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

8. Facilities which generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

   a. Whenever flow measurements for any domestic sewage treatment facility reach 75 percent of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90 percent of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75 percent of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

      If in the 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. Facilities which generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:

   a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

   b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

   c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Environmental Cleanup Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

   d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

   e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

   f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:

      i. Volume of waste and date(s) generated from treatment process;
      ii. Volume of waste disposed of on-site or shipped off-site;
      iii. Date(s) of disposal;
      iv. Identity of hauler or transporter;
      v. Location of disposal site; and
      vi. Method of final disposal.

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

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

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SLUDGE PROVISIONS

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

## 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 11) 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 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year.

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

TABLE 1

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

* Dry weight basis

3. Pathogen Control

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

a. For sewage sludge to be classified as Class A with respect to pathogens, the density of fecal coliform in the sewage sludge be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met.

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

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

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

b. For sewage sludge to be classified as Class AB with respect to pathogens, the density of fecal coliform in the sewage sludge be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met.

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

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

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

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

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

c. Sewage sludge that meets the requirements of Class AB sewage sludge may be classified a Class A sewage sludge if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.

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

Alternative 1

i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.

ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

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

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

ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;

iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and

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

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

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

ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

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

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

i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.

v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.

vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

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

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

i. Sewage sludge shall be injected below the surface of the land.

ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10-

i. Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

ii. When sewage sludge that is incorporated into the soil is Class A or Class AB with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

**C. Monitoring Requirements**

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

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

| Amount of sewage sludge (*) metric tons per 365-day period | Monitoring Frequency |
|---|---|
| 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 e shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

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

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

**A. Pollutant Limits**

Table 2

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

Table 3

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

*Dry weight basis

**B. Pathogen Control**

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

**C. Management Practices**

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.

2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.

3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:

   a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

   b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.

   c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

**D. Notification Requirements**

1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:

   a. The location, by street address, and specific latitude and longitude, of each land application site.

   b. The approximate time period bulk sewage sludge will be applied to the site.

   c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.

2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

**E. Record keeping Requirements**

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

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

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.

2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B sludge, if applicable).

3. A description of how the vector attraction reduction requirements are met.

4. A description of how the management practices listed above in Section II.C are being met.

5. The following certification statement:

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

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:

   a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.

   b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.

   c. The number of acres in each site on which bulk sludge is applied.

   d. The date and time sludge is applied to each site.

e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.

f. The total amount of sludge applied to each site in dry tons.

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

**F. Reporting Requirements**

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

1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
2. The frequency of monitoring listed in Section I.C. that applies to the permittee.
3. Toxicity Characteristic Leaching Procedure (TCLP) results.
4. Identity of hauler(s) and TCEQ transporter number.
5. PCB concentration in sludge in mg/kg.
6. Date(s) of disposal.
7. Owner of disposal site(s).
8. Texas Commission on Environmental Quality registration number, if applicable.
9. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
10. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
11. Level of pathogen reduction achieved (Class A, Class AB or Class B).
12. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.
13. Vector attraction reduction alternative used as listed in Section I.B.4.
14. Annual sludge production in dry tons/year.
15. Amount of sludge land applied in dry tons/year.
16. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.

17. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.

    a. The location, by street address, and specific latitude and longitude.

    b. The number of acres in each site on which bulk sewage sludge is applied.

    c. The date and time bulk sewage sludge is applied to each site.

    d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.

    e. The amount of sewage sludge (i.e., dry tons) applied to each site.

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

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

A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

D. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

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

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, 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 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

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

F. Record keeping Requirements

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

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

2. The description (including procedures followed and results) of all TCLP tests performed.

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

G. Reporting Requirements

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

1. Toxicity Characteristic Leaching Procedure (TCLP) results.

2. Annual sludge production in dry tons/year.

3. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.

4. Amount of sludge transported interstate in dry tons/year.

5. A certification that the sewage sludge meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

6. Identity of hauler(s) and transporter registration number.

7. Owner of disposal site(s).

8. Location of disposal site(s).

9. Date(s) of disposal.

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

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

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

### A. General Requirements

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.

2. Sludge may only be transported using a registered transporter or using an approved pipeline.

### B. Record Keeping Requirements

1. For sludge transported by an approved pipeline, the permittee must maintain records of the following:

   a. the amount of sludge transported;

   b. the date of transport;

   c. the name and TCEQ permit number of the receiving facility or facilities;

   d. the location of the receiving facility or facilities;

   e. the name and TCEQ permit number of the facility that generated the waste; and

   f. copy of the written agreement between the permittee and the receiving facility to accept sludge.

2. For sludge transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge transported.

3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

**C. Reporting Requirements**

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

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

**SPECIAL PROVISIONS:**

1. This permit is granted subject to the policy of the Commission to encourage the development of areawide waste collection, treatment and disposal systems. The Commission reserves the right to amend this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an areawide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such areawide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

2. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

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

3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.

4. Prior to construction of the Interim II and Final phase wastewater treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) of the Water Quality Division, a summary transmittal letter according to the requirements in 30 TAC Section 217.6(c). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications and a final engineering design report which comply with the requirements of 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 3 of this permit.

5. Prior to construction of the subsurface area drip dispersal system in the Interim II and the Final phases, the permittee shall submit, to the TCEQ Wastewater Permitting Section (MC148) of the Water Quality Division, an engineering report, including plans and specifications, that meets the requirements in 30 TAC Chapter 222: Subsurface Area Drip Dispersal Systems, Subchapter D: Design Criteria.

6. The permittee shall notify the TCEQ Regional Office (MC Region 11) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing, at least forty-five (45) days prior to the completion of the Interim II and Final Phase facilities on Notification of Completion Form 20007.

7. The permittee shall comply with the requirements of 30 TAC Section 309.13 (a) through (d). In addition, by ownership of the required buffer zone area and legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee, the permittee shall comply with the requirements of 30 TAC Section 309.13(e). The permittee submitted evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee (on file) according to 30 TAC § 309.13(e)(3). (See Attachment B.)

8. According to the requirements of 30 TAC Section 222.81(a), the permittee shall locate the subsurface area drip dispersal system a minimum horizontal distance of 100 feet from surface waters in the state. The permittee shall locate the subsurface area drip dispersal system a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water and 150 feet from private water wells as described in 30 TAC Section 309.13(e)(1). The permittee shall not locate a subsurface area drip dispersal system within a floodway according to the requirements of 30 TAC Section 222.81(d).

9. The permittee shall maintain juniper and oak trees on the disposal site. Application rates shall not exceed 0.1 gallons per square foot per day. The permittee is responsible for providing equipment to determine the application rate and for maintaining accurate records of the volume of effluent applied. According to the requirements of 30 TAC Section 222.161(d), the permittee shall maintain records documenting all activities associated with maintaining the vegetative cover, like planting, over-seeding, mowing height, fertilizing, and harvesting. These records shall be maintained for a minimum of five years and be made available to TCEQ staff upon request.

10. Based on the requirements of 30 TAC Section 222.151, the subsurface area drip dispersal system shall be designed and managed so as to prevent seepage or percolation out of the root zone, except for leaching in the amount required to maintain the health of the vegetative cover. Surfacing and ponding of effluent is prohibited. Creating a condition at the treatment facility or the drip dispersal zones that contributes to vector attraction or odor is prohibited.

11. The permittee shall maintain juniper and oak trees on the disposal site. The irrigated crops shall be established and well maintained to provide year-round vegetative growth for effluent and nutrient uptake by the crop and to prevent pathways for effluent surfacing.

12. The permittee shall analyze the irrigation effluent at least once annually for total Kjeldahl nitrogen (TKN) and nitrate-nitrogen. Total nitrogen in the irrigation effluent = TKN + nitrate-nitrogen. The permittee shall calculate and report the total amount of nitrogen applied to the land application fields. The monitoring results to include laboratory sheets with analytical results and the total nitrogen loading rate to soils from the irrigation effluent in pounds/acre/year shall be provided with the soil monitoring report by September 1st of each reporting year.

13. The permittee shall maintain a minimum soil depth below the drip irrigation lines of one foot in the 9.64-acre areas. If imported soils are utilized, the permittee shall submit within 90 days of permit issuance to the TCEQ Water Quality Assessment Team (MC 150) and the Wastewater Permitting Section (MC 148) of the Water Quality Division how imported soils will be incorporated into the native soils. The drip irrigation lines shall be laid directly on natural ground surface and covered above ground with a minimum of four (4) inches of a prepared soil/mulch mixture.

14. The subsurface drip irrigation system in the new 4.13 acres shall consist of a sufficient number of different dispersal zones. The drip lines shall be covered and maintained with a minimum of six (6) inches of soil/mulch. The minimum soil depth below the drip lines shall consists of at least twelve (12) inches of usable soil. If imported soils are utilized, the permittee shall submit no later than 90 days prior to construction to the TCEQ Water Quality Assessment Team (MC 150) and the Wastewater Permitting Section (MC 148) of the Water Quality Division a plan for review/revision and approval describing how the imported soils will be incorporated into the native soils and how soil erosion will be prevented in the affected areas.

15. Emitter and drip line spacings shall be on not less than one-foot centers and on not greater than three-foot centers.

16. Drip irrigation lines shall be installed on the contour and lateral slopes of the tubing shall not exceed 1 percent. Each drainfield (zone) shall have at least two moisture sensing devices placed no more than 12 inches below the drip lines in the zone's topographic low that will automatically shut off treated effluent to the drainfield when the soil becomes saturated.

17. The velocity of the flush water shall be at least two feet per second at the end of each dispersal zone or return line during the flushing operation.

18. The permittee shall design and install temporary storage that equals at least three days of the design flow of the facility for times when the subsurface area drip dispersal system is out of service due to an emergency or scheduled maintenance. In addition, the permittee shall pump and haul wastewater from the facility to prevent the discharge of treated or untreated wastewater if complete shutdown of the wastewater treatment facility becomes necessary or if the storage capacity is exceeded.

19. Permanent transmission lines shall be installed from the treatment system to each drip irrigation zone of the subsurface area drip dispersal system. According to 30 TAC Section 222.153, the permittee shall flush the subsurface area drip dispersal system from the

dispersal zone and return the flush water to a point preceding the treatment system at least once every two months.

20. Effluent shall not be applied for irrigation when the ground is saturated.

21. Drip irrigation with effluent shall be accomplished only when the area specified is not in use.

22. The permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply for any area where treated effluent is stored or where there exist hose bibs or faucets. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.

23. The permittee shall maintain a long term contract with the owner(s) of the land application site which is authorized for use in this permit, or own the land authorized for land application of treated effluent.

24. The permittee shall obtain representative soil samples from the root zones of the land application area receiving wastewater. Composite sampling techniques shall be used. Each composite sample shall represent no more than the 9.64 acres with no less than two soil cores taken in each drainfield (zone). Subsamples shall be composited by like sampling depth, type of crop and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches and 18 to 30 inches below ground level. The permittee shall sample annually during the period December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

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

| Parameter | Method | Minimum Analytical Level (MAL) | Reporting units |
|---|---|---|---|
| pH | 2:1 (v/v) water to soil mixture | N/A | Reported to 0.1 pH units after calibration of pH meter |
| Electrical Conductivity | 2:1 (v/v) water to soil mixture | 0.01 | dS/m (same as mmho/cm) |
| Nitrate-nitrogen, ammonium-nitrogen | From a 1 N KCl soil extract | 1 | mg/kg (dry weight basis) |
| Total Kjeldahl Nitrogen (TKN) | For determination of Organic plus Ammonium | 20 | mg/kg (dry weight basis) |

| | | | |
|---|---|---|---|
| | Nitrogen. Procedures that use Mercury (Hg) are not acceptable. | | |
| Total Nitrogen | = TKN plus Nitrate-nitrogen | | mg/kg (dry weight basis) |
| Plant-available: Phosphorus | Mehlich III with inductively coupled plasma | 1 (P) | mg/kg (dry weight basis) |
| Plant-available: Potassium (K) Calcium (Ca) Magnesium (Mg) Sodium (Na) Sulfur (S) | May be determined in the same Mehlich III extract with inductively coupled plasma | 5 (K)<br>10 (Ca)<br>5 (Mg)<br>10 (Na)<br>1 (S) | mg/kg (dry weight basis) |
| Amendment addition, e.g., gypsum | | | Report in short tons/acre in the year effected |

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports with a map depicting the areas that have received wastewater within the permanent sampling fields to the Water Quality Assessment Team (MC 150), the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224), no later than September 1st of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

25. The soil testing plan recommended for the proposed 4.13-acre site is as follows.

The permittee shall obtain representative soil samples from the root zones of the land application area receiving wastewater. Composite sampling techniques shall be used. Each composite sample shall represent no more than the new 4.13 acres with no less than two soil cores taken in each drainfield (zone). Subsamples shall be composited by like sampling depth, type of crop and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 12 inches and 12 to 24 inches below ground level. The permittee shall sample annually in December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

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

| Parameter | Method | Minimum | Reporting units |
|---|---|---|---|

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

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports with a map depicting the areas that have received wastewater within the permanent sampling fields to the Water Quality Assessment Team (MC 150), the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224), no later than September 1st of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

26. The physical condition of the drip irrigation fields will be monitored on a weekly basis. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation, etc., will be recorded in the field log kept onsite and corrective measures will be implemented within 24 hours of discovery.

27. According to 30 TAC Section 222.163, Closure Requirements, the permittee shall close the system under the standards set forth in this section.

28. The permittee is granted a variance to the site requirements and design criteria in Chapter 222, Subsurface Area Drip Dispersal Systems according to 30 TAC Section 222.31(l).

29. According to the requirements of 30 TAC Section 222.43, the permittee shall notify the TCEQ Regional Office (MC Region 11) for each of the following activities:

    a. At least 30 days prior to the date the field layout and/or construction startup is scheduled to begin for the proposed subsurface drip irrigation system.

    b. At least 30 days prior to the date that construction is projected to be complete.

    c. Within 30 days after operation of the proposed subsurface drip irrigation system.

    d. If soils are imported, at least 30 days prior to completion of the soil importing project.

30. According to the requirements of 30 TAC Section 222.45, the permittee shall submit a copy of the issued permit to the health department with jurisdiction in the area where the system is located before commencing operation of the proposed subsurface drip irrigation system. The permittee shall retain proof of delivery for the duration of the permit.

31. The permittee shall comply with buffer zone requirements of 30 TAC Section § 309.13(c) and 30 TAC § 222.81(a)(1-3). A wastewater treatment plant unit, defined by 30 TAC Section § 309.11(9), must be located a minimum horizontal distance of 250 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water, as provided by § 290.41(c)(1)(C) of this title. A land application field must be located a minimum horizontal distance of 150 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water. A buffer of 100 feet minimum shall be maintained from all surface water features.

32. The permittee must notify the TCEQ Regional Office (MC Region 11) 30 days before any of the following activities begin: construction start up, drip system field layout, completion of any soil amendments, operation of the subsurface drip system, or completion of the subsurface project in accordance with 30 TAC § 222.43.

33. Any recharge features uncovered by construction activities must be addressed in an updated and certified Recharge Feature Plan (RFP). The updated certified RFP must be submitted to the TCEQ Water Quality Assessment Team (MC 150), and the TCEQ Regional Office (MC Region 11).

34. The permittee must develop a Seeps/Springs Monitoring Plan and submit the plan to the TCEQ Water Quality Assessment Team (MC 150) for review and approval within 30 days of permit issuance.

a. At a minimum, the plan must include:

i. A procedure to conduct field checks at the irrigation fields and down-gradient of the fields to identify emerging springs or seeps. The field checks must be conducted by a Texas licensed professional engineer or geoscientist.

A. Prior to operation of the irrigation systems, the permittee must sample a minimum of one existing seep or spring onsite to establish background groundwater quality. The sample(s) must be analyzed in accordance with ii.A below. Subsequent analyses of seeps or springs onsite must be compared to this background analysis.

B. Field checks must be conducted quarterly. If possible, the field checks must be within 3 days of a 0.5 inch or greater rain event.

C. The locations of the field checks must be recorded in a field log kept onsite for TCEQ inspection for 5 years.

D. The quarterly checks must continue for the life of the system.

ii. A procedure to obtain grab samples of springs or seeps in the event that springs/seeps develop after irrigation.

A. The samples from the springs/seeps must be analyzed for chloride, specific conductivity, the complete nitrogen series [($NO_3$ + $NO_2$ - N), Total Kjeldahl Nitrogen, ammonia-N], total phosphorus, and ortho-phosphate. The laboratory and analytical methods used must be NELAC accredited and comply with 30 Texas Administrative Code (TAC) Chapter 25.

B. The locations of the seeps/springs that were sampled must be recorded in a field log kept onsite for TCEQ inspection for 5 years, along with the results of the laboratory analyses.

C. Monitoring of emerging springs/seeps and of existing seeps must continue for the life of the system.

b. Permittee must implement the plan upon approval by the Water Quality Assessment Team. The permittee or Executive Director may request modification of the approved plan if future information indicates that it would be necessary for the protection of the environment.

c. Permittee must submit the data from the Seeps/Springs Monitoring Plan to the Water Quality Assessment Team (MC 150) of the Water Quality Division and the Compliance Monitoring Section (MC-224) by September 30th of each year for review.

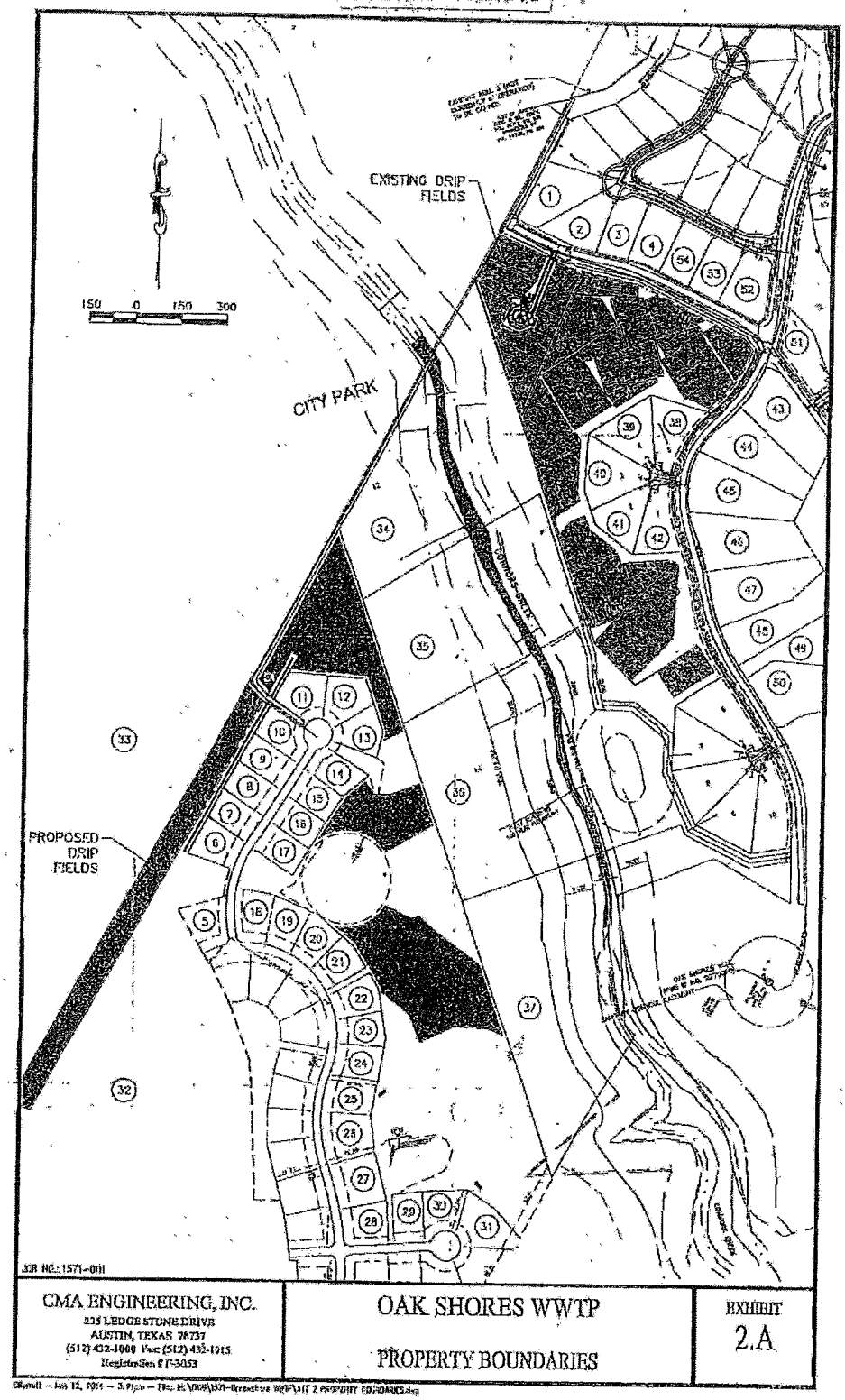
35. If complete shutdown of the facility becomes necessary or if the storage capacity is exceeded, the permittee shall employ pump and haul method to prevent the discharge of treated or untreated wastewater. The permittee shall obtain the necessary authorization from TCEQ Region 11 before undertaking the pump and haul activity.

36. The permittee shall develop an Irrigation System Management Plan and submit the plan to the TCEQ Water Quality Assessment Team (MC 150) and the Wastewater Permitting Section (MC 148) of the Water Quality Division for review and approval 30 days prior to the construction. At a minimum, the plan shall require a maintenance contract for the drip irrigation system.

37. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.

PK-RE Development Company, Inc.
TCEQ Permit No: WQ0014286001

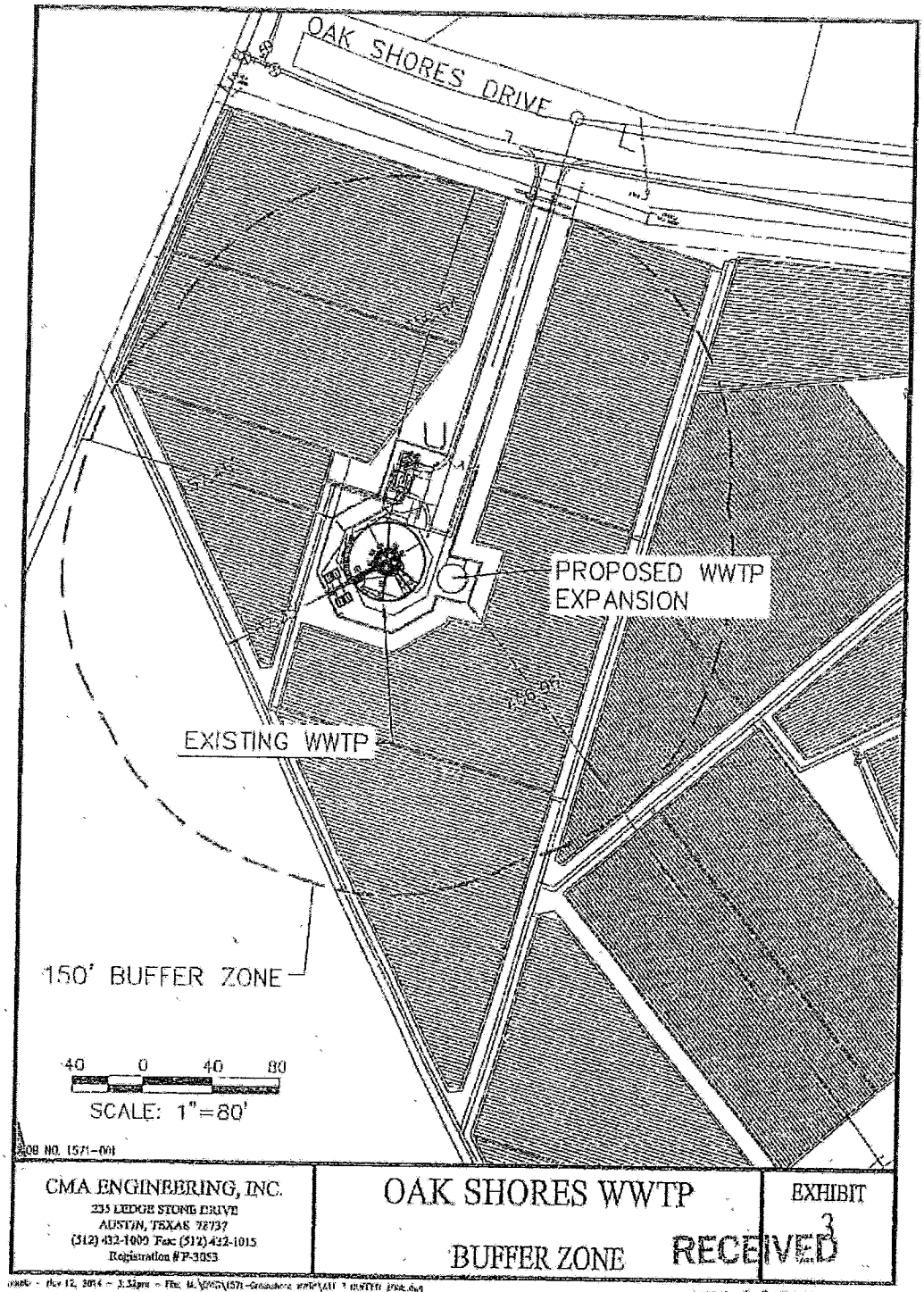
ATTACHMENT A




| CMA ENGINEERING, INC.<br>235 LEDGE STONE DRIVE<br>AUSTIN, TEXAS 78737<br>(512) 432-1000 Fax (512) 432-1015<br>Registration # F-3053 | OAK SHORES WWTP<br><br>PROPERTY BOUNDARIES | EXHIBIT<br>2.A |
|---|---|---|

PK-RE Development Company, Inc.
TCEQ Permit No. WQ0014286001

ATTACHMENT B




RECEIVED
DEC 0 8 2014
WATER QUALITY DIVISION
Applications Team

# CONFIDENTIAL

DOCKET NO. _____

STYLE: Application for Sale, Transfer, or Merger of a Retail Public Utility

_____

SUBMITTING PARTY: PK-RE Development Company, Inc.

BRIEF DESCRIPTION OF CONTENTS: Exhibit B

Customer Name and Address and Deposit Information

BATE STAMP OR SEQUENTIAL PAGE NUMBER RANGE:

80 TO 84

ENVELOPE # 1 OF 1

ADDITIONAL INFORMATION REQUIRED BY PROTECTIVE ORDER:

_____

DATE SUBMITTED TO COMMISSION: _____

# CONFIDENTIAL

DOCKET NO. _____

STYLE: Application for Sale, Transfer, or Merger of Retail Public Utility

SUBMITTING PARTY: PK-RE Development Company, Inc.

BRIEF DESCRIPTION OF CONTENTS: Exhibit C

Partnership Agreement - Undine Development, LLC Organizational Chart

BATE STAMP OR SEQUENTIAL PAGE NUMBER RANGE:

85 TO 98

ENVELOPE # 1 OF 1

ADDITIONAL INFORMATION REQUIRED BY PROTECTIVE ORDER:

DATE SUBMITTED TO COMMISSION: _____

# Attachment 'D'

Certificate of Account Status

# Franchise Tax Account Status

As of: 04/12/2016 12:42:44 PM

**This Page is Not Sufficient for Filings with the Secretary of State**

| UNDINE DEVELOPMENT, LLC | |
|---|---|
| Texas Taxpayer Number | 32060062695 |
| Mailing Address | 21102 REFUGE CREEK DR<br>CYPRESS, TX 77433-3590 |
| Right to Transact Business in Texas | ACTIVE |
| State of Formation | DE |
| Effective SOS Registration Date | 04/01/2016 |
| Texas SOS File Number | 0802427793 |
| Registered Agent Name | CAREY THOMAS |
| Registered Office Street Address | 21102 REFUGE CREEK DR.<br>CYPRESS, TX 77433 |

# CONFIDENTIAL

DOCKET NO. _____

STYLE: Application for Sale, Transfer, or Merger of a Retail Public utility

_____

SUBMITTING PARTY: PK-RE Development Company, Inc.

BRIEF DESCRIPTION OF CONTENTS: Exhibit E

Evidence of Financial, Managerial and Technical Capabilities

BATE STAMP OR SEQUENTIAL PAGE NUMBER RANGE:

101 TO 102

ENVELOPE # 1 OF 1

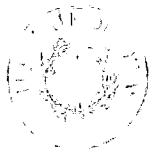
ADDITIONAL INFORMATION REQUIRED BY PROTECTIVE ORDER:

_____

DATE SUBMITTED TO COMMISSION: _____

# Attachment 'F'

TCEQ Correspondence



COPY

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

September 11, 2014

Mr. Russell Parker
PK-RE Development Company, Inc.
4705 Spicewood Springs Road, Suite 200
Austin, TX 78759

Re: Notice of Compliance with Notice of Violation (NOV) dated July 19, 2013:
Oak Shores WWTP, 1000 Cuernavaca Dr, Austin (Travis County), Texas
TCEQ ID.: WQ0014286001, RN102185998, Investigation #1193587

Dear Mr. Parker:

This letter is to inform you that the Texas Commission on Environmental Quality (TCEQ) Austin Regional Office has received adequate compliance documentation on January 21, 2014 to resolve the alleged violation documented during the investigation of the above-referenced regulated entity conducted on May 21, 2013. TCEQ records indicate that compliance with the above-reference NOV has been achieved.

The Texas Commission on Environmental Quality appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions, please feel free to contact Ms. Julie Pevehouse at the Austin Regional Office at (512) 339-2929.

Sincerely,

Shawn Stewart
Water Work Leader
Austin Regional Office

SS/jkp

Cc: Mr. Richard O'Donnell, AWR Service, 500 N Capital of TX Hwy, Bldg 1, Ste 125
Austin, TX 78746

Enclosures: Summary of Investigation Findings

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

March 17, 2016

Mr. Russell Eppright, President
PK-RE Development Company, Incorporated
c/o: Mr. William Abshire, Vice President of Operations
Crossroads Utility Services
2601 Forest Creek Drive
Round Rock, Texas 78665

Re: Comprehensive Compliance Investigation at:
Oak Shores Water System
7624 Oak Shores Drive, Austin (Travis County), Texas
TCEQ Public Water Supply 2270060, RN102674264

Dear Mr. Eppright:

On February 25, 2016, Lawrence King of the Texas Commission on Environmental Quality (TCEQ) Austin Region Office conducted an investigation of the above-referenced facility to evaluate compliance with applicable requirements for public water systems. No violations are being alleged as a result of the investigation.

The TCEQ appreciates your assistance in this matter and your continued efforts to ensure the protection of the public health. Should you have a question, please feel free to contact Mr. King in the Austin Region Office at (512) 339-2929.

Sincerely,

Carolyn Runyon
Water Section Manager
Austin Region Office

SS/lok

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

February 5, 2014

Mr. Russell Eppright, President
PK-RE Development Company, Incorporated
c/o: Mr. Richard O'Donnell, Regulatory Compliance
AWR Services, Incorporated
500 North Capital of Texas Highway, Bldg. 1, Ste. 125
Austin, Texas 78746m

Re: Notice of Compliance with Notice of Violation dated September 20, 2013:
Oak Shores Water System
7624 Oak Shores Drive, Austin (Travis County), Texas
RN102674264, TCEQ Public Water Supply ID 2270060

Dear Mr. Eppright:

This letter is to inform you that the Texas Commission on Environmental Quality (TCEQ) Austin Region Office received adequate compliance documentation on January 21, 2014, to resolve the alleged violations documented during the investigation on September 11, 2013. Based on the information submitted, no further action is required concerning this investigation.

The TCEQ appreciates your assistance in this matter and your continued efforts to ensure protection of the public health. If you or members of your staff have any questions, please feel free to contact Mr. King at the Austin Regional Office at (512) 339-2929.

Sincerely,

Shawn Stewart
Water Section Work Leader
Austin Regional Office

SS/lok

RECEIVED FEB - 7 2014

# Summary of Investigation Findings

OAK SHORES WATER SYSTEM

Investigation # 1145762

Investigation Date: 01/31/2014

, TRAVIS COUNTY,

Additional ID(s): 2270060

## ALLEGED VIOLATION(S) NOTED AND RESOLVED

Track No: 515078

30 TAC Chapter 290.46(m)(1)(B)

Alleged Violation:

Investigation: 1117020 Comment Date: 09/13/2013

The interior surface of the pressure tank had not been inspected within the past five years.

Investigation: 1145762 Comment Date: 01/31/2014

On January 21, 2014, the TCEQ Austin Region Office received a copy of the tank inspection report for the pressure tank. The inspection was performed by HOT Inspection Services, Incorporated on December 14, 2013. The tank was found to be in good working condition.

**Resolution:** On January 21, 2014, the TCEQ Austin Region Office received a copy of the tank inspection report for the pressure tank. The inspection was performed by HOT Inspection Services, Incorporated on December 14, 2013. The tank was found to be in good working condition.

Track No: 515080

30 TAC Chapter 290.42(d)(13)

Alleged Violation:

Investigation: 1117020 Comment Date: 09/13/2013

The influent, effluent, waste backwash and chemical feed lines were not identified by the use of labels or various colors of paint.

Investigation: 1145762 Comment Date: 01/31/2014

On January 21, 2014, the TCEQ Austin Region Office received a letter with photographs demonstrating that the water lines had been identified with labels.

**Resolution:** On January 21, 2014, the TCEQ Austin Region Office received a letter with photographs demonstrating that the water lines had been identified with labels.

Track No: 515081

30 TAC Chapter 290.42(d)(2)

Alleged Violation:

Investigation: 1117020 Comment Date: 09/13/2013

Oak Shores Water System failed to ensure that all the plant piping was throughly tight against leakage. Specifically, water was dripping at three locations from water lines on the membrane treatment unit.

Investigation: 1145762 Comment Date. 01/31/2014

On January 21, 2014, the TCEQ Austin Region Office received a letter with photographs demonstrating that the leaks had been repaired.

**Resolution:** On January 21, 2014, the TCEQ Austin Region Office received a letter with photographs demonstrating that the leaks had been repaired.

RECEIVED FEB - 7 2014

Track No: 515084

30 TAC Chapter 290.42(f)(1)(E)(ii)

Alleged Violation:

Investigation: 1117020 Comment Date: 09/13/2013

Oak Shores Water System failed to provide adequate containment for a liquid chemical storage tank. Specifically, two 38% sodium bisulfate feed containers/barrels were not provided with containment for possible leaks or spills.

Investigation: 1145762 Comment Date: 01/31/2014

On January 21, 2014, the TCEQ Austin Region Office received a letter with photographs demonstrating that secondary containment had been provided for the chemical tanks.

**Resolution:** On January 21, 2014, the TCEQ Austin Region Office received a letter with photographs demonstrating that secondary containment had been provided for the chemical tanks.

Track No: 515086

30 TAC Chapter 290.42(d)(5)

Alleged Violation:

Investigation: 1117020 Comment Date: 09/13/2013

The water treatment plant did not have a flow measuring device to measure the treated water used to backwash the filters.

Investigation: 1145762 Comment Date: 01/31/2014

On January 21, 2014, the TCEQ Austin Region Office received a letter with photographs demonstrating that a flow measuring device had been installed.

**Resolution:** On January 21, 2014, the TCEQ Austin Region Office received a letter with photographs demonstrating that a flow measuring device had been installed.

# Summary of Investigation Findings

OAK SHORES WWTP
1000 N CUERNAVACA DR
AUSTIN, TRAVIS COUNTY, TX 78733

Investigation # 1193587
Investigation Date: 09/09/2014

**Additional ID(s):** WQ0014286001

## ALLEGED VIOLATION(S) NOTED AND RESOLVED

**Track No:** 507918

**30 TAC Chapter 305.125(1)**

**PERMIT** WQ0014286001, Page 25, Item 19
Special Provisions

**Alleged Violation:**

Investigation: 1076109 Comment Date: 07/16/2013

Failure to cover drip irrigation lines with a minimum of four inches of a prepared soil/mulch mixture

Investigation: 1193587 Comment Date: 09/09/2014

Failure to cover drip irrigation lines as required by the permit.

**Recommended Corrective Action:** Apply soil/mulch mixture as required and submit narrative and photographic documentation.

**Resolution:** The TCEQ Austin Region Office received compliance documentation on January 21, 2014. Compliance documentation included narrative and photographic documentation indicating that approximately 184 yards of a soil/mulch mixture which was applied on the irrigation lines.

Mr. O'Donnell, AWR Services, also informed the investigator that a pile of mulch is maintained on-site and irrigation lines are repaired and covered as needed. The irrigation fields are inspected at least weekly.

# CONFIDENTIAL

DOCKET NO. _____

STYLE: Application for Sale, Transfer or Merger of a Retail Public Utility

SUBMITTING PARTY: PK-RE Development Company, Inc.

BRIEF DESCRIPTION OF CONTENTS: Exhibit G

Financial Information

BATE STAMP OR SEQUENTIAL PAGE NUMBER RANGE:

110 TO 119

ENVELOPE # 1 OF 1

ADDITIONAL INFORMATION REQUIRED BY PROTECTIVE ORDER:

DATE SUBMITTED TO COMMISSION: _____

# Attachment 'H'

Utilities within 2-Miles

| 2-Mile Radius Information | | | | | |
|---|---|---|---|---|---|
| **Utility Name** | **CCN#** | **Street** | **City** | **State** | **Zip** |
| AQUA TEXAS INC | 11157 | 1106 CLAYTON LN STE 400W | AUSTIN | TX | 78723 |
| CITY OF AUSTIN | 11322 | PO BOX 1088 | AUSTIN | TX | 78767 |
| LOOP 360 WSC | 11913 | 14046 SUMMIT DR | AUSTIN | TX | 78728 |
| TRAVIS COUNTY WCID 10 | 10306 | 5450 BEE CAVE RD STE 2A | AUSTIN | TX | 78746 |
| TRAVIS COUNTY MUD 4 | 20654 | PO BOX 250 | ROUND ROCK | TX | 78680 |
| RIVER PLACE VENTURE | 20602 | 11855 RESEARCH BLVD | AUSTIN | TX | 78759 |
| TRAVIS COUNTY WCID 18 | | 1502 SAN JUAN DR | AUSTIN | TX | 78733 |
| TRAVIS COUNTY WCID 20 | | 100 CONGRESS AVE STE 1300 | AUSTIN | TX | 78701 |
| Lower Colorado River Authority | | 3700 LAKE AUSTIN BLVD | AUSTIN | TX | 78703 |
| Travis County | | PO BOX 1748 | AUSTIN | TX | 78767 |
| TRAVIS COUNTY MUD 3 | | 100 CONGRESS AVE STE 1300 | AUSTIN | TX | 78701 |
| RIVER PLACE MUD | | 600 CONGRESS AVE STE 2100 | AUSTIN | TX | 78701 |

# Attachment 'I'

Wastewater Permit Transfer Application

## Please Note That Transfer Will Not Occur Until PUC Approvals Have Been Obtained

# Application and Instructions to Transfer a Wastewater Permit or CAFO Permit

## Submission Checklist - Submit This with the Application

Indicate If The Following Are Included In The Application. Additional Blank Spaces Provided for Referencing Applicant's Attachments to the application.

| Attachments | Y | N |
|---|---|---|
| Required Signature Pages | ✓ | |
| Copy Of The Check or Payment Voucher Submitted For Transfer Application Processing Fee | ✓ | |
| Core Data Form - Required To Complete Transfer Application | ✓ | |
| Lease Agreements – if applicable | | ✓ |
| Proof of Ownership – Required for CAFO Permits | | ✓ |
| | | |
| | | |

**For Commission Use Only**

Permit Number WQoo_____ EPA I.D. No._____

Expiration Date_____ County _____Region_____

## 1. Applicant General Information

What is the Legal Name of the entity (applicant) applying for this permit? *(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.)*

a. **Facility Owner:** Undine Development, LLC.

What is the applicant's mailing address (for use on the permit and permit correspondence) as recognized by the US Postal Service? You may verify the address at: http://zip4.usps.com/zip4/welcome.jsp

Street Number/Name 10913 Metronome Street type Dr. OR

P.O. Box _____ City Houston State TX Zip code 77043

Telephone number (713) 574-5953 Fax number (713) 647-0277

Email address: athomas@undinellc.com

Tax Identification Number issued by the State Comptroller 32060062695

Charter Number issued by the Texas Secretary of State 0802427793

If the applicant is currently a customer with TCEQ, what is the Customer Number (CN)? Search for your CN at: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

**CN** _____

If the owner has not yet received a Customer Reference Number a complete Core Data Form(TCEQ-10400) listing the owner as the customer and this facility as the regulated entity must be attached to this application.

b. **Co-Permittee Information** - (Complete only if the operator is required to apply as a co-permittee)

**Co-Permittee Name:** NA

What is the mailing address (for use on the permit and permit correspondence) as recognized by the US Postal Service? You may verify the address at: http://zip4.usps.com/zip4/welcome.jspMailing

Street Number/Name _____ Street type _____ OR

P.O. Box _____ City _____ State TX Zip code _____

Telephone number _____ Fax number _____

Email address: _____

Tax Identification Number issued by the State Comptroller _____

Charter Number issued by the Texas Secretary of State _____

If the applicant is currently a customer with TCEQ, what is the Customer Number (CN)? Search for your CN at:

http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

CN _____

If the owner has not yet received a Customer Reference Number a complete Core Data Form (TCEQ-10400) listing the owner as the customer and this facility as the regulated entity must be attached to this application.

c. **Individual information** - Pursuant to the Texas Water Code 26.027(b), supply the following information when the applicant is an individual. NA

☐ Male ☐ Female

*Full Legal Name:*

First _____ Middle _____ Last _____

State ID Number: _____ Date of Birth _____

Street Number/Name _____ Street type _____

Telephone number _____ Fax number _____

Email address: _____

If the applicant is currently a customer with TCEQ, what is the Customer Number (CN)? Search for your CN at:
http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

CN _____

If the owner has not yet received a Customer Reference Number a complete Core Data Form (TCEQ-10400) listing the owner as the customer and this facility as the regulated entity must be attached to this application.

## 2. Contact Information

### a. Application Contact

Identify the person, including a complete mailing address, telephone number, and fax number, authorized to act for the applicant during the processing of the transfer application. The person identified will be contacted if additional information is needed during the transfer process.

First/Last Name: Jeff Goebel

Street Number/Name 10913 Metronome Street type Dr. OR

P.O. Box _____ City Houston State TX Zip code 77043

Telephone number (713) 574-5953 Fax number (713) 647-0277

Email address: jgoebel@undinellc.com

### b. Permit Contact:

Identify the person, including a complete mailing address, telephone number, and fax number, that can be contacted by the agency as needed throughout the term of the permit/registration.

First/Last Name: Andy Thomas

Street Number/Name 10913 Metronome Street type Dr. OR

P.O. Box _____ City Houston State TX Zip code 77043

Telephone number (713) 574-5953 Fax number (713) 647-0277

Email address: athomas@undinellc.com

## 3. Permit/Registration Information

a. What is the TCEQ Water Quality Permit No.? WQ0014286001

b. What is the EPA ID No.?: TX_____

c. What is the permit expiration date?: 12/1/19

d. Check if applicable (for POTWs only)

☐ The permit to be transferred requires implementation of an approved pretreatment program by a POTW. (Note: The transferee must contact the Stormwater and Pretreatment Team staff before this application may be processed.)

e. Check if applicable (for domestic reclaimed water authorizations)

☐ There is a domestic reclaimed water authorization associated with this permit. (Note: The domestic reclaimed water authorization associated with this permit will be transferred. If you do not want the domestic reclaimed water authorization transferred, please state this and the authorization will be cancelled on the same date the transfer took place.)

## 4. Site Information

a. TCEQ issued RE Reference Number (RN): Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch

**RN** 102185998

b. Site Name: Oak Shores WWTP

c. County in which the facility is located Travis

d. Owner of the land where the facility is/will be: (if not the same as the facility owner, please see instructions)

Street Number: _____ Street Name: _____

City: _____ State: TX ZIP Code: _____

e. Owner of the effluent disposal site (if not the same as the facility owner, please see instructions)

Street Number: _____ Street Name: _____

City: _____ State: TX ZIP Code: _____