TPDES PERMIT NO. WQ0004996000
[For TCEQ office use only -
EPA I.D. No. TX0133671]

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

This is new TPDES Permit No. WQ0004996000.

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

North Texas Municipal Water District

whose mailing address is

P.O. Box 2408
Wylie, Texas 75098

is authorized to treat and discharge wastes from the North Texas Municipal Water District Leonard Water Treatment Plant (SIC 4941)

located 700 feet north of the intersection of County Road 4965 and State Highway 78, west of the City of Leonard, Fannin County, Texas 75452

via pipe to an unnamed tributary; thence to the Red River Below Lake Texoma in Segment No. 0202 of the Red 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 on December 1, 2017.

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge desalination concentrate subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 9.3 million gallons per day (MGD). The daily maximum flow shall not exceed 18.6 MGD.

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average mg/L	Daily Maximum mg/L	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow	9.3 MGD	18.6 MGD	N/A	Continuous	Meter
Total Suspended Solids	20	30	30	1/week	Grab
Total Dissolved Solids	Report	Report	N/A	1/month	Grab
Chloride	Report	Report	N/A	1/month	Grab
Sulfate	Report	Report	N/A	1/month	Grab

2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day by grab sample.

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

4. Effluent monitoring samples shall be taken at the following location: following the final treatment unit.

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 Texas Water Code §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 a 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 (Fecal coliform, E. coli, or Enterococci) – the number of colonies 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 nth 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 substitute value of one shall 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 × Concentration, mg/L × 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 that 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; TWC Chapters 26, 27, and 28; and THSC Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

   a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

   b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

   a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

   b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (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 that 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 that 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 that 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) that 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 that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that 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 that 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 that 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 Texas Water Code §§7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) 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 Chapter 361.

b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit, or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at

any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in 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 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 that are not described in the permit application or that 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 that 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 Texas Water Code 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(15)) controlling the permittee or listing the permit or permittee as property of the estate; or
       iii. an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.

    b. This notification must indicate:

       i. the name of the permittee;
       ii. the permit number(s);

iii. the bankruptcy court in which the petition for bankruptcy was filed; and
iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Land Application 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 that 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 149) 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 Corrective Action 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.

12. 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 THSC Code Chapter 361.

OTHER REQUIREMENTS

1. Violations of daily maximum limitations for the following pollutants shall be reported orally or by facsimile to TCEQ Region 4 within 24 hours from the time the permittee becomes aware of the violation, followed by a written report within five working days to TCEQ Region 4 and the Enforcement Division (MC 224): None.

2. The mixing zone is defined as 300 feet downstream and 100 feet upstream from the point of discharge. Chronic toxic criteria apply at the edge of the mixing zone.

3. This permit does not authorize the discharge of domestic sewage. Domestic sewage shall either be routed to the City of Leonard Publicly-Owned Treatment Works (POTW) or to an on-site sewage facility.

4. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 0202 of the Red River Basin and any subsequent updating of the water quality model for Segment No. 0202, in order to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC Section 305.62, as a result of such review.

5. Reporting requirements pursuant to 30 TAC Sections 319.1-319.11 and any additional effluent reporting requirements contained in the permit are suspended from the effective date of the permit until plant startup or discharge, whichever comes first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Region 4 Office and the Applications Review and Processing Team (MC-148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever occurs first, on Notification of Completion Form 20007.

6. Wastewater discharged via Outfall 001 shall be sampled and analyzed for those parameters listed in Tables 1 and 2 of Attachment 1 of this permit for a minimum of four separate sampling events which are a minimum of one week apart. Analytical testing for Outfall 001 shall be completed within the first 90 days after initial discharge that is representative of regular operations and submitted to the TCEQ, Wastewater Permitting Section (MC-148), Industrial Permits Team. Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations and monitoring requirements.

7. Water treatment plant sludge may be disposed of either at an approved landfill or by another method in accordance with 30 TAC Chapter 312, Subchapter F. The permittee shall give 180 days prior notice to the Executive Director of any planned change in the water treatment sludge disposal practice.

   The permittee shall comply with the following sludge requirements:

   a. The permittee shall handle and dispose of water treatment sludge in accordance with the requirements of 30 TAC Section 312.121 and Title 40, Part 527 of the Code of Federal Regulations 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.

   b. If the permittee generates water treatment sludge and supplies that water treatment 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 to

insure compliance with the permit for that MSWLF. The permittee shall ensure that the water treatment sludge meets the requirements in 40 CFR Part 258 concerning the quality of the sludge disposed in a municipal solid waste landfill.

c. The permittee shall report the following information annually to the TCEQ's Enforcement Division (MC-224) and to the Region 4 Office in September of each year:

i. Annual sludge production in dry tons/year.

ii. For land application:

(a) Amount of sludge disposed of in dry tons/year.
(b) Certification that the water treatment sludge meets the requirements of 40 CFR Part 257 concerning the quality of the sludge being land applied.

iii. For sludge disposed of in a municipal solid waste landfill:

(a) Amount of sludge in dry tons/year.
(b) Date(s) of disposal.
(c) Identity of hauler and TCEQ transporter registration number.
(d) Owner and location of disposal site.
(e) Registration or permit number of disposal facility.
(f) Certification that the water treatment sludge meets the requirements of 40 CFR Part 258 concerning the quality of the sludge disposed in a MSWLF.

The above records must be maintained on-site on a monthly basis and must be made available to the TCEQ upon request.

d. Sludge which has come into contact with reject water from the water treatment unit may not be disposed of on-site.

e. The pH of the sludge and soil mixture must be 6.5 standard units or greater.

8. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

a. The permittee shall conduct the following whole effluent toxicity tests utilizing the test organisms, procedures, and quality assurance requirements specified in "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," Fourth Edition (EPA-821-R-02-013), or the most recent update.

1) Chronic static renewal, survival, and reproduction test using the water flea (*Ceriodaphnia dubia*) (Method 1002.0 or the most recent update). This test may be terminated when 60% of the surviving adults in the control produce three broods or at the end of eight days, whichever comes first.

2) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*) (Method 1000.0 or the most recent update). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution.

b. The tests must be conducted once per quarter during each of the first four full calendar quarters following the initial discharge representative of regular operations at the facility. The permittee shall perform and report a valid test for each species during each of the four quarters. An invalid test must be repeated during the same quarter. An invalid test is herein defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirement specified in the above-referenced test methods.

c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These additional effluent concentrations are 4%, 5%, 7%, 9%, and 12% effluent. The critical dilution, defined as 9% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical flow or critical mixing conditions.

d. Dilution water used in the toxicity tests must be moderately hard synthetic dilution water.

e. If any of the tests exhibit a significant effect at the critical dilution, three retests must be performed within the following 90 days. A significant effect is defined as a statistically significant difference at the 95% confidence level, between a specified endpoint (survival, growth, or reproduction) of the test organism in a specified effluent dilution when compared to the specified endpoint of the test organism in the control. If two of the retests also exhibit a significant effect, the permittee shall conduct a study with the objective of determining the cause of the test failures and identifying actions that will eliminate test failures due to that cause.

f. Reports for all of the tests specified above must be submitted to the TCEQ Standards Implementation Team (MC 150) of the Water Quality Division within 45 days of completion of the final quarterly test.

Attachment 1

Table 1

Outfall No. 001 ☐C ☐G	Effluent Concentration (mg/L)				
Pollutants	**Samp.**	**Samp.**	**Samp.**	**Samp.**	**Average**
BOD (5-day)					
CBOD (5-day)					
Chemical Oxygen Demand					
Total Organic Carbon					
Dissolved Oxygen					
Ammonia Nitrogen					
Total Suspended Solids					
Nitrate Nitrogen					
Total Organic Nitrogen					
Total Phosphorus					
Oil and Grease					
Total Residual Chlorine					
Total Dissolved Solids					
Sulfate					
Chloride					
Fluoride					
Temperature (°F)					
Total Alkalinity (mg/L as CaCO3)					
pH (Standard Units; min/max)					

	Effluent Concentration (µg/L)					MAL (µg/L)
Total Aluminum						30
Total Antimony						30
Total Arsenic						10
Total Barium						10
Total Beryllium						5
Total Cadmium						1
Total Chromium						10
Trivalent Chromium						N/A
Hexavalent Chromium						10
Total Copper						10
Cyanide						20
Total Lead						5
Total Mercury						0.2
Total Nickel						10
Total Selenium						10
Total Silver						2.0
Total Thallium						10
Total Zinc						5

Table 2

Outfall No.: 001 ☐C ☐G Pollutant	Samp. 1 (µg/L)*	Samp. 2 (µg/L)*	Samp. 3 (µg/L)*	Samp. 4 (µg/L)*	Avg. (µg/L)*	MAL (µg/L)
Acrylonitrile						50
Anthracene						10
Benzene						10
Benzidine						50
Benzo(*a*)anthracene						10
Benzo(*a*)pyrene						10
Bis(2-chloroethyl)ether						10
Bis(2-ethylhexyl)phthalate						10
Bromodichloromethane						10
Bromoform						10
Carbon Tetrachloride						10
Chlorobenzene						10
Chlorodibromomethane						10
Chloroform						10
Chrysene						10
Cresols						(**)
1,2-Dibromoethane						2
m-Dichlorobenzene						10
o-Dichlorobenzene						10
p-Dichlorobenzene						10
3,3'-Dichlorobenzidine						5
1,2-Dichloroethane						10
1,1-Dichloroethylene						10
Dichloromethane						20
1,2-Dichloropropane						10
2,4-Dimethylphenol						10
Di-*n*-Butyl Phthalate						10
Ethylbenzene						10
Fluoride						500
Hexachlorobenzene						10
Hexachlorobutadiene						10
Hexachlorocyclopentadiene						10
Hexachloroethane						20
Methyl Ethyl Ketone						50
Nitrobenzene						10
N-Nitrosodiethylamine						20
N-Nitroso-di-*n*-Butylamine						20
Nonylphenol						333
Pentachlorobenzene						20
Pentachlorophenol						50
Phenanthrene						10

Outfall No.: 001 ☐C ☐G Pollutant	Samp. 1 (µg/L)*	Samp. 2 (µg/L)*	Samp. 3 (µg/L)*	Samp. 4 (µg/L)*	Avg. (µg/L)*	MAL (µg/L)
Polychlorinated Biphenyls (PCBs) (***)						1
Pyridine						20
1,2,4,5-Tetrachlorobenzene						20
1,1,2,2-Tetrachloroethane						10
Tetrachloroethylene						10
Toluene						10
1,1,1-Trichloroethane						10
1,1,2-Trichloroethane						10
Trichloroethylene						10
2,4,5-Trichlorophenol						50
TTHM (Total Trihalomethanes)						10
Vinyl Chloride						10

(*) Indicate units if different from µg/L.
(**) MALs for Cresols: p-Chloro-m-Creso 10 µg/L; 4,6-Dinitro-o-Cresol 50 µg/L; p-Cresol 10 µg/L.
(***) Total PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, PCB-1016.

STATEMENT OF BASIS/TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant:	North Texas Municipal Water District; Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004996000 (TX0133671)
Regulated Activity:	Industrial Wastewater Permit
Type of Application:	New Permit
Request:	New Permit to authorize the discharge of desalination concentrate at a daily average flow not to exceed 9.3 MGD
Authority:	Federal Clean Water Act §402; Texas Water Code §26.027; Title 30 Texas Administrative Code (TAC) Chapter 305, Subchapters C-F, Chapters 307 and 319, Commission Policies; and EPA Guidelines

EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. It is proposed the permit be issued to expire on December 1, 2017 in accordance with 30 TAC §305.71, Basin Permitting.

REASON FOR PROJECT PROPOSED

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit.

PROJECT DESCRIPTION AND LOCATION

The applicant proposes to operate the North Texas Municipal Water District (NTMWD) Leonard Water Treatment Plant.

The proposed Leonard Water Treatment Plant will consist of conventional water treatment (that is, coagulation, filtration, etc.) followed by a desalination process, which will likely include a pretreatment operation. Some of the conventionally treated water will be bypassed around the desalination process to be blended with desalinated water prior to distribution to NTMWD's treated water system. At present, both electrodialysis reversal (EDR) and multi-stage reverse osmosis (RO) are being considered for the desalination process; the final desalination process will be selected based on the performance of pilot studies. The RO process was used to develop the desalination concentrate quantity and quality information required for the application for this permit, as constituent loadings generated from the RO process are expected to be equal to or greater than those generated by the EDR process. Brine residuals (concentrate) from the desalination process will be discharged at a daily average flow not to exceed 9.3 million gallons per day (MGD) via Outfall 001. Domestic wastewater will either be routed to the City of Leonard Publicly Owned Treatment Works (POTW) or to an on-site sewage facility. All other waste generated at the plant, which may include clarifier blowdown, filter backwash, and backwash from maintenance and pretreatment membranes, is expected to be trucked to a permitted landfill or be disposed of in accordance with 30 TAC Chapter 312, Subchapter F.

The plant site is located 700 feet north of the intersection of County Road 4965 and State Highway 78, west of the City of Leonard, Fannin County, Texas.

The effluent is discharged to an unnamed tributary; thence to the Red River Below Lake Texoma in Segment No. 0202 of the Red River Basin. Because Segment No. 0202 is within 300 feet of the outfall, the discharge is considered direct to segment and the unnamed tributary is not assessed. The

designated uses for Segment No. 0202 are contact recreation, public water supply, and high aquatic life use. The effluent limits in the draft permit will maintain and protect the existing instream uses. All determinations are preliminary and subject to additional review and revisions.

In accordance with 30 TAC §307.5 and the TCEQ implementation procedures (January 2003) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in the Red River Below Lake Texoma, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

The discharge from this permit is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES; September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Segment No. 0202 is not currently listed on the State's inventory of impaired and threatened waters (the 2010 Clean Water Act Section 303(d) list).

SUMMARY OF EFFLUENT DATA

Self-reporting data is not available because the facility has not been constructed.

DRAFT PERMIT CONDITIONS

The draft permit authorizes the discharge of desalination concentrate at a daily average flow not to exceed 9.3 million gallons per day via Outfall 001.

Final effluent limitations are established in the draft permit as follows:

Outfall Number	Pollutant	Daily Average, mg/L	Daily Maximum, mg/L
001	Flow	9.3 MGD	18.6 MGD
	Total Suspended Solids	20	30
	Total Dissolved Solids	Report	Report
	Chloride	Report	Report
	Sulfate	Report	Report
	pH (standard units, S.U.)	6.0 S.U., min	9.0 S.U.

Regulations promulgated in Title 40 of the Code of Federal Regulations (40 CFR) require technology-based limitations be placed in wastewater discharge permits based on effluent limitation guidelines, where applicable, or on best professional judgment (BPJ) in the absence of guidelines. No federal effluent limitation guidelines apply to the discharge of desalination concentrate from a potable water treatment plant. A pH limit of between 6.0-9.0 standard units is established in the draft permit based

on BPJ. A screening calculation was performed to evaluate whether this pH limitation would also ensure that the Segment 0202 pH criteria of 6.5-9.0 standard units would be maintained at the edge of the mixing zone. The screening predicts that this pH limitation will be adequate (see Appendix A).

Water quality-based effluent limitations for the protection of aquatic life are presented at Appendix A. Aquatic life criteria established in Table 1 and human health criteria established in Table 2 of 30 TAC Chapter 307 are incorporated into the calculations as well as recommendations by the Water Quality Assessment Team memorandum dated August 3, 2012. TCEQ practice for determining significant potential is to compare the reported analytical data from the facility against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85 percent of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70 percent of the calculated daily average water quality-based effluent limitation. No actual effluent data were submitted with the application because the facility has yet to be built. Conservative model-based estimates of pollutant concentrations were provided, and these values were initially screened against the calculated daily average water quality-based effluent limitations. The estimated concentration of total silver was 70.8% of the calculated daily average limit, and the estimated concentration of cadmium was 82.4% of the calculated daily average limit. Additional information supplied by the applicant on November 21, 2013 included revised estimated concentrations of total silver and total cadmium that are both well below 70% of the calculated daily average limits. After review of this information, no additional monitoring and reporting requirements for total silver or total cadmium were included in the draft permit. Other Requirement No. 6 of the draft permit requires effluent testing once discharge commences, and if any results exceed the 70% or 85% levels, the permit may be reopened to add appropriate effluent monitoring and reporting or limitations.

Screening was also performed to evaluate whether permit limitations were needed for total dissolved solids (TDS), chloride, and sulfate. Based on the results of this screening (see Appendix A), no effluent limitations for TDS, chloride, or sulfate are needed in the draft permit. The effluent concentrations for TDS, chloride, and sulfate submitted in the application are projected values based on source water concentrations and modeling of the solids removal process. Because TDS, chloride, and sulfate will be present in the discharge, monitoring and reporting requirements for TDS, chloride, and sulfate are included in the draft permit based on BPJ.

Biomonitoring requirements have been included in the draft permit at the request of the applicant.

SUMMARY OF CHANGES FROM APPLICATION

The following changes have been made from the application, which make the draft permit more stringent.

1. At the request of the applicant, daily average and daily maximum limitations on total suspended solids have been added to the draft permit.

2. Monitoring and reporting requirements are included in the draft permit for TDS, chloride, and sulfate because these are constituents that will be present in the effluent, and effluent concentrations provided in the application are based on source water concentrations and modeling of the solids removal process.

3. Effluent testing requirements are included in Other Requirement No. 6 of the draft permit because the facility is new and could not supply actual effluent data in the application.

4. At the request of the applicant, whole effluent toxicity (WET) testing, or biomonitoring, requirements have been included in Other Requirement No. 8 of the draft permit.

See the next section for additional changes to the existing permit.

SUMMARY OF CHANGES FROM EXISTING PERMIT

N/A, this is an application for a new permit.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on June 11, 2012 and additional information received on July 12, 2012, November 21, 2013, and July 31, 2014.
2. Existing permits: N/A, new permit.
3. Waste Load Evaluation for Segment No. 0202.
4. TCEQ Rules.
5. Texas Surface Water Quality Standards – 30 TAC §§307.1-307.10, effective July 22, 2010, as approved by EPA.
6. Texas Surface Water Quality Standards - 30 TAC §§307.1-307.10, effective August 17, 2000, and Appendix E, effective February 27, 2002, for portions of the 2010 Standards not approved by EPA.
7. *Procedures to Implement the Texas Surface Water Quality Standards*, Texas Commission on Environmental Quality, January 2003.
8. Appendix D, *Procedures to Implement the Texas Surface Water Quality Standards*, Texas Commission on Environmental Quality, Draft, June 2010.
9. Memos from the Water Quality Standards Implementation Team and the Water Quality Assessment Team of the Water Quality Assessment Section of the TCEQ.
10. "Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits," TCEQ Document No. 98-001.000-OWR-WQ, May 1998.
11. EPA Effluent Guidelines: N/A.
12. Consistency with the Coastal Management Plan: N/A

PROCEDURES FOR FINAL DECISION

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

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

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

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

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

For additional information about this application, contact Karen Holligan at (512) 239-4589.

Karen Holligan
Karen Holligan

August 18, 2014
Date

Appendix A
Calculated Water Quality-Based Effluent Limits

TEXTOX MENU #3 - PERENNIAL STREAM OR RIVER

The water quality-based effluent limitations developed below are calculated using:

Table 1, 2010 Texas Surface Water Quality Standards (30 TAC 307) for Freshwater Aquatic Life
Table 2, 2010 Texas Surface Water Quality Standards for Human Health (except Mercury)
Table 3, 2000 Texas Surface Water Quality Standards for Human Health (Mercury)
"Procedures to Implement the Texas Surface Water Quality Standards," Texas Commission on Environmental Quality, January 2003
"Procedures to Implement the Texas Surface Water Quality Standards," Appendix D, Texas Commission on Environmental Quality, June 2010

PERMIT INFORMATION

Permittee Name:	North Texas Municipal Water District
TPDES Permit No.:	WQ0004996000
Outfall No.:	001
Prepared by:	Karen Holligan
Date:	November 16, 2012

DISCHARGE INFORMATION

Receiving Waterbody:	Red River Below Lake Texoma
Segment No.:	0202
TSS (mg/L):	19
pH (Standard Units):	7.3
Hardness (mg/L as $CaCO_3$):	175
Chloride (mg/L):	197
Effluent Flow for Aquatic Life (MGD):	9.3
Critical Low Flow [7Q2] (cfs):	146
Percent Effluent for Mixing Zone:	8.97
Percent Effluent for Zone of Initial Dilution:	28.28
Effluent Flow for Human Health (MGD):	9.3
Harmonic Mean Flow (cfs):	482
Percent Effluent for Human Health:	2.90
Public Water Supply Use?:	Yes

CALCULATE DISSOLVED FRACTION:

Stream/River Metal	*Intercept (b)*	*Slope (m)*	*Partition Coefficient (Kp)*	*Dissolved Fraction (Cd/Ct)*		*Water Effect Ratio (WER)*	
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	55784.03	0.49		1.00	Assumed
Cadmium	6.60	-1.13	142892.17	0.27		1.00	Assumed
Chromium (Total)	6.52	-0.93	214170.25	0.20		1.00	Assumed
Chromium (+3)	6.52	-0.93	214170.25	0.20		1.00	Assumed
Chromium (+6)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	118501.09	0.31		1.00	Assumed
Lead	6.45	-0.80	267298.87	0.16		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	5.69	-0.57	91434.57	0.37		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	115580.29	0.31		1.00	Assumed
Zinc	6.10	-0.70	160277.47	0.25		1.00	Assumed

CONVERT TISSUE-BASED CRITERIA TO WATER COLUMN CRITERIA:

Parameter	*Water and Fish Criterion (ug/kg)*	*Fish Only Criterion (ug/kg)*	*BCF (L/kg)*	*Water and Fish Criterion (ug/L)*	*Fish Only Criterion (ug/L)*
4,4'-DDD	166.16	166.16	53600	0.0031	0.0031
4,4'-DDE	214.4	214.4	53600	0.004	0.004
4,4'-DDT	209.04	209.04	53600	0.0039	0.0039
Dioxins/Furans	0.0004	0.0004	5000	8.00E-08	8.00E-08
Polychlorinated Biphenyls (PCBs)	19.96	19.96	31200	6.40E-04	6.40E-04

AQUATIC LIFE

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*FW Acute Criterion (ug/L)*	*FW Chronic Criterion (ug/L)*	*WLAa*	*WLAc*	*LTAa*	*LTAc*	*Daily Avg. (ug/L)*	*Daily Max. (ug/L)*
Aldrin	3	N/A	10.6	N/A	6.08	N/A	8.94	18.9
Aluminum	991	N/A	3505	N/A	2008	N/A	2952	6246
Arsenic	340	150	2477	3444	1419	2652	2086	4414
Cadmium	14.8	0.363	194	15.0	111	11.6	17.0	36.0
Carbaryl	2	N/A	7.07	N/A	4.05	N/A	5.96	12.6
Chlordane	2.4	0.004	8.49	0.045	4.86	0.034	0.050	0.107
Chlorpyrifos	0.083	0.041	0.294	0.457	0.168	0.352	0.247	0.523
Chromium (+3)	901	117	16154	6623	9256	5099	7496	15859
Chromium (+6)	15.7	10.6	55.5	118	31.8	91.0	46.8	98.9
Copper	24.1	15.3	277	554	159	426	233	493
Cyanide	45.8	10.7	162	119	92.8	91.8	135	286
4,4'-DDT	1.1	0.001	3.89	0.011	2.23	0.009	0.013	0.027
Demeton	N/A	0.1	N/A	1.11	N/A	0.858	1.26	2.67
Diazinon	0.17	0.17	0.601	1.89	0.345	1.46	0.506	1.07
Dicofol	59.3	19.8	210	221	120	170	177	374
Dieldrin	0.24	0.002	0.849	0.022	0.486	0.017	0.025	0.053
Diuron	210	70	743	780	426	601	626	1324
Endosulfan I (alpha)	0.22	0.056	0.778	0.624	0.446	0.481	0.655	1.39
Endosulfan II (beta)	0.22	0.056	0.778	0.624	0.446	0.481	0.655	1.39
Endosulfan sulfate	0.22	0.056	0.778	0.624	0.446	0.481	0.655	1.39
Endrin	0.086	0.002	0.304	0.022	0.174	0.017	0.025	0.053
Guthion	N/A	0.01	N/A	0.111	N/A	0.086	0.126	0.267
Heptachlor	0.52	0.004	1.84	0.045	1.05	0.034	0.050	0.107
Hexachlorocyclohexane (Lindane)	1.126	0.08	3.98	0.892	2.28	0.687	1.01	2.14
Lead	118	4.60	2539	312	1455	240	353	747
Malathion	N/A	0.01	N/A	0.111	N/A	0.086	0.126	0.267
Mercury	2.4	1.3	8.49	14.5	4.86	11.2	7.15	15.1
Methoxychlor	N/A	0.03	N/A	0.334	N/A	0.257	0.379	0.801
Mirex	N/A	0.001	N/A	0.011	N/A	0.009	0.013	0.027
Nickel	752	83.5	7277	2548	4170	1962	2884	6101
Nonylphenol	28	6.6	99.0	73.6	56.7	56.6	83.3	176
Parathion (ethyl)	0.065	0.013	0.230	0.145	0.132	0.112	0.164	0.347
Pentachlorophenol	11.8	9.05	41.7	101	23.9	77.7	35.1	74.3
Phenanthrene	30	30	106	334	60.8	257	89.4	189
Polychlorinated Biphenyls (PCBs)	2	0.014	7.07	0.156	4.05	0.120	0.177	0.374
Selenium	20	5	70.7	55.7	40.5	42.9	59.6	126
Silver (free ion)	0.8	N/A	101	N/A	57.7	N/A	84.8	179
Toxaphene	0.78	0.0002	2.76	0.0022	1.58	0.0017	0.0025	0.0053
Tributyltin (TBT)	0.13	0.024	0.460	0.268	0.263	0.206	0.303	0.641
2,4,5 Trichlorophenol	136	64	481	713	276	549	405	857

AQUATIC LIFE

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*FW Acute Criterion (ug/L)*	*FW Chronic Criterion (ug/L)*	*WLAa*	*WLAc*	*LTAa*	*LTAc*	*Daily Avg. (ug/L)*	*Daily Max. (ug/L)*
Zinc	188	190	2694	8559	1543	6590	2269	4800

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*Water and Fish Criterion (ug/L)*	*Fish Only Criterion (ug/L)*	*WLAh*	*LTAh*	*Daily Avg. (ug/L)*	*Daily Max. (ug/L)*
Acrylonitrile	0.8	3.8	27.60	25.67	37.73	79.82
Aldrin	0.00094	0.001	0.032	0.030	0.044	0.094
Anthracene	5569	N/A	192116	178668	262642	555658
Antimony	6	1071	207	192	283	599
Arsenic	10	N/A	711	661	971	2055
Barium	2000	N/A	68995	64165	94323	199554
Benzene	5	513	172	160	236	499
Benzidine	0.00086	0.002	0.030	0.028	0.041	0.086
Benzo(a)anthracene	0.068	0.33	2.35	2.18	3.21	6.78
Benzo(a)pyrene	0.068	0.33	2.35	2.18	3.21	6.78
Bis(chloromethyl)ether	0.0024	0.44	0.083	0.077	0.113	0.239
Bis(2-chloroethyl)ether	0.3	5.27	10.3	9.62	14.1	29.9
Bis(2-ethylhexyl)phthalate	6	41	207	192	283	599
Bromodichloromethane	10.2	322	352	327	481	1018
Bromoform	69.1	2175	2384	2217	3259	6895
Cadmium	5	N/A	641	596	876	1853
Carbon Tetrachloride	4.1	29	141	132	193	409
Chlordane	0.008	0.0081	0.276	0.257	0.377	0.798
Chlorobenzene	100	5201	3450	3208	4716	9978
Chlorodibromomethane (Dibromochloromethane)	7.6	239	262	244	358	758
Chloroform	70	7143	2415	2246	3301	6984
Chromium (+6)	62	502	2139	1989	2924	6186
Chrysene	68.13	327	2350	2186	3213	6798
Cresols	736	1981	25390	23613	34711	73436
Cyanide	200	N/A	6899	6417	9432	19955
4,4'-DDD	0.0031	0.0031	0.107	0.099	0.146	0.309
4,4'-DDE	0.004	0.004	0.138	0.128	0.189	0.399
4,4'-DDT	0.0039	0.0039	0.135	0.125	0.184	0.389
2,4'-D	70	N/A	2415	2246	3301	6984
Danitol	5.39	5.44	186	173	254	538
1,2-Dibromoethane	0.16	2.13	5.52	5.13	7.55	16.0
m-Dichlorobenzene	473	1445	16317	15175	22307	47195
o-Dichlorobenzene	600	4336	20698	19250	28297	59866
p-Dichlorobenzene	75	N/A	2587	2406	3537	7483
3,3'-Dichlorobenzidine	0.32	0.44	11.0	10.3	15.1	31.9
1,2-Dichloroethane	5	553	172	160	236	499
1,1-Dichloroethylene	7	23916	241	225	330	698
Dichloromethane	5	5926	172	160	236	499
1,2-Dichloropropane	5	226	172	160	236	499
1,3-Dichloropropene (1,3- Dichloropropylene)	3.4	211	117	109	160	339
Dicofol	0.076	0.076	2.62	2.44	3.58	7.58

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*Water and Fish Criterion (ug/L)*	*Fish Only Criterion (ug/L)*	*WLAh*	*LTAh*	*Daily Avg. (ug/L)*	*Daily Max. (ug/L)*
Dieldrin	0.0005	0.0005	0.017	0.016	0.024	0.050
2,4-Dimethylphenol	257	571	8866	8245	12120	25643
Di-n-Butyl Phthalate	1318	3010	45468	42285	62159	131506
Dioxins/Furans (TCDD Equivalents)	8.00E-08	8.00E-08	2.76E-06	2.57E-06	3.77E-06	7.98E-06
Endrin	0.2	0.2	6.90	6.42	9.43	20.0
Ethylbenzene	700	7143	24148	22458	33013	69844
Fluoride	4000	N/A	137990	128330	188646	399108
Heptachlor	0.0015	0.0015	0.052	0.048	0.071	0.150
Heptachlor Epoxide	0.00074	0.00075	0.026	0.024	0.035	0.074
Hexachlorobenzene	0.0044	0.0045	0.152	0.141	0.208	0.439
Hexachlorobutadiene	6.5	274	224	209	307	649
Hexachlorocyclohexane (alpha)	0.05	0.093	1.72	1.60	2.36	4.99
Hexachlorocyclohexane (beta)	0.17	0.33	5.86	5.45	8.02	17.0
Hexachlorocyclohexane (gamma) (Lindane)	0.2	6.2	6.90	6.42	9.43	20.0
Hexachlorocyclopentadiene	50	N/A	1725	1604	2358	4989
Hexachloroethane	27	62	931	866	1273	2694
Hexachlorophene	0.008	0.008	0.276	0.257	0.377	0.798
Lead	1.15	3.83	241	224	330	697
Mercury	0.0122	0.0122	0.421	0.391	0.575	1.217
Methoxychlor	0.33	0.33	11.4	10.6	15.6	32.9
Methyl Ethyl Ketone	13932	1500000	480618	446975	657053	1390093
Nickel	332	1140	31350	29156	42859	90674
Nitrate-Nitrogen (as Total Nitrogen)	10000	N/A	344974	320826	471615	997770
Nitrobenzene	11	463	379	353	519	1098
N-Nitrosodiethylamine	0.0037	2.1	0.128	0.119	0.174	0.369
N-Nitroso-di-n-Butylamine	0.119	4.2	4.11	3.82	5.61	11.9
Pentachlorobenzene	1	1	34.5	32.1	47.2	99.8
Pentachlorophenol	1	57	34.5	32.1	47.2	99.8
Polychlorinated Biphenyls (PCBs)	6.40E-04	6.40E-04	0.022	0.021	0.030	0.064
Pyridine	23	2014	793	738	1085	2295
Selenium	50	N/A	1725	1604	2358	4989
1,2,4,5-Tetrachlorobenzene	0.65	0.71	22.4	20.9	30.7	64.9
1,1,2,2-Tetrachloroethane	3.2	76	110	103	151	319
Tetrachloroethylene	5	49	172	160	236	499
Thallium	0.75	1.5	25.9	24.1	35.4	74.8
Toluene	1000	N/A	34497	32083	47161	99777
Toxaphene	0.0053	0.0053	0.183	0.170	0.250	0.529
2,4,5-TP (Silvex)	7.3	7.6	252	234	344	728
1,1,1-Trichloroethane	200	956663	6899	6417	9432	19955
1,1,2-Trichloroethane	5	295	172	160	236	499
Trichloroethylene	5	649	172	160	236	499
2,4,5-Trichlorophenol	1194	2435	41190	38307	56311	119134
TTHM (Sum of Total Trihalomethanes)	80	N/A	2760	2567	3773	7982
Vinyl Chloride	0.25	24	8.62	8.02	11.8	24.9

CALCULATE 70% AND 85% OF DAILY AVERAGE EFFLUENT LIMITATIONS

Aquatic Life		
Parameter	***70%***	***85%***
Aldrin	6.26	7.60
Aluminum	2066	2509
Arsenic	1460	1773
Cadmium	11.9	14.5
Carbaryl	4.17	5.06
Chlordane	0.035	0.043
Chlorpyrifos	0.173	0.210
Chromium (+3)	5247	6372
Chromium (+6)	32.7	39.8
Copper	163	198
Cyanide	94.5	115
4,4'-DDT	0.009	0.011
Demeton	0.883	1.07
Diazinon	0.354	0.430
Dicofol	124	150
Dieldrin	0.018	0.021
Diuron	438	532
Endosulfan (alpha)	0.459	0.557
Endosulfan (beta)	0.459	0.557
Endosulfan sulfate	0.459	0.557
Endrin	0.018	0.021
Guthion	0.088	0.107
Heptachlor	0.035	0.043
Hexachlorocyclohexane (Lindane)	0.707	0.858
Lead	247	300
Malathion	0.088	0.107
Mercury	5.00	6.08
Methoxychlor	0.265	0.322
Mirex	0.009	0.011
Nickel	2019	2451
Nonylphenol	58.3	70.8
Parathion (ethyl)	0.115	0.139
Pentachlorophenol	24.6	29.9
Phenanthrene	62.6	76.0
Polychlorinated Biphenyls (PCBs)	0.124	0.150
Selenium	41.7	50.6
Silver (free ion)	59.4	72.1
Toxaphene	0.0018	0.0021
Tributyltin (TBT)	0.212	0.257
2,4,5 Trichlorophenol	284	344
Zinc	1588	1928

Human Health

Parameter	*70%*	*85%*
Acrylonitrile	26.4	32.1
Aldrin	0.031	0.038
Anthracene	183850	223246
Antimony	198	241
Arsenic	680	826
Barium	66026	80174
Benzene	165	200
Benzidine	0.028	0.034
Benzo(a)anthracene	2.24	2.73
Benzo(a)pyrene	2.24	2.73
Bis(chloromethyl)ether	0.079	0.096
Bis(2-chloroethyl)ether	9.90	12.0
Bis(2-ethylhexyl)phthalate	198	241
Bromodichloromethane	337	409
Bromoform	2281	2770
Cadmium	613	745
Carbon Tetrachloride	135	164
Chlordane	0.264	0.321
Chlorobenzene	3301	4009
Chlorodibromomethane (Dibromochloromethane)	251	305
Chloroform	2311	2806
Chromium (+6)	2047	2485
Chrysene	2249	2731
Cresols	24298	29504
Cyanide	6603	8017
4,4'-DDD	0.102	0.124
4,4'-DDE	0.132	0.160
4,4'-DDT	0.129	0.156
2,4'-D	2311	2806
Danitol	178	216
1,2-Dibromoethane	5.28	6.41
m-Dichlorobenzene	15615	18961
o-Dichlorobenzene	19808	24052
p-Dichlorobenzene	2476	3007
3,3'-Dichlorobenzidine	10.6	12.8
1,2-Dichloroethane	165	200
1,1-Dichloroethylene	231	281
Dichloromethane	165	200
1,2-Dichloropropane	165	200
1,3-Dichloropropene (1,3- Dichloropropylene)	112	136
Dicofol	2.51	3.05
Dieldrin	0.017	0.020
2,4-Dimethylphenol	8484	10302
Di-n-Butyl Phthalate	43511	52835
Dioxins/Furans (TCDD Equivalents)	2.64E-06	3.21E-06
Endrin	6.60	8.02
Ethylbenzene	23109	28061
Fluoride	132052	160349
Heptachlor	0.050	0.060
Heptachlor Epoxide	0.024	0.030
Hexachlorobenzene	0.145	0.176
Hexachlorobutadiene	215	261

Human Health

Parameter	*70%*	*85%*
Hexachlorocyclohexane (alpha)	1.65	2.00
Hexachlorocyclohexane (beta)	5.61	6.81
Hexachlorocyclohexane (gamma) (Lindane)	6.60	8.02
Hexachlorocyclopentadiene	1651	2004
Hexachloroethane	891	1082
Hexachlorophene	0.264	0.321
Lead	231	280
Mercury	0.403	0.489
Methoxychlor	10.9	13.2
Methyl Ethyl Ketone	459937	558495
Nickel	30001	36430
Nitrate-Nitrogen (as Total Nitrogen)	330130	400872
Nitrobenzene	363	441
N-Nitrosodiethylamine	0.122	0.148
N-Nitroso-di-n-Butylamine	3.93	4.77
Pentachlorobenzene	33.0	40.1
Pentachlorophenol	33.0	40.1
Polychlorinated Biphenyls (PCBs)	0.021	0.026
Pyridine	759	922
Selenium	1651	2004
1,2,4,5-Tetrachlorobenzene	21.5	26.1
1,1,2,2-Tetrachloroethane	106	128
Tetrachloroethylene	165	200
Thallium	24.8	30.1
Toluene	33013	40087
Toxaphene	0.175	0.212
2,4,5-TP (Silvex)	241	293
1,1,1-Trichloroethane	6603	8017
1,1,2-Trichloroethane	165	200
Trichloroethylene	165	200
2,4,5-Trichlorophenol	39418	47864
TTHM (Sum of Total Trihalomethanes)	2641	3207
Vinyl Chloride	8.25	10.0

Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate

Menu 3 - Discharge to a Perennial Stream or River

Applicant Name: North Texas Municipal Water District
Permit Number: WQ0004996000
Segment Number: 0202

Enter values needed for screening:			Data Source
QE - Average effluent flow	9.3	MGD	Permit application
QS - Perennial stream harmonic mean flow	482.00	cfs	Critical conditions memo
QE - Average effluent flow	14.3892	cfs	Calculated
CA - TDS - ambient segment concentration	784	mg/L	June 2010 IP, Appendix D
CA - chloride - ambient segment concentration	197	mg/L	June 2010 IP, Appendix D
CA - sulfate - ambient segment concentration	150	mg/L	June 2010 IP, Appendix D
CC - TDS - segment criterion	1,100	mg/L	2010 TSWQS, Appendix A
CC - chloride - segment criterion	375	mg/L	2010 TSWQS, Appendix A
CC - sulfate - segment criterion	250	mg/L	2010 TSWQS, Appendix A
CE - TDS - average effluent concentration	5,000	mg/L	Permit application
CE - chloride - average effluent concentration	1,725	mg/L	Permit application
CE - sulfate - average effluent concentration	1,000	mg/L	Permit application

Screening Equation

$$CC \geq [(QS)(CA) + (QE)(CE)]/[QE + QS]$$

Permit Limit Calculations

TDS

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	11,685
Calculate the LTA	LTA = WLA * 0.93	10,867
Calculate the daily average	Daily Avg. = LTA * 1.47	15,975
Calculate the daily maximum	Daily Max. = LTA * 3.11	33,797
Calculate 70% of the daily average	70% of Daily Avg. =	11,182
Calculate 85% of the daily average	85% of Daily Avg. =	13,579

No permit limitations required if:	5,000	≤	11,182		
Reporting required if:	5,000	>	11,182	but ≤	13,579
Permit limits may be required if:	5,000	>	13,579		

Chloride

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	**6,338**
Calculate the LTA	LTA = WLA * 0.93	**5,894**
Calculate the daily average	Daily Avg. = LTA * 1.47	**8,664**
Calculate the daily maximum	Daily Max. = LTA * 3.11	**18,330**
Calculate 70% of the daily average	70% of Daily Avg. =	**6,065**
Calculate 85% of the daily average	85% of Daily Avg. =	**7,364**

No permit limitations required if:	**1,725**	**≤**	**6,065**		
Reporting required if:	**1,725**	**>**	**6,065**	**but ≤**	**7,364**
Permit limits may be required if:	**1,725**	**>**	**7,364**		

Sulfate

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	**3,600**
Calculate the LTA	LTA = WLA * 0.93	**3,348**
Calculate the daily average	Daily Avg. = LTA * 1.47	**4,921**
Calculate the daily maximum	Daily Max. = LTA * 3.11	**10,411**
Calculate 70% of the daily average	70% of Daily Avg. =	**3,445**
Calculate 85% of the daily average	85% of Daily Avg. =	**4,183**

No permit limitations required if:	**1,000**	**≤**	**3,445**		
Reporting required if:	**1,000**	**>**	**3,445**	**but ≤**	**4,183**
Permit limits may be required if:	**1,000**	**>**	**4,183**		

Conclusion

Based on these screenings, neither effluent limitations nor monitoring are required for TDS, sulfate, or chloride.

Screening Calculations for pH

This calculation of resulting pH after a mixture of two flows is based on the procedure in EPA's DESCON program (EPA, 1988. Technical Guidance on Supplementary Stream Design Conditions for Steady State Modeling. USEPA Office of Water, Washington, D.C. Sources of input data are noted within square brackets.

Input

1. Dilution Factor at Mixing Zone Boundary [*memo from Water Quality Assessment Team dated August 3, 2012*]:	11.150
Receiving Water Characteristics	
2. Temperature (°C) [*Segment 0202 daily maximum criterion*]:	33.89
3. pH (standard units) [*Segment 0202 15th percentile value*]:	7.70
4. Alkalinity (mg/L as $CaCO_3$) [*Segment 0202 15th percentile value*]:	94.00
Effluent Characteristics	
5. Temperature (°C) [*estimated to be 90°F*]:	32.22
6. pH (standard units) [*minimum pH limit*]:	6.00
7. Alkalinity (mg/L as $CaCO_3$) [*estimated alkalinity at low pH*]:	20.00

Output

1. Ionization Constants	
Upstream/Background pKa:	6.31
Effluent pKa:	6.31
2. Ionization Fractions	
Upstream/Background Ionization Fraction:	0.96
Effluent Ionization Fraction:	0.33
3. Total Inorganic Carbon	
Upstream/Background Total Inorganic Carbon (mg/L as $CaCO_3$):	97.81
Effluent Total Inorganic Carbon (mg/L as $CaCO_3$):	61.25
4. Conditions at Mixing Zone Boundary	
Temperature (°C):	33.74
Alkalinity (mg/L as $CaCO_3$):	87.36
Total Inorganic Carbon (mg/L as $CaCO_3$):	94.53
pKa:	6.31
pH at Mixing Zone Boundary:	**7.39**

Conclusion: the pH limits of 6.0-9.0 standard units are predicted to ensure that the pH criteria of 6.5-9.0 for Segment 0202 will be maintained at the edge of the mixing zone.

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Compliance History Report

PENDING Compliance History Report for CN601365448, RN106437320, Rating Year 2015 which includes Compliance History (CH) components from September 1, 2010, through August 31, 2015.

Customer, Respondent, or Owner/Operator: CN601365448, North Texas Municipal Water District **Classification:** SATISFACTORY **Rating:** 1.26

Regulated Entity: RN106437320, NORTH TEXAS MWD LEONARD WTF **Classification:** UNCLASSIFIED **Rating:** -----

Complexity Points: 3 **Repeat Violator:** NO

CH Group: 14 - Other

Location: 700 FT N OF INTX OF CR 4965 AND STATE HWY 78, W OF LEONARD FANNIN, TX, FANNIN COUNTY

TCEQ Region: REGION 04 - DFW METROPLEX

ID Number(s):
WASTEWATER PERMIT WQ0004996000 **WASTEWATER** EPA ID TX0133671

Compliance History Period: September 01, 2010 to August 31, 2015 **Rating Year:** 2015 **Rating Date:** 09/01/2015

Date Compliance History Report Prepared: September 18, 2015

Agency Decision Requiring Compliance History: Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

Component Period Selected: September 01, 2010 to August 31, 2015

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: Karen Holligan **Phone:** (512) 239-4589

Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five year compliance period? NO
2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO
3) If **YES** for #2, who is the current owner/operator? N/A
4) If **YES** for #2, who was/were the prior owner(s)/operator(s)? N/A
5) If **YES**, when did the change(s) in owner or operator occur? N/A

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:
N/A

B. Criminal convictions:
N/A

C. Chronic excessive emissions events:
N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):
N/A

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):
A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:
N/A

G. Type of environmental management systems (EMSs):
N/A

H. Voluntary on-site compliance assessment dates:
N/A

I. Participation in a voluntary pollution reduction program:
N/A

J. Early compliance:
N/A

Sites Outside of Texas:
N/A

Compliance History Report

Customer/Respondent/Owner-Operator:	CN603851551	NORTH TEXAS MUNICIPAL WATER DISTRICT	Classification: AVERAGE	Rating: 1.00
Regulated Entity:	RN106437320	NORTH TEXAS MWD LEONARD WTF	Classification:	Site Rating:
ID Number(s):	WASTEWATER	PERMIT		WQ0004996000
	WASTEWATER	EPA ID		TX0133671
Location:	700 FT N OF INTX OF CR 4965 AND STATE HWY 78, W OF LEONARD			
TCEQ Region:	REGION 04 - DFW METROPLEX			
Date Compliance History Prepared:	August 21, 2012			
Agency Decision Requiring Compliance History:	Enforcement			
Compliance Period:	June 01, 2007 to May 30, 2012			

TCEQ Staff Member to Contact for Additional Information Regarding this Compliance History

Name: Karen Holligan Phone: 239 - 4589

Site Compliance History Components

1. Has the site been in existence and/or operation for the full five year compliance period? NO
2. Has there been a (known) change in ownership/operator of the site during the compliance period? NO
3. If **YES**, who is the current owner/operator? N/A
4. If **YES**, who was/were the prior owner(s)/operator(s)? N/A
5. If **YES**, when did the change(s) in owner or operator occur? N/A
6. Rating Date: N/A Repeat Violator: NO

Components (Multimedia) for the Site :

A. Final Enforcement Orders, court judgments, and consent decrees of the State of Texas and the federal government.

N/A

B. Any criminal convictions of the state of Texas and the federal government.

N/A

C. Chronic excessive emissions events.

N/A

D. The approval dates of investigations. (CCEDS Inv. Track. No.)

N/A

E. Written notices of violations (NOV). (CCEDS Inv. Track. No.)

N/A

F. Environmental audits.

N/A

G. Type of environmental management systems (EMSs).

H. Voluntary on-site compliance assessment dates.

N/A

I. Participation in a voluntary pollution reduction program.

N/A

J. Early compliance.

N/A

Sites Outside of Texas

N/A