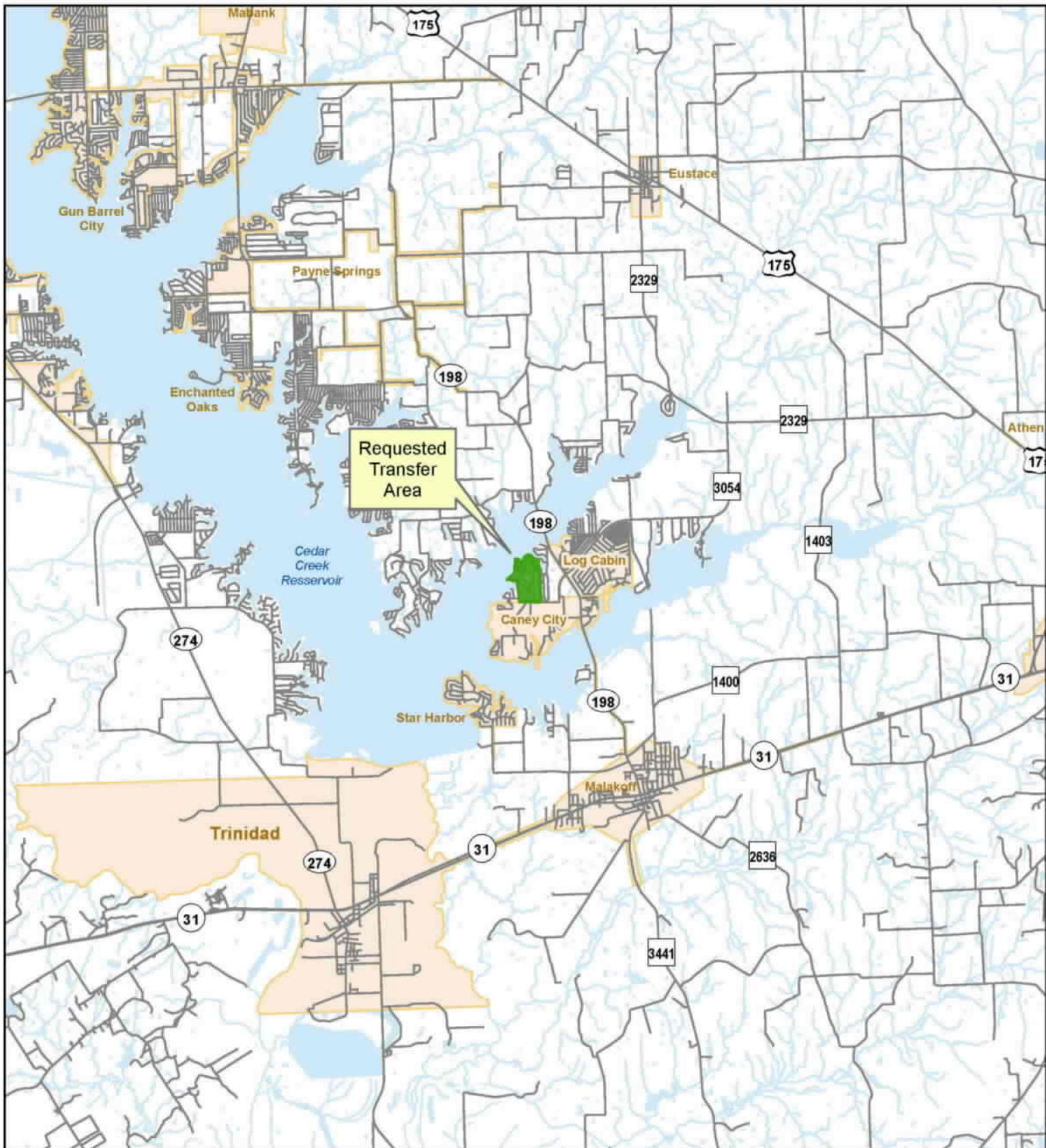
14 **Q. Do you have any comments about how this PUC proceeding has progressed?**

15 A. Yes. I am not intending to be critical of any person or entity, but I am surprised at how
16 long and expensive the process of merely transferring an agreed-upon CCN service area
17 has been. The STM application in this case was originally filed on November 10, 2022.
18 As described in the Commission's March 13, 2025 preliminary order, after more than a
19 year of our responding to requests for information and providing notices, the
20 Commission's administrative law judge ("ALJ") determined on January 30, 2024 that a
21 hearing was not necessary because the application meets all applicable regulatory
22 requirements and no one had requested a hearing. On January 30, 2024, the
23 Commission's ALJ approved the sale and transfer of the CCN area and allowed the sale
24 to proceed to closing. The sale closed and closing documents were filed in the docket on
25 July 23, 2024 and on August 9, 2024 the ALJ found the closing documents to be
26 sufficient. On December 3, 2024 the ALJ filed a proposal for decision ("PFD")
27 recommending that the sale and transfer be approved. However, at the Commission's
28 February 20, 2025 open meeting, the Commission did not adopt the PFD because there
29 were remaining fact issues. Therefore this case was referred to SOAH, but instead of
30 limiting the SOAH hearing to the fact issues identified in the open meeting, the

1 Commission referred to SOAH the entire list of standard STM statutory and regulatory
2 issues even though all those issues had already been favorably determined by the
3 Commission's ALJ and were not contested by anyone. With the referral to SOAH of all
4 these STM issues, 821 Investments is now obligated to file this testimony to address all
5 the standard STM issues. So for a case where no hearing requests were filed, 821
6 Investments has been forced to wait so far over 2½ years, and now we have to go through
7 this SOAH hearing process at substantial added financial costs. There must be a more
8 efficient way to address this kind of a case.

9 **Q. Does this conclude your direct testimony?**

10 A. Yes, but I reserve the right to supplement or modify my testimony based on further
11 information that I obtain.



GENERAL LOCATION

821 Investments, LLC

Application to Transfer a Portion of Lakeshore Utility Company, CCN No. 20478 to 821 Investments, LLC
in Henderson County



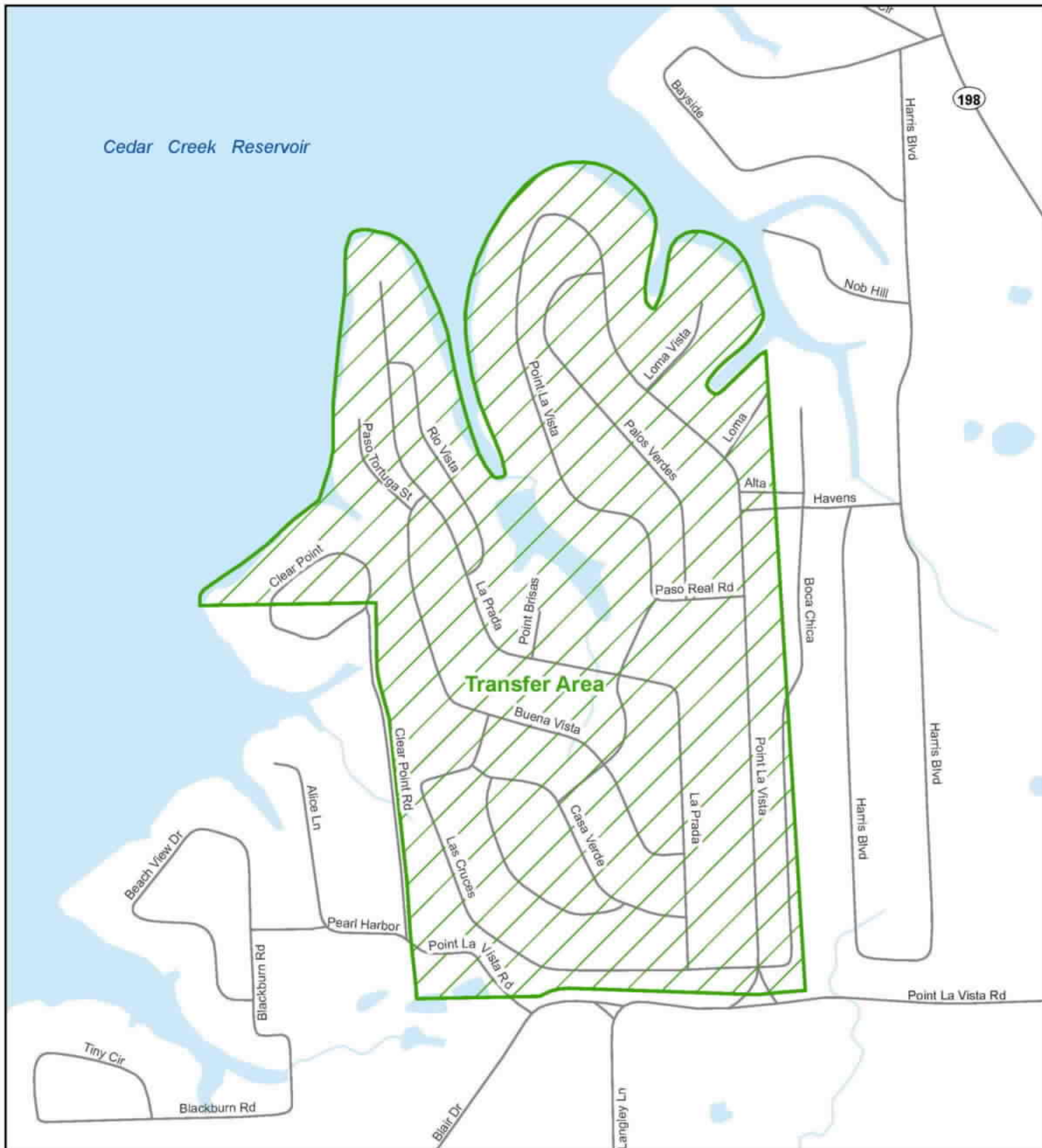
Requested Area to Transfer



0 1 2
Miles

Exh. DC-2

Map by: S. Burt, ASBG
Date: December 6, 2022
Base: TxDOT Roadways
Project: Lakeshore General Location



DETAIL MAP

821 Investments, LLC

Application to Transfer a Portion of Lakeshore Utility Company, CCN No. 20478 to 821 Investments, LLC
in Henderson County



Requested Area to Transfer

Exh. DC-3



0 300 600
Feet

Map by: S. Burt, ASBGI
Date: December 6, 2022
Base: TxDOT Roadways
Project: Lakeshore Detail Map



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

This is a renewal of Permit No.
WQ0014845001 issued on
December 14, 2012.

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

Sentry Title Company, Incorporated

whose mailing address is

106 East Corsicana Street
Athens, Texas 75751

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

General Description and Location of Waste Disposal System:

Description: The Point La Vista wastewater treatment facility consists of an activated sludge process plant using the extended aeration mode. Treatment units include an oxidation ditch, clarifier, and chlorine contact chamber. The facility includes two storage ponds with a total surface area of 0.72 acre and total capacity of 12.62 acre-feet for storage of treated effluent prior to irrigation. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.01925 million gallons per day (MGD) via surface irrigation of 4.23 acres of non-public access agricultural land. Application rates to the irrigated land shall not exceed 5.1 acre-feet per year per acre irrigated. The permittee will maintain turf grass and other ground cover on the disposal site.

Location: The wastewater treatment facility and disposal site are located at 15575 Pearl Harbor Road, Malakoff, approximately 0.5 mile west of the intersection of State Highway 90 and Farm-to-Market Road 3054, in Henderson County, Texas 75148. (See Attachment A)

Drainage Area: The wastewater treatment facility and disposal site are located in the drainage basin of Cedar Creek Reservoir in Segment No. 0818 of the Trinity 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 **December 1, 2026.**

ISSUED DATE: March 15, 2017


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 Sewage Effluent

Volume: Daily Average Flow – 0.01925 million gallons per day (MGD) from the treatment system

Quality: The following effluent limitations are required:

<u>Parameter</u>	<u>Effluent Concentrations</u>	
	<u>(Not to Exceed)</u>	
	<u>Daily Average mg/l</u>	<u>Single Grab mg/l</u>
Biochemical Oxygen Demand (5-day)	N/A	65

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

B. Monitoring Requirements:

<u>Parameter</u>	<u>Monitoring Frequency</u>	<u>Sample Type</u>
Flow	Five/week	Instantaneous
Biochemical Oxygen Demand (5-day)	One/month	Grab
pH	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 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. Except as allowed by 30 TAC § 305.132, 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.

TCEQ Revision 06/2008

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 with the TCEQ. This provision does not authorize Distribution and Marketing of sludge. This provision does not authorize land application of Class A or Class AB Sewage 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 § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that 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 that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. 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 5) within seven (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, Registration, Review, and Reporting 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 5) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceeds 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> <u>(Milligrams per kilogram)*</u>
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 must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B pathogen requirements.

- a. For sewage sludge to be classified as Class A with respect to pathogens, the density of fecal coliform in the sewage sludge be less than 1,000 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. In addition, one of the alternatives listed below must be met.

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 § 312.82(a)(2)(A) for specific information.

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must 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 must 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. For sewage sludge to be classified as Class AB with respect to pathogens, the density of fecal coliform in the sewage sludge be less than 1,000 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. In addition, one of the alternatives listed below must be met.

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° 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%.

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 § 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 § 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.

- c. Sewage sludge that meets the requirements of Class AB sewage sludge may be classified a Class A sewage sludge if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.
- d. 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 § 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%.
- 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° Celsius. Volatile solids must be reduced by less than 17% 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 percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% 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° 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° Celsius and the average temperature of the sewage sludge shall be higher than 45° 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% 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% 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 or Class AB 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 or Class AB 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 wt. 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, CLASS AB 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, Class AB 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, Class AB 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 Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 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 § 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 AB and Class B sludge, 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 § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 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 § 312.47 for persons who land apply:
 - a. 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 § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
 - b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
 - c. The number of acres in each site on which bulk sludge is applied.
 - d. The date and time sludge is applied to each site.

- e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
- f. 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 5) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th 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. that 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, Class AB 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 § 312.47(a)(4)(A)(ii) or 30 TAC § 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 § 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 § 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 § 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 5) 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, Registration, Review, and Reporting 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 5) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year.

- E. Sewage sludge shall be tested as needed, in accordance with the requirements of 30 TAC § 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 5) and Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th 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 § 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.

SECTION IV. REQUIREMENTS APPLYING TO SLUDGE TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

These provisions apply to sludge that is transported to another wastewater treatment facility or facility that further processes sludge. These provisions are intended to allow transport of sludge to facilities that have been authorized to accept sludge. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge, nor do they limit the ability of the receiving facility to request additional testing or documentation.

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 that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
2. Sludge may only be transported using a registered transporter or using an approved pipeline.

B. Record Keeping Requirements

1. For sludge transported by an approved pipeline, the permittee must maintain records of the following:
 - a. the amount of sludge transported;
 - b. the date of transport;
 - c. the name and TCEQ permit number of the receiving facility or facilities;
 - d. the location of the receiving facility or facilities;
 - e. the name and TCEQ permit number of the facility that generated the waste; and
 - f. copy of the written agreement between the permittee and the receiving facility to accept sludge.
2. For sludge transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge transported.
3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

C. Reporting Requirements

The permittee shall report the following information annually to the TCEQ Regional Office (MC Region 5) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year:

1. the annual sludge production;
2. the amount of sludge transported;
3. the owner of each receiving facility;
4. the location of each receiving facility; and
5. the date(s) of disposal at each receiving facility.

TCEQ Revision 6/2015

SPECIAL PROVISIONS:

1. This permit is 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 this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, if an area-wide system is developed; to require the delivery of the wastes authorized to be collected in, treated by, or discharged from the system, to an 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.
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 § 30, Occupational Licenses and Registrations, and in particular 30 TAC § 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category D facility must be operated by a chief operator or an operator holding a Category D 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. Within 60 days of permit issuance, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) of the Water Quality Division, a summary transmittal letter according to the requirements in 30 TAC § 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 the permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ. **This provision is continued from the permit issued on December 14, 2012 which has not been complied with to date.**
5. Within 60 days of permit issuance, the permittee shall submit sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3). The evidence of legal restrictions shall be submitted to the Executive Director in care of the TCEQ Wastewater Permitting Section (MC 148). The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). (See Attachment B.) **This provision is continued from the permit issued on**

December 14, 2012 which has not been complied with to date.

6. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
7. The permittee will maintain turf grass and other ground cover on the disposal site. Application rates to the irrigated land shall not exceed 5.1 acre-feet per year per acre irrigated. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. These records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for at least three years.
8. Irrigation practices shall be designed and managed so as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. Turf grass or other ground cover shall be established and well maintained in the irrigation area throughout the year for effluent and nutrient uptake by the crop and to prevent pathways for effluent surfacing. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.
9. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
10. 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.
11. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
12. 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.
13. The permittee shall obtain representative soil samples from the root zones of the irrigation area prior to commencing land application of treated effluent. Composite sampling techniques shall be used. Each composite sample shall represent no more than 4.23 acres with no less than 15 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth 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, 6 inches to 18 inches and 18 inches to 30 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 sample 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	0.1	Standard units
Electrical Conductivity	Obtained from the SAR water saturated paste extract	0.01	dS/m (same as mmho/cm)
Nitrate-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 + nitrate-nitrogen (same as, organic-nitrogen + ammonium-nitrogen + 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	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K)	mg/kg (dry weight basis)
Amendment addition, e.g., gypsum	Recommendation from analytical laboratory		Report in <i>short tons/acre</i> in the year effected

The permittee shall provide a copy of this plan to the analytical laboratory prior to sample analysis.

The permittee shall submit the results of the soil sample analyses with copies of the laboratory reports with a map depicting the permanent sampling fields to the TCEQ Regional Office (MC Region 5) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division no later than end of September following the sampling date of each year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater and/or sludge has not been applied on the approved land disposal sites during that year.

14. 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 Sewerage Systems.
15. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.
16. Within 180 days of permit issuance, the permittee shall demonstrate that the liners for Pond

A, Pond B, and the tail water containment pond are in accordance with one of the following options:

a. In situ clay soils or placed and compacted clay soils meeting the following requirements:

- 1) More than 30% passing a No. 200 mesh sieve,
- 2) Liquid limit greater than 30%,
- 3) Plasticity index greater than 15,
- 4) A minimum thickness of 3 feet,
- 5) Permeability equal to or less than 1×10^{-7} cm/sec, and
- 6) Soil compaction will be 95% standard proctor at optimum moisture content

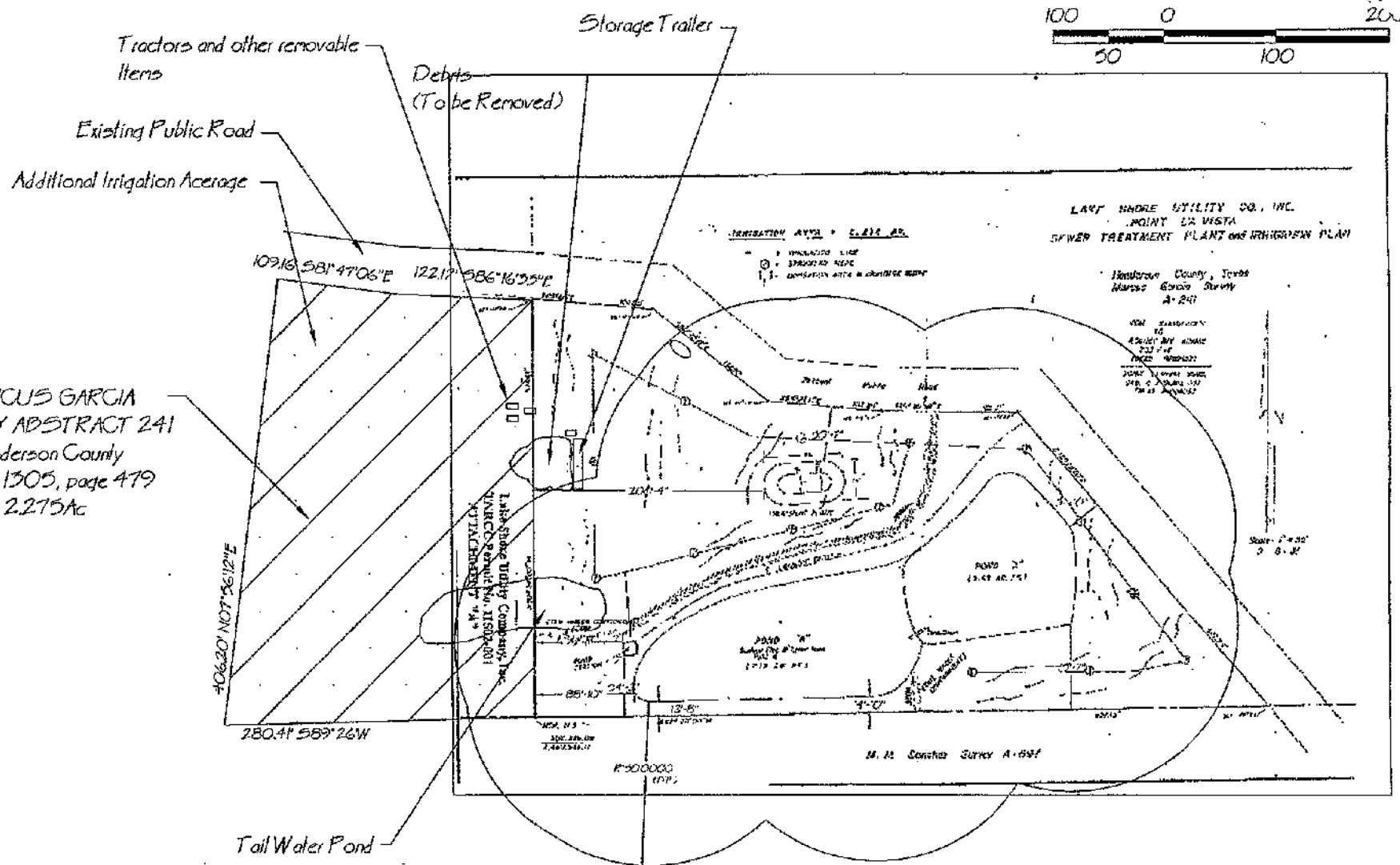
b. Membrane lining with a minimum thickness of 30 mils, and an underdrain leak detection system.

c. An alternate method of pond lining may be utilized with prior approval from the Executive Director.

The permittee shall furnish certification by a Texas Licensed Professional Engineer that the pond lining meets the appropriate criteria. The liner certifications shall be sent to the Water Quality Assessment Team (MC 150), TCEQ Regional Office (MC Region 5) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division. **This provision is continued from the permit issued on December 14, 2012 which has not been complied with to date.**

If the permittee needs to reconstruct the pond liners for Pond A, Pond B, and/or the tail water containment pond to meet the above criteria, the reconstruction of the liners may be done in phases so that two of the ponds may be in operation to hold wastewater while one is being constructed and certified.

17. The permittee shall use cultural practices to promote and maintain the health and propagation of the Coastal bermuda grass (warm season) and ryegrass (cool season) crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove them 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.
18. The physical condition of the land 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 immediately.



Attachment "A" Permit No. WQ0014845001
Sentry Title Company, Inc.
Irrigation Area

TCEQ 10053 DOMESTIC
ADMINISTRATIVE REPORT 1.1
ITEM 1 - ATTACHMENT #2A
APPLICANT: SENTRY TITLE CO., INC.
SITE PLAN

LAKE SHORE UTILITY CO., INC.
POINT LA VISTA
SEWER TREATMENT PLANT and IRRIGATION PLAN

Henderson County, Texas
Marcus Garcia Survey
A-241

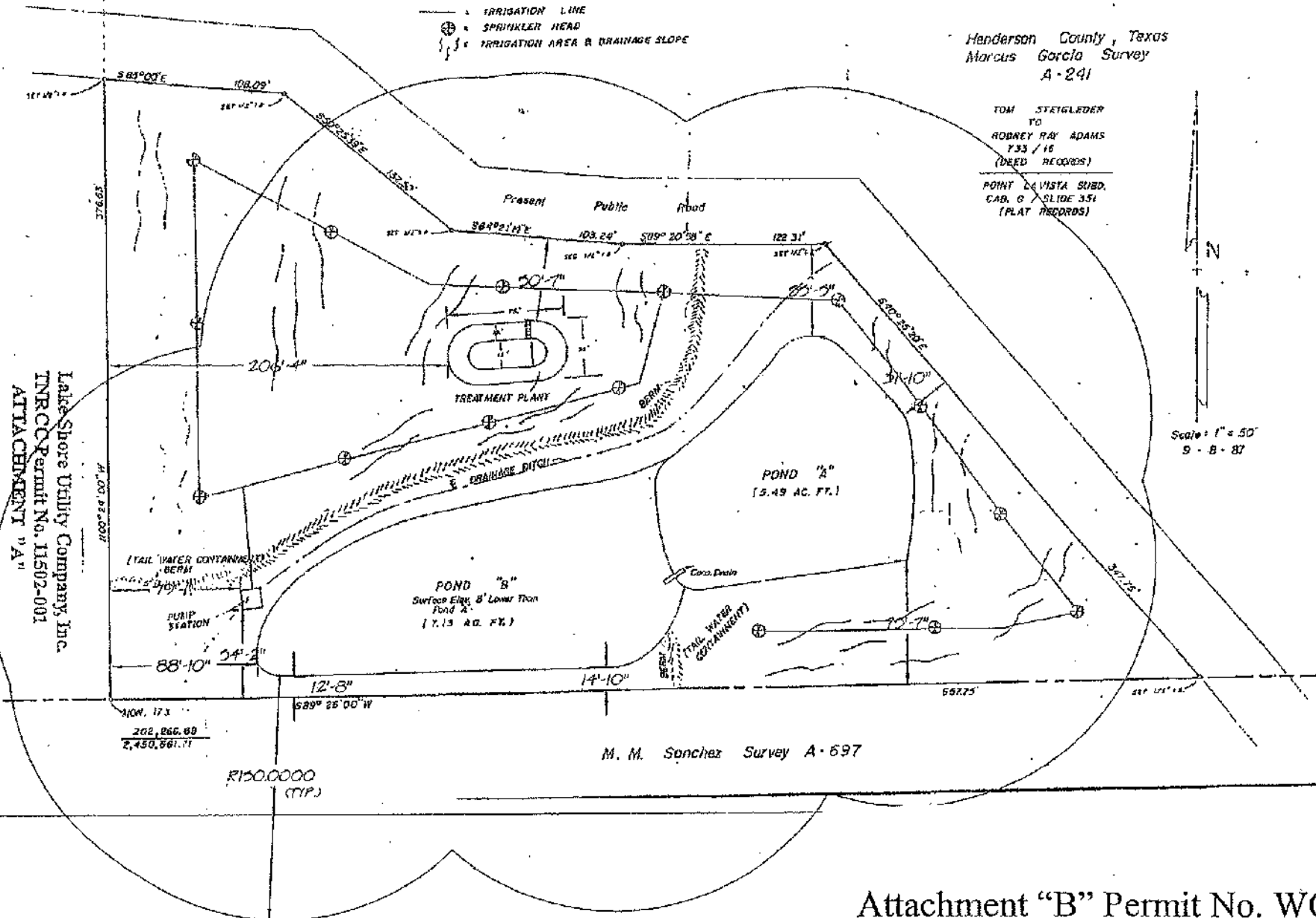
TOM STEIGLEDER
TO
RODNEY RAY ADAMS
733 / 16
(DEED RECORDS)

POINT LA VISTA SUBD.
CAB. 0 / SLIDE 351
(PLAT RECORDS)

Scale: 1" = 50'
9 - 8 - 87

IRRIGATION AREA = 2.232 AC.

- IRRIGATION LINE
- ⊕ SPRINKLER HEAD
- IRRIGATION AREA & DRAINAGE SLOPE



Lake Shore Utility Company, Inc.
TNRCC Permit No. 11502-001
ATTACHMENT "A"

Attachment "B" Permit No. WQ0014845001
Sentry Title Company, Inc.
Buffer Zone Map

Sort Order

from

Original	Cust #	Street Name	Subdivision	32
112	1510	Lakeview	Clear Point Estates	94
113	1512	Lakeview	Clear Point Estates	95
114	1513	Lakeview	Clear Point Estates	96
118	2275	Lakeview	Clear Point Estates	97
120	2367	Lakeview	Clear Point Estates	98
124	2729	Clearpoint	Clearpoint Estates	59
1	1346	La Vista	ClearWaterBay EDGE	92
2	1347	La Vista	ClearWaterBay EDGE	93
12	1288	Bayside	Clearwater Bay	4
21	1289	Bayside	Clearwater Bay	5
33	1296	Bayside	Clearwater Bay	6
35	1298	Bayside	Clearwater Bay	7
36	1299	Bayside	Clearwater Bay	8
38	2421	Bayside	Clearwater Bay	9
55	2413	Bayside	Clearwater Bay	10
56	1305	Bayside	Clearwater Bay	11
57	1307	Bayside	Clearwater Bay	12
58	2765	Bayside	Clearwater Bay	13
98	1306	Bayside	Clearwater Bay	14
102	1362	Bayside	Clearwater Bay	15
119	2310	Bayside	Clearwater Bay	16
121	2527	Bayside	Clearwater Bay	17
25	1290	Bayside Circle	Clearwater Bay	18
27	1291	Bayside Circle	Clearwater Bay	19
29	1294	Bayside Circle	Clearwater Bay	20
30	1295	Bayside Circle	Clearwater Bay	21
31	1297	Bayside Circle	Clearwater Bay	22
22	2028	Harris	ClearWater Bay	60
28	2226	Harris	ClearWater Bay	61
32	2508	Harris	ClearWater Bay	62
34	2593	Harris	ClearWater Bay	63
37	1321	Harris	ClearWater Bay	64
49	2677	Harris	ClearWater Bay	65
59	1325	Harris	ClearWater Bay	66
60	1326	Harris	ClearWater Bay	67
61	2320	Harris	ClearWater Bay	68
62	2596	Harris	ClearWater Bay	69
63	2250	Harris	ClearWater Bay	70
64	2253	Harris	ClearWater Bay	71
65	2750	Harris	ClearWater Bay	72
66	2757	Harris	ClearWater Bay	73
67	2745	Harris	ClearWater Bay	74
68	1331	Harris	ClearWater Bay	75
69	2464	Harris	ClearWater Bay	76
70	1332	Harris	ClearWater Bay	77
71	2381	Harris	ClearWater Bay	78
72	1334	Harris	ClearWater Bay	79
73	1335	Harris	ClearWater Bay	80
74	2769	Harris	ClearWater Bay	81
75	2573	Harris	ClearWater Bay	82
76	1336	Harris	ClearWater Bay	83
77	2783	Harris	ClearWater Bay	84
78	2784	Harris	ClearWater Bay	85
79	2791	Harris	ClearWater Bay	86
99	1333	Harris	ClearWater Bay	87
101	1340	Harris	ClearWater Bay	88
23	1338	Havens	ClearWater Bay	89
26	2474	Havens	ClearWater Bay	90
100	1337	Havens	ClearWater Bay	91
18	2259	Nob	ClearWater Bay	99

13	2530	Nob hill	ClearWater Bay	100
15	1316	Nob Hill	ClearWater Bay	101
17	1317	Nob hill	ClearWater Bay	102
3	1311	Nobhill	ClearWater Bay	103
5	2612	Nobhill	ClearWater Bay	104
11	2301	Nobhill	ClearWater Bay	105
4	2245	Shoreline	ClearWater Bay	107
6	2468	Shoreline	ClearWater Bay	108
7	1274	Shoreline	ClearWater Bay	109
8	2110	Shoreline	ClearWater Bay	110
9	2807	Shoreline	ClearWater Bay	111
10	1278	Shoreline	ClearWater Bay	112
14	1280	Shoreline	ClearWater Bay	113
16	2637	Shoreline	ClearWater Bay	114
19	1282	Shoreline	ClearWater Bay	115
20	2708	Shoreline	ClearWater Bay	116
24	2255	Shoreline	ClearWater Bay	117
39	2528	Blakburn	Dorchester	51
40	1494	Blakburn	Dorchester	52
41	2409	Blakburn	Dorchester	53
42	2526	Blakburn	Dorchester	54
43	1497	Blakburn	Dorchester	55
44	1498	Blakburn	Dorchester	56
45	2470	Blakburn	Dorchester	57
46	2412	Blakburn	Dorchester	58
80	2465	Palm	Dorchester	106
47	1500	Tiny	Dorchester	118
48	2072	Tiny	Dorchester	119
50	2211	Tiny	Dorchester	120
51	2567	Tiny	Dorchester	121
52	2194	Tiny	Dorchester	122
53	1504	Tiny	Dorchester	123
54	2350	Tiny	Dorchester	124
86	2025	Alice	Pearl Harbor	1
103	1472	Alice Ln	Pearl Harbor	2
104	1474	Alice Ln	Pearl Harbor	3
81	1475	Beach View	Pearl Harbor	23
82	2620	Beach View	Pearl Harbor	24
83	2730	Beach View	Pearl Harbor	25
84	1477	Beach View	Pearl Harbor	26
85	2602	Beach View	Pearl Harbor	27
87	2437	Beach View	Pearl Harbor	28
88	1481	Beach View	Pearl Harbor	29
89	1482	Beach View	Pearl Harbor	30
90	2476	Beach View	Pearl Harbor	31
91	1484	Beach View	Pearl Harbor	32
92	2684	Beach View	Pearl Harbor	33
93	1487	Beach View	Pearl Harbor	34
94	1488	Beach View	Pearl Harbor	35
95	1492	Beach View	Pearl Harbor	36
96	1495	Beach View	Pearl Harbor	37
97	1493	Beach View	Pearl Harbor	38
105	1480	Beach View	Pearl Harbor	39
106	1483	Beach View	Pearl Harbor	40
107	1485	Beach View	Pearl Harbor	41
108	1486	Beach View	Pearl Harbor	42
109	1489	Beach View	Pearl Harbor	43
110	1490	Beach View	Pearl Harbor	44
111	1491	Beach View	Pearl Harbor	45
115	2035	Beachview	Pearl Harbor	46
116	2196	Beachview	Pearl Harbor	47
117	2265	Beachview	Pearl Harbor	48
122	2581	Beachview	Pearl Harbor	49
123	2597	Beachview	Pearl Harbor	50

Exh. DC-6
J.F. FONTAINE & ASSOCIATES, INC.

CONSULTING ENGINEERS

P.O. BOX 4187

PALESTINE, TX 75802

(903) 729-6005

The Point La Vista Wastewater Treatment Facility
Sewer Plant Capacity Study and Expansion Report

Summary

This report evaluates the current and future capacity of the sewer treatment facility. It considers the original system report from 1990 (prior to improvements), updates current operating statistics, and projects future conditions after expanding the irrigation area by 1.6 acres.

Index

1. Section 1: Prior Conditions (1990 Report Overview)	PAGE 2
2. Section 2: Updated Current Conditions (2025 Data)	PAGE 3
3. Section 3: Future Capacity Analysis (After Expansion by 1.6 Acres)	PAGE 4
4. Section 4: Summary of Findings	PAGE 5
5. Appendix: Flow Breakdown Table	PAGE 5

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Section 1: Prior Conditions (1990 Report Overview)

- Original Permit Capacity: 48,000 gallons per day (gpd)
- Customer Connections (1990): 73 connections
- Assumptions (No actual measurements available at that time): 2.5 persons per connection, 50 gallons per capita per day (gpcd)
- Estimated Average Flow (1990):
 - $73 \text{ connections} \times 2.5 \text{ persons/connection} \times 50 \text{ gpcd} = 9,125 \text{ gpd}$
- Irrigation Area Needed (1990):
 - $9,125 \text{ gpd} \times 365 \text{ days/year} = 3,328,125 \text{ gallons/year}$
 - $3,328,125 \text{ gallons/year} \div 325,900 \text{ gallons/acre-foot} = 10.2 \text{ acre-feet/year}$
 - $10.2 \text{ acre-feet/year} \div 2.1 \text{ acre-feet/acre/year} = 4.8 \text{ acres required}$
- Effluent Storage:
 - Pond A: 5.49 acre-feet
 - Pond B: 7.13 acre-feet
 - Total Storage: 12.62 acre-feet
- Treatment: Secondary treatment is assumed (chlorination observed)
- Disposal Loading Rate: 2.1 acre-feet/acre/year (original loading standard)

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Section 2: Updated Current Conditions (2025 Data)

- Current Permit Capacity: 19,250 gpd
- Actual Current Flow: ~12,000 gpd
- Customer Connections (2025): ~250 connections
- Irrigation Area: 4.23 acres
- Effluent Storage:
 - Pond A: 5.49 acre-feet
 - Pond B: 7.13 acre-feet
 - Pond C (runoff catchment, not primary storage): 1.25 acre-feet
- Updated Disposal Loading Rate: 5.1 acre-feet/acre/year (current permit)
- Effluent Application Capacity:
 - $4.23 \text{ acres} \times 5.1 \text{ acre-feet/acre/year} = 21.573 \text{ acre-feet/year}$
 - $21.573 \text{ acre-feet/year} \times 325,900 \text{ gallons/acre-foot} = 7,029,061 \text{ gallons/year}$
 - Average daily disposal = $7,029,061 \div 365 = 19,252 \text{ gpd}$

Notes:

- Current disposal matches closely to the permitted average daily flow.
- Storage facilities provide flow balancing between wet and dry seasons.

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CONSULTING ENGINEERS

Section 3: Future Capacity Analysis (After Expansion by 1.6 Acres)

- New Irrigation Area:
 - 4.23 acres existing + 1.6 acres new = 5.83 acres total
- New Disposal Capacity:
 - 5.83 acres x 5.1 acre-feet/acre/year = 29.733 acre-feet/year
 - 29.733 acre-feet/year x 325,900 gallons/acre-foot = 9,689,908 gallons/year
 - Average daily disposal = $9,689,908 \div 365 = 26,557$ gpd

Additional Customer Capacity:

- Assumption: 2.5 persons/connection x 50 gpcd = 125 gpd per connection, per 1990 report.
- Actual Yearly Average Usage per 2024-2025 Monthly Operating Reports: 48 gpd per connection.
- Additional capacity available:
 - 26,557 gpd (new) - 12,000 gpd (current) = 14,557 gpd available
- Additional customers supported:
 - Per assumptions from 1990 report: $14,557 \text{ gpd} \div 125 \text{ gpd/connection} = 116$ new connections possible.
 - Per actual usage: $14,557 \text{ gpd} \div 48 \text{ gpd/connection} = 303$ new connections possible.

Requested Growth of 74 New Customers:

- $74 \times 125 \text{ gpd} = 9,250$ gpd needed
- Available expansion (14,557 gpd) easily covers 9,250 gpd.
- Conclusion: Expansion will allow for 74 additional customers in new subdivision with margin for growth in existing areas served.

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Section 4: Summary of Findings

- **Original (1990) system report:** Estimated need for 4.8 acres irrigation for ~9,125 gpd flow.
- **Current system (2025):**
 - Permitted for 19,250 gpd
 - Serves 250 customers at ~12,000 gpd average
 - Disposal system sized for 19,252 gpd with current 4.23 acres
- **Future system (after 1.6-acre expansion):**
 - Disposal capacity increases to 26,557 gpd
 - Supports 74 additional customers (plus reserve capacity)

System can confidently accommodate the proposed 74-customer increase based on existing treatment, irrigation acreage, and disposal loading rates.

Appendix: Flow and Capacity Breakdown Table

Item	1990 Values	2025 Values	Post-Expansion Values
Permit Flow (gpd)	48,000	19,250	26,557 (based on disposal)
Actual Flow (gpd)	~9,125	~12,000	~12,000 + 9,250 growth
Customer Connections	73	250	324
Irrigation Area (acres)	4.8 (required)	4.23	5.83
Loading Rate (ac-ft/ac/year)	2.1	5.1	5.1
Disposal Capacity (gpd)	~9,125	~19,252	~26,557
Storage Volume (acre-feet)	12.62	12.62	12.62

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*
Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 3, 2023

Mr. Joe Whatley
Lakeshore Utility Company
106 E. Corsicana Street
Athens, Texas 75751

Re: Focused Investigation at:
Point La Vista Wastewater Treatment Plant, 0.5 miles west of the intersection of
SH 90 and FM 3054 in Caney City, Henderson County, Texas
TCEQ ID No. WQ0014845001

Dear Mr. Whatley:

On February 27, 2023, Doug Belzer of the Texas Commission on Environmental Quality (TCEQ) Tyler Region Office conducted an investigation of the above-referenced facility to evaluate compliance with applicable requirements for wastewater treatment. No violations were documented during the investigation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Mr. Belzer in the Tyler Region Office at (903) 535-5138.

Sincerely,

A handwritten signature in black ink, appearing to read "Cara C. Fisher".

Ms. Cara C. Fisher, Water Team Leader
Tyler Regional Office
Texas Commission on Environmental Quality

CCF/dwb

CITY OF LOG CABIN
14387 Alamo RD, Log Cabin, TX 75148
903.489.2195 *Fax 903-489-0106
cityoflogcabin.com

May 12th, 2025

RE: Leo's Landing/Point La Vista Sewer Plant and/or connections

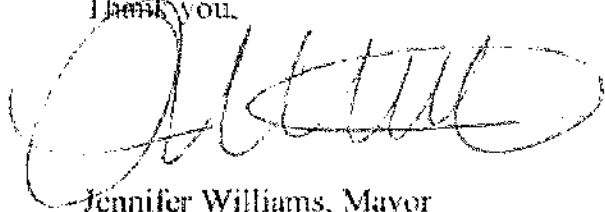
To Whom it May Concern,

While the City of Log Cabin is interested in helping our neighboring cities, our water/wastewater system's current infrastructure would not be able to accommodate the growth that the Leo's Landing development projects without substantial and expensive improvements.

That said, if the Leo's Landing development would like to invest in the expansions and improvements our system would need to provide services to those properties, the City would be willing to meet to discuss the feasibility of that venture.

If you have any questions, please let us know.

Thank you,

A handwritten signature in black ink, appearing to read "Jennifer Williams", written over a circular stamp or seal.

Jennifer Williams, Mayor
City of Log Cabin
mayor@logcabin.texas.gov

Exh. DC-8