

assistant vice-presidents to assist the Vice-President in the performance of his/her duties.

6. THE SECRETARY-TREASURER AND ASSISTANTS SECRETARIES-TREASURERS

The Secretary-Treasurer shall attend all meetings of the Board and all meetings of the Members and shall record all votes and the minutes of all proceedings and shall perform like duties for the standing committees when required. He/she shall give or cause to be given notice of all meetings of the Members and all meetings of the Board of Directors and shall perform such other duties as may be prescribed by the Board. He/she shall keep in safe custody the seal of the Corporation, and when authorized by the Board, affix the same to any instrument requiring it, and when so affixed, it shall be attested by his/her signature or by the signature of an Assistant Secretary-Treasurer.

The Secretary-Treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors.

The Secretary-Treasurer shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements. He/she shall keep and maintain the Corporation's books of account and shall render to the President and Directors an account of all of his/her transactions as Treasurer and of the financial condition of the Corporation and exhibit the books, records and accounts to the President or Directors at any time. He/she shall disburse funds for capital expenditures as authorized by the Board of Directors and in accordance with the orders of the President. He/she shall present to the President for his/her attention any requests for disbursing funds if in the judgment of the Secretary-Treasurer any such request is not properly authorized. He/she shall perform such other duties as may be directed by the Board of Directors or by the President.

If required by the Board of Directors, he/she shall give the Corporation a bond in such sum and with such surety or sureties as shall be satisfactory to the Board for the faithful performance of the duties of office and for the restoration to the Corporation, in case of death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his/her possession or under his/her control belonging to the Corporation.

There may be assistant secretaries and/or assistant treasurers to assist the Secretary-Treasurer in the performance of his/her duties.

The Board may appoint an employee of the Corporation to take minutes of any meeting as directed by and responsible to the Secretary-Treasurer.

7. GENERAL MANAGER

The Corporation shall not be required to have a general manager; however, a general manager, elected by a majority vote of the Board, may handle the business of the Corporation under the direction of the Board of Directors. The general manager shall be employed at a salary to be fixed by the Board of Directors. The general manager shall perform such duties and for such term of office as shall be fixed by majority vote of the Board of Directors.

The general manager shall not have authority to expend the funds of the Corporation in excess of \$5,000 per expenditure without prior approval of the Board of Directors unless otherwise necessary for emergencies to avoid contamination of the water supply, disruption of service or permanent damage or injury to persons or property.

The general manager shall not have authority to sell or dispose of the assets of the Corporation that are of no further benefit to the Corporation with a salvage or net book value in excess of \$5,000 without prior approval of the Board of Directors.

8. COMPENSATION

Directors shall not be paid any salary. Officers may be paid salaries commensurate with their duties and obligation but in no event shall their compensation exceed \$5000 per annum. The Board of Directors shall set the General Manager's salary.

9. CONFLICT OF INTEREST

An Officer shall be prohibited from providing goods or services to the Corporation by reason of their office. An Officer has an affirmative duty to exercise reasonable due diligence to investigate and disclose to the Board of Directors any real or apparent conflicts of interests or pecuniary interests he may have on a matter affecting the Corporation or its Members.

10. GOOD FAITH RELIANCE

In conducting their duties as Officers, each Officer (1) shall be entitled to rely, in good faith and with ordinary care, on information, opinions, reports or statements, including financial statements and other financial data, concerning

the Corporation of the Corporation's affairs that have been prepared or presented by one or more Officers or employees of the Corporation; or by legal counsel, public accountants, registered engineers or other persons retained by the Corporation for the development of professional advice and information falling within such person's professional or expert competence; (2) may believe, in good faith and with ordinary care, that the assets of the Corporation are at least that of their book value; and (3) in determining whether the Corporation has made adequate provision for the discharge of its liabilities and obligations, may rely in good faith and with ordinary care on the financial statements of or other information concerning any person or entity obligated to pay, satisfy or discharge some or all of the Corporation's liabilities or obligations; and (4) may rely in good faith and with ordinary care on information, opinions, reports or statements by one or more Officers or employees of the Corporation; or by legal counsel, public accountants, registered engineers or other persons retained by the Corporation provided that said Officer reasonably believes such matters fall within such person's professional or expert competence. Nevertheless, an Officer must disclose any knowledge which he may have concerning a matter in question that makes reliance otherwise provided herein to be unwarranted.

ARTICLE 11 - MEMBERSHIPS

1. CERTIFICATES OF MEMBERSHIP

The Certificates of Memberships of the Corporation shall be numbered and shall be entered in the Corporation as they are issued. They shall exhibit the holder's name and shall be signed by the President or Secretary-Treasurer and shall be sealed with the seal of the Corporation or a facsimile thereof. In case any Officer or Officers who shall have signed or whose facsimile signature or signatures shall have been used on any such certificate or certificates shall cease to be such Officer or Officers of the Corporation, whether because of death, resignation or otherwise, before said certificate or certificates shall have been issued, such certificate may nevertheless be issued by the Corporation with the same effect as though the person or persons who signed such certificates or whose facsimile signature or signatures shall have been used thereon had been such Officer or Officers at the date of its issuance. Certificates shall be in such form as prescribed from time to time by the Board of Directors and in conformity to controlling laws.

The Corporation may appoint from time to time agents and registrars who shall perform their duties under the supervision of the Secretary-Treasurer.

2. TERMINATION OF MEMBERSHIPS

The membership rights of any subscriber(s) to utility service from the Corporation shall automatically terminate upon the occurrence of any event or change of circumstances which would disqualify the person from membership as provided by these by-laws, including but not limited to, the sale of the membership real property to which his/her membership is tied or the expiration of the leasehold at which service is received. The Board of Directors, by affirmative vote of a majority of all Directors, may suspend or expel any Member who is, or whose tenant or other occupier of the Member's fee simple real property is, in default of the payment of scheduled rates and charges for a period of sixty (60) days after the same become lawfully due and payable or who violates the prescribed terms and conditions of service applicable to all customers for so long as such violations occur.

3. TRANSFER OF MEMBERSHIP

(a) A person who owns a membership in the Corporation may not sell or transfer that membership to another person or entity except:

(1) by will to a transferee who is a person related to the testator within the second degree of consanguinity;

(2) by transfer without compensation to a transferee who is a person related to the owner of the membership within the second degree of consanguinity; or

(3) by transfer without compensation or by sale to the Corporation.

(b) Subsection (a) of this section does not apply to a person or entity that transfers the membership to another person as part of the conveyance of real estate from which the membership arose. In such cases the transferee must still qualify for membership as provided herein and pay all applicable membership fees.

(c) The transfer of membership under this section does not entitle the transferee to water service unless each condition for water service is met as provided in the Corporation's published rates, charges and conditions of service.

(d) The Corporation may, consistent with the limitations prescribed by subsection (a) of this section, reassign a canceled membership to any person or entity that has legal title to the real estate from which the canceled membership arose and for which water service is requested, subject to compliance with the conditions for water service in the Corporation's published rates, charges and conditions of service.

4. REGISTERED MEMBERS

The Corporation shall be entitled to treat the holder of record of any membership or Certificate of Membership as the holder in fact thereof, and accordingly shall not be bound to recognize any equitable or other claim to or interest in such membership on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by law.

5. LOST CERTIFICATE

The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the Corporation alleged to have been lost or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate to be lost. When authorizing such issue of a new certificate or certificates, the Board of Directors in its discretion and as a condition precedent to the issuance thereof, may require the owner of such lost or destroyed certificate or certificates or his/her legal representative to advertise the same in such manner as it shall require to give the Corporation a bond with surety and in form satisfactory to the Corporation [which bond shall also name the Corporation's agent(s) and registrar(s), if any, as obligees] in such sum as it may direct as indemnity against any claim that may be made against the Corporation or other obligees with respect to the certificate alleged to have been lost or destroyed, or to advertise and also give such bond.

6. MEMBERSHIP FEES

A membership fee of THREE HUNDRED DOLLARS (\$300.00) shall be charged for all memberships. Notwithstanding anything herein to the contrary, the Board of Directors shall be authorized to exchange memberships without the payment of the standard membership fee for property of equal or greater value that benefits the Corporation and enhances its ability to serve the public. All applicants for restored service whose memberships have been forfeited to the Corporation shall pay a membership fee of \$300.00 in addition to any applicable reconnection charges. All transferees of memberships as provided by these by-laws shall pay a membership fee of \$300.00. A membership fee and service application shall be required for each service connection requested regardless of whether the applicant already holds a membership. Membership fees are non-refundable [or refundable after deduction of indebtedness to the Corporation at the time of transfer or surrender].

The Board of Directors may set and revise the membership fee as it may determine to be appropriate. In no event, shall the membership fee exceed

twelve (12) times the monthly minimum water service fee for customers in the lowest rate customer class. The Board of Director shall establish deferred payment plans for the payment of initial membership fees for new service applicants or existing customers receiving service without a membership upon whom a one-time payment of the membership fee creates a financial hardship. These plans shall require the payment of not less than one-half of the membership fee down with the remainder being paid in three (3) equal installments plus the customer's normal monthly utility service bill for the next three months thereafter. Deferred payment plans (of any type or purpose) shall be applied equally to all persons regardless of age, race, color, creed, sex or other federally protected status.

ARTICLE 12 - DEPOSITORY

The Board of Directors shall select as depository for the funds of the Corporation, a bank(s) within the State of Texas which is insured with the Federal Deposit Insurance Corporation and shall require of said depository such bond as the Board deems necessary for the protection of the Corporation; and such funds as the Board of Directors may from time to time allocate to a sinking fund for replacement, amortization of debts and the payment of interest which shall not be required to be expended within the year in which the same is deposited shall be invested in bonds or other evidence of indebtedness of the United States of America or deposited at interest with the Federal Deposit Insurance Corporation in a savings account.

ARTICLE 13 - FINANCIAL RESERVES

The Board of Directors may establish and operate such financial reserves, sinking funds or debt service accounts as may be reasonably necessary to prudent and conservative financial management of the Corporation or to comply with loan or bond covenants entered into between the Corporation and its creditors. Such financial reserves shall not be of such an amount so as to jeopardize the non-profit nature and standing at law of the Corporation.

Subject to such restrictions as may exist under the laws of Texas or of the United States, the Board of Directors may encumber the assets of the Corporation by reasonable liens or security interests as provided by the loan or bond covenants entered into between the Corporation and its creditors. When encumbered, the assets of the Corporation may not be sold, conveyed or disposed of without notice to and permission from the creditor holding such liens or security interests as provided in the loan or bond covenants, except as may otherwise be provided by law and/or the sale and distribution of potable water in the ordinary course of business.

Should the Corporation become indebted to the Texas Water Development Board, Rural Development/Rural Utilities Service, their successor agencies or other state or federal financial institution and such indebtedness is evidenced by bonds or loans, the Board of Directors shall be expressly empowered to adopt such standard and customary water supply service corporation bond or loan resolutions as may be required by the Texas Water Development Board, Rural Development/Rural Utilities Service, their successor agencies or other state or federal financial institution as a condition of such indebtedness. Any provisions contained therein which conflicts with loan agreements executed by TOWSC, so long as the loan remains outstanding, the loan agreement shall prevail.

ARTICLE 14 - MISCELLANEOUS

1. TEXAS PUBLIC INFORMATION ACT

As long as the Corporation avails itself of an exemption(s) from state ad valorem taxes as may be provided by law, all meetings and other business of the Corporation shall be conducted with notice and in the manner prescribed by the Texas Public Information Act, Texas Government Code Chapter 552, as amended.

2. SEAL

The Board of Directors shall provide a corporate seal, which shall be in the form of a circle and shall have inscribed thereon the name of the Corporation and the words "Corporate Seal of Crystal Clear Water Supply Corporation."

3. BOOKS AND RECORDS

The Corporation shall keep correct and complete books and records of accounts and shall also keep minutes of the proceedings of its Members, Board of Directors and committees having the authority of the Board of Directors. The Corporation shall keep at the registered or principal office a record giving the names and addresses of the Members entitled to vote. All books and records of the Corporation may be inspected by any Member or his/her agent or attorney for any proper purpose at any reasonable time when so requested in writing.

With prior written request, corporate records, books and annual reports, subject to exceptions provided by the Texas Public Information Act, including any amendments thereto, shall be available for public inspection and copying by the public or their duly authorized representatives during normal business hours subject to reasonable charge for the preparation of copies.

In the event of any conflict between the provision of the Open Records Act and the provisions of these By-laws, the provisions of the Open Records Act shall prevail.

4. CHECKS

Any two (2) authorized signers, shall sign all checks or demands for money and notes of the Corporation. For checks over \$15,000, one (1) director and any other authorized signer shall sign all checks or demands for money and notes of the Corporation.

5. FISCAL YEAR

The fiscal year of the Corporation shall begin on the 1st day of January and end on the 31st day of December in each and every year.

6. DIRECTORS' ANNUAL STATEMENT

The Board of Directors shall present at each annual meeting of Members a full and clear statement of the business and condition of the Corporation. If required by resolution of the Board of Directors or as a condition of indebtedness to any creditor, such report shall be prepared by an independent Certified Public Accountant.

7. AMENDMENTS

These by-laws may be altered, amended or repealed in whole or in part by the affirmative vote of a majority of the Members at a regular or special meeting of the membership at which such vote is taken. The Board of Directors shall be empowered to alter, amend or repeal in whole or in part any by-law that does not directly affect the voting or membership rights of Members.

For so long as the Corporation is indebted for a loan or loans made by or through the Texas Water Development Board, USDA Rural Development, their successor agencies, these by-laws shall not be altered, amended or repealed without the prior written consent of the General Fund Manager (or equivalent designated agency representative) of the Texas Water Development Board, USDA Rural Development, their successor agencies. If the Corporation becomes indebted to another state or federal financial institution and said creditor requires similar limitations on the amendment of these by-laws as a condition precedent to necessary debt financing, amendment of these by-laws shall be restricted as set forth in the loan agreement.

ADOPTED AND APPROVED IN A PROPERLY NOTICED MEETING OF THE MEMBERSHIP, RATIFIED BY MAJORITY VOTE OF THE BOARD OF DIRECTORS, ON THE ____ DAY OF _____, 20__ BY A MEMBERSHIP VOTE OF ____ FOR, ____ AGAINST, AND ____ ABSTAINED AND A DIRECTOR VOTE OF ____ FOR, ____ AGAINST, AND ____ ABSTAINED.

President

Attested:

Secretary/Treasurer

Top of Form

Filing Number: 20636101 **Entity:** Domestic Nonprofit
Type: Corporation
Original Date of Filing: September 14, 1964 **Entity:** In existence
Status:
Formation Date: N/A **Non-Profit Type:** Water Supply Corporation
FEIN:
Tax ID: 17460671542
Duration: Perpetual
Name: CRYSTAL CLEAR WATER SUPPLY CORPORATION
Address: 2370 FM 1979
San Marcos, TX 78666-2100 USA

<u>REGISTERED AGENT</u>	<u>FILING HISTORY</u>	<u>NAMES</u>	<u>MANAGEMENT</u>	<u>ASSUMED NAMES</u>	<u>ASSOCIATED ENTITIES</u>
Name	Address			Inactive Date	
MARK L SPEED	2370 FM 1979 San Marcos, TX 78666-2100 USA				

Bottom of Form

2. LOCATION INFORMATION

2. LOCATION INFORMATION

B. Demonstrate the Need for Service by providing the following:

- i. Describe the service area and circumstances driving the need for service in the requested area. Indicate the name(s) and address(es) of landowner(s), prospective landowner(s), tenant(s), or resident(s) that have requested service; and/or
- ii. Describe the economic need(s) for service in the requested area (i.e. plat approvals, recent annexation(s) or annexation request(s), building permits, septic tank permits, hospitals, etc.); and/or
- iii. Provide copies of any written application(s) or request(s) for service in the requested area; and/or
- iv. Provide copies of any reports and/or market studies demonstrating existing or anticipated growth in the requested area.
- v. If none of these items exist or are available, please justify the need for service in the proposed area in writing.

DESCRIPTION OF THE AREA NEEDING SERVICE –

The area of which the Sewer CCN is requested is limited to the subdivision development “The Crossings at Havenwood.” This subdivision has an area of approximately 88 acres located northeast of the City of New Braunfels and has a proposed build-out lot total of 184 residential lots. These lots will be constructed in three phases. Currently, there is not sewer service provided in this area, nor is it currently located in any utility’s CCN.

Phase I will include 49 residential lots, Phase II 70 residential lots and Phase III 65 residential lots. Construction for Phase I is to begin in May 2015 and related waste disposal to start February 2016. Construction for Phase II is planned to begin in April 2016 and related waste disposal to start January 2017. Construction for Phase III is planned to begin in May 2017 and related waste disposal to start February 2018.

TREATMENT FACILITY –

The wastewater treatment facility to be installed for this service area is an effluent pumping system which includes a septic tank with effluent pump (STEP), followed by recirculation tanks and packed-bed media filters. The treatment process for all three construction phases is the same.

Primary treatment of raw sewage is accomplished with anaerobic digestion through appropriately-sized STEP tanks at each residential lot. All of the sludge is contained within these individual tanks and pumped out as scheduled per the operator’s regular maintenance plan and delivered to an approved TCEQ location.

After primary treatment, the non-sludge effluent is pumped to the secondary treatment pods where the aerobic treatment process provides oxidation and digestion for both organic and nutrient reduction. During this secondary treatment within the pods the effluent enters a recirculation chamber where the influent is blended and diluted with filtrate before being dosed onto the filter by recirculation pumps. The pumps transport the effluent to a distribution manifold above the filter. Effluent percolates down through the textile media, where organic and inorganic matter is treated by naturally occurring heterotrophic and autotrophic microorganisms that populate the filter. The flow of the filtered effluent

is mechanically divided between the recirculation-blend chamber and the recirculation-filter chamber via a tank baffle; the liquid levels within the recirculation-blend chamber and the recirculation-filtrate chamber are controlled by the recirculation return valve. Finally, the treated effluent is discharged at a defined point location.

Each of the three phases will work the same, adding primary treatment tanks at each home as it is built and adding two additional recirculation fixed filter pod units for phase two and one more with phase three (for a total of 5 treatment pod units).

OPERATION OF FACILITY-

Crystal Clear WSC employs the intended operator for the treatment facility, Michael F. Taylor, who holds a Class-A Operator License (#WW0009531).



June 11, 2015

Crystal Clear Water Supply Corporation
2370 FM-1979
San Marcos, TX 78666

Re: Sewer Service for The Crossings at Havenwood

To Whom It May Concern:

SouthStar Communities is requesting sewer service from Crystal Clear WSC for our property located in Comal County. This service request is for "The Crossings at Havenwood," an 88-acre residential development located between the City of San Marcos and New Braunfels at approximately 5800 Farm to Market Road 1102. We are requesting service for 185 lots or single family homes at this location.

If you need additional information please contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Vater", written over a large, stylized loop.

Jim Vater, VP Land Development
SouthStar Communities
1114 Lost Creek Blvd., Suite #270
Austin, Texas 78746
(512) 865-5898
jim@southstarcommunities.com

3. MAP REQUIREMENTS

3. MAP REQUIREMENTS

- A.** A location map delineating the proposed service area with enough detail to accurately locate the proposed area within the county.

- B.** A map showing only the proposed area by:
 - i. metes and bounds survey certified by a licensed state or register professional land surveyor; or
 - ii. Projectable digital data with metadata (proposed areas should be in a single record and clearly labeled). Also, a data disk labeled with the applicant's name must be provided; or
 - iii. following verifiable natural and man-made landmarks; or
 - iv. A copy of recorded plat map with metes and bounds.

- C.** A written description of the proposed service area.

The area of which the Sewer CCN is requested is limited to the subdivision development "The Crossings at Havenwood." This subdivision has an area of approximately 88 acres located northeast of the City of New Braunfels and has a proposed build-out lot total of 184 residential lots. These lots will be constructed in three phases. Currently, there is not sewer service provided in this area, nor is it currently located in any utility's CCN.

Phase I will include 49 residential lots, Phase II 70 residential lots and Phase III 65 residential lots. Construction for Phase I is to begin in May 2015 and related waste disposal to start February 2016. Construction for Phase II is planned to begin in April 2016 and related waste disposal to start January 2017. Construction for Phase III is planned to begin in May 2017 and related waste disposal to start February 2018.

OVERSIZED DOCUMENTS

MAPS

TO VIEW OVERSIZED DOCUMENTS PLEASE GO TO CENTRAL RECORDS

512-936-7180

4. NEW SYSTEM INFORMATION

4. NEW SYSTEM INFORMATION OR UTILITIES REQUESTING CCN FOR FIRST TIME

A. Please provide the following information: Attached on the following page.

- i. A list of public drinking water supply system(s) or sewer system(s) within a 2 mile radius of the proposed system;

There is no sewer system within a 2 mile radius of the proposed system.

- ii. Copies of written requests seeking to obtain service from each of the public drinking water systems or sewer systems listed in a. 1 above or documentation that it is not economically feasible to obtain service from each entity;

N/A

- iii. Copies of written responses from each system or evidence that they did not reply; and for sewer utilities, documentation showing that you have obtained or applied for a wastewater discharge permit.

N/A

- iv. Wastewater discharge permit
Attached on Page 70.

B. Were your requests for service denied?

- i. If yes, please provide documentation of the denial of service and go to c.

N/A

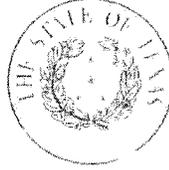
- ii. If no, please provide a detailed analysis which justifies your reasons for not accepting service. A separate analysis must be prepared and submitted for each utility that granted your request for service.

N/A

C. Please summarize how the proposed utility system will be constructed and describe each projected construction phase, if any:

The discharge and facility permit was obtained by Southstar at Havenwood LLC. Southstar will finance the construction of the waste water facility, and eventually convey the ownership to Crystal Clear Water Supply Corporation. The area of which the Sewer CCN is requested is limited to the subdivision development "The Crossings at Havenwood." This subdivision has an area of approximately 88 acres located northeast of the City of New Braunfels and has a proposed build-out lot total of 184 residential lots. These lots will be constructed in three phases. Currently, there is not sewer service provided in this area, nor is it currently located in any utility's CCN. Phase I will include 49 residential lots, Phase II 70 residential lots and Phase III 65 residential lots. Construction for Phase I is to begin in May 2015 and related waste disposal to start February 2016. Construction for Phase II is planned to begin in April 2016 and related waste disposal to start January 2017. Construction for Phase III is planned to begin in May 2017 and related waste disposal to start February 2018.

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 15, 2015

Mr. Thad Rutherford, Chief Operating Officer
SouthStar at Havenwood, LLC
1114 Lost Creek Boulevard, Suite 270
Austin, Texas 78746

Re: SouthStar at Havenwood, LLC; TPDES Permit No. WQ0015266001
(RN107324121; CN604591735)

Dear Mr. Rutherford:

Enclosed is a copy of the above referenced water quality permit issued on behalf of the Executive Director pursuant to Chapter 26 of the Texas Water Code.

Self-reporting or Discharge Monitoring Forms and instructions will be forwarded to you from the Water Quality Management Information Systems Team so that you may comply with monitoring requirements. For existing facilities, revised forms will be forwarded if monitoring requirements have changed.

Enclosed is a "Notification of Completion of Wastewater Treatment Facilities" form. Use this form (if needed) when the facility begins to operate or goes into a new phase. The form notifies the agency when the proposed facility is completed or when it is placed in operation. This notification complies with the special provision incorporated into the permit, as applicable.

Should you have any questions, please contact Mr. John Onyenobi, P.E. of the Texas Commission on Environmental Quality's (TCEQ) Wastewater Permitting Section at (512) 239-4671 or if by correspondence, include MC 148 in the letterhead address below.

Sincerely,

A handwritten signature in cursive script that reads "David W Galindo".

David W. Galindo, Director
Water Quality Division

DWG/JOO/hd

ccs: TCEQ, Region 13
Mr. Heath Woods, P.E., M&S Engineering, LLC, 6477 Farm to Market Road 311, Spring Branch, Texas 78070

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 15, 2015

Thad Rutherford, Chief Operating Officer
SouthStar at Havenwood, LLC
1114 Lost Creek Boulevard, Suite 270
Austin, Texas 78746-6376

RE: SouthStar at Havenwood, LLC
Permit No. WQ0015266001

This letter is your notice that the Texas Commission on Environmental Quality (TCEQ) executive director (ED) has issued final approval of the above-named application. According to 30 Texas Administrative Code (TAC) Section 50.135 the approval became effective on the date the ED signed the permit or other approval. A copy of the final approval is enclosed and cites the effective date.

You may file a **motion to overturn** with the chief clerk. A motion to overturn is a request for the commission to review the TCEQ executive director's approval of the application. Any motion must explain why the commission should review the TCEQ executive director's action. According to 30 TAC Section 50.139 an action by the ED is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the chief clerk within 23 days after the date of this letter. An original and 7 copies of a motion must be filed with the chief clerk in person or by mail. The Chief Clerk's mailing address is Office of the Chief Clerk (MC 105), TCEQ, P.O. Box 13087, Austin, Texas 78711-3087. On the same day the motion is transmitted to the chief clerk, please provide copies to Robert Martinez, Environmental Law Division Director (MC 173), and Vic McWherter, Public Interest Counsel (MC 103), both at the same TCEQ address listed above. If a motion is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the ED's approval. According to Texas Water Code Section 5.351 a person affected by the ED's approval must file a petition appealing the ED's approval in Travis County district court within 30 days after the effective date of the approval. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

Individual members of the public may seek further information by calling the TCEQ Public Education Program, toll free, at 1-800-687-4040.

Sincerely,

A handwritten signature in cursive script that reads "Bridget C. Bohac".

Bridget C. Bohac
Chief Clerk

BCB/ka

cc: Vic McWherter, TCEQ Public Interest Counsel (MC 103)



TPDES PERMIT NO. WQ0015266001
[For TCEQ office use only - EPA I.D.
No. TX0135488]

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

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

SouthStar at Havenwood, LLC

whose mailing address is

1114 Lost Creek Boulevard, Suite 270
Austin, Texas 78746

is authorized to treat and discharge wastes from the The Crossing at Havenwood Wastewater Treatment Facility, SIC Code 4952

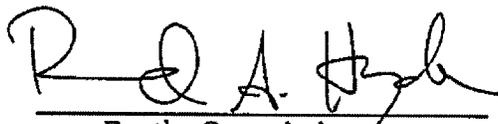
located on the south side of Farm-to-Market Road 1102, approximately 3.3 miles northeast of the intersection of Highway 306 and Farm-to-Market Road 1102 in Comal County, Texas 78132

to Water Hole Creek; thence to Soil Conservation Service Site 3 Reservoir; thence to Water Hole Creek; thence to York Creek; thence to the Lower San Marcos River in Segment No. 1808 of the Guadalupe River Basin

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

This permit shall expire at midnight, **February 1, 2020**.

ISSUED DATE: April 7, 2015


For the Commission

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of 0.0242 million gallons per day (MGD) facility the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.0101 MGD; nor shall the average discharge during any two-hour period (2-hour peak) exceed 14 gallons per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Min. Self-Monitoring Requirements</u>		
	Daily Avg mg/l (lbs/day) Report	7-day Avg mg/l N/A	Daily Max mg/l Report	Single Grab mg/l N/A	Report Daily Avg. & Max. Single Grab Measurement Frequency	Sample Type Totalizing Meter
Flow, MGD	20 (1.7)	N/A	Report	N/A	Continuous	Grab
Biochemical Oxygen Demand (5-day)	20 (1.7)	30	45	65	One/week	Grab
Total Suspended Solids	20 (1.7)	30	45	65	One/week	Grab
Total Phosphorus	Report (Report)	N/A	N/A	Report	One/week	Grab
<i>E. coli</i> , CFU or MPN/100 ml	126	N/A	N/A	399	One/quarter	Grab

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 2.0 mg/l and shall be monitored once per week by grab sample.

INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the completion of expansion to the 0.0242 million gallons per day (MGD) facility and lasting through the completion of expansion to the 0.0373 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.0242 MGD; nor shall the average discharge during any two-hour period (2-hour peak) exceed 34 gallons per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Min. Self-Monitoring Requirements</u>		
	Daily Avg mg/l (lbs/day) Report	7-day Avg mg/l N/A	Daily Max mg/l Report	Single Grab mg/l N/A	Report Daily Avg. & Max. Measurement Frequency Continuous	Sample Type Totalizing Meter Grab
Flow, MGD	20 (4.0)	N/A	45	N/A	One/week	Grab
Biochemical Oxygen Demand (5-day)	20 (4.0)	30	45	65	One/week	Grab
Total Suspended Solids	Report (Report)	N/A	N/A	Report	One/week	Grab
Total Phosphorus	126	N/A	N/A	399	One/quarter	Grab

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 2.0 mg/l and shall be monitored once per week by grab sample.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the completion of expansion to the 0.0373 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.0373 MGD; nor shall the average discharge during any two-hour period (2-hour peak) exceed 52 gallons per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Min. Self-Monitoring Requirements</u>		
	Daily Avg mg/l (lbs/day) Report	7-day Avg mg/l N/A	Daily Max mg/l Report	Single Grab mg/l N/A	Report Daily Avg. & Max. Single Grab Measurement Frequency Continuous	Sample Type Totalizing Meter Grab
Flow, MGD	20 (6.2)	N/A	45	N/A	One/week	Grab
Biochemical Oxygen Demand (5-day)	20 (6.2)	30	45	65	One/week	Grab
Total Suspended Solids	Report (Report)	N/A	N/A	Report	One/week	Grab
Total Phosphorus	126	N/A	N/A	399	One/quarter	Grab

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l and shall not exceed a chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.

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

5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.

6. The effluent shall contain a minimum dissolved oxygen of 2.0 mg/l and shall be monitored once per week by grab sample.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 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. 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 one million gallons per day or greater permitted flow.
- b. 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.
- c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

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.
- d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the n th root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
 - f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
 - g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), 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 that 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 AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided 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 and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be reported on an approved self-report form that is signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 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 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 § 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 (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) 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, application or certification. 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 the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

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

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later

than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
 - b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
 - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES 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. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
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).

11. All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Executive Director of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
- c. For the purpose of this paragraph, adequate notice shall include information on:
 - i. The quality and quantity of effluent introduced into the POTW; and
 - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

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 that 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 TWC§ 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 Other Requirements section of this permit.
 - h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
 - i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).
3. Inspections and Entry
- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 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 TWC § 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 to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - iii. 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 TWC § 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.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be

modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

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 that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

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

9. 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.

10. 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.

11. 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 and the permit number(s);
 - ii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iii. 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 TWC § 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 required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other 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 that 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% 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% 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% 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 judgment 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. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
11. Facilities that 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 Registration, Review, and Reporting 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 § 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.

- 12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

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SLUDGE PROVISIONS

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

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION**A. General Requirements**

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 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 13) 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 13) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants 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 shall be treated by one of the following methods to ensure that the sludge meets either the Class A or Class B pathogen requirements.

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

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

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

The temperature of the sewage sludge shall be above 52° 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.

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

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

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

Alternative 1

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

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

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

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

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

- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and
- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

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

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

Alternative 10-

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

C. Monitoring Requirements

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

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

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

() The amount of bulk sewage sludge applied to the land (dry 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 or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

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

A. Pollutant Limits

Table 2

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

Table 3

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

*Dry weight basis

B. Pathogen Control

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

C. Management Practices

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with the Management Requirements in accordance with 30 TAC § 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 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 13) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30 of each year the following information:

1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
2. The frequency of monitoring listed in Section I.C. 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 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