FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For draft Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010232001, EPA I.D. No. TX0067881, to discharge to water in the state.

Issuing Office: Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Applicant: New Braunfels Utilities
263 Main Plaza
New Braunfels, Texas 78131

Prepared By: Abdur Rahim
Domestic Permits Team
Domestic Wastewater Section (MC 148)
Water Quality Division
(512) 239-0504

Date: April 17, 2026

Permit Action: Renewal

1. EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **five years from the date of issuance**.

2. APPLICANT ACTIVITY

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of the existing permit that authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 4.2 million gallons per day (MGD) in the Interim I phase, an annual average flow not to exceed 9.3 MGD in the Interim II phase, and an annual average flow not to exceed 15.4 MGD in the Final phase. The existing wastewater treatment facility serves the New Braunfels Central and South Sides.

3. FACILITY AND DISCHARGE LOCATION

The plant site is located at 1608 Coco Drive, in the City of New Braunfels, in Comal County, Texas 78130.

Outfall Location:

Outfall Number	Latitude	Longitude
001	29.687351 N	98.097869 W
002	29.686402 N	98.099436 W

The treated effluent is discharged via Outfall 001 and Outfall 002 to an unnamed

tributary of the Guadalupe River, thence to the Guadalupe River Below Comal River in Segment No. 1804 of the Guadalupe River Basin. The unclassified receiving water use is minimal aquatic life use for the unnamed tributary. The designated uses for Segment No. 1804 are primary contact recreation, public water supply, aquifer protection, and high aquatic life use.

4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL

The South Kuehler Wastewater Treatment Facility is an activated sludge process plant using the complete mix mode with single-stage nitrification. Treatment units in Interim I phase include bar screen, an aerated grit chamber, four aeration basins, two final clarifiers, two aerobic digesters, a sludge gravity thickener, belt filter press, two chlorine contact chambers, and a dechlorination chamber. Treatment untis in Interim II phase will include bar screen, two aerated grit chambers, nine aeration basins, five final clarifiers, an anaerobic basin, a anoxic selector basin, four tertiary effluent filters, six aerobic digesters, two sludge gravity thickeners, belt filter press, and an ultra-violet light (UV) disinfection system. Treatment untis in Final phase will include twelve aeration basins, eight final clarifiers, four anaerobic basins, four anoxic selector basins, six tertiary effluent filters, six aerobic digesters, two sludge gravity thickeners, belt filter press, and an UV disinfection system. The facility is operating in Interim I phase.

Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ-permitted landfill, Mesquite Creek Landfill, Permit No. 66B, in Comal County. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

5. INDUSTRIAL WASTE CONTRIBUTION

The draft permit includes pretreatment requirements that are appropriate for a facility of this size and complexity. The facility does not appear to receive significant industrial wastewater contributions.

6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES

The following is a summary of the applicant's effluent monitoring data for the period from January 2024 through January 2026. The average of Daily Average value is computed by the averaging of all 30-day average values for the reporting period for each parameter: flow, five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), and total phosphorous (P). The average of Daily Average value for *Escherichia coli* (*E. coli*) in colony-forming units (CFU) or most probable number (MPN) per 100 ml is calculated via geometric mean.

Parameter	Average of Daily Avg
Flow, MGD	2.25
BOD_5, mg/l	4.9
TSS, mg/l	4.9
Total P, mg/l	2.04
E. coli, CFU or MPN per 100 ml	5

7. DRAFT PERMIT CONDITIONS AND MONITORING REQUIREMENTS

The effluent limitations and monitoring requirements for those parameters that are limited in the draft permit are as follows:

A. INTERIM I PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The annual average flow of effluent shall not exceed 4.2 MGD*, nor shall the average discharge during any two-hour period (2-hour peak) exceed 8,750 gallons per minute.

Outfalls 001 and 002

Parameter	30-Day Average		7-Day Average	Daily Maximum
	mg/l	lbs/day	mg/l	mg/l
BOD_5	10	350	15	25
TSS	15	525	25	40
Total Phosphorus (P)	3	105	6	8
DO (minimum)	4.0	N/A	N/A	N/A
E. coli, CFU or MPN per 100 ml	126	N/A	N/A	399

*The combined annual average flow of Outfall 001 and 002 shall not exceed 4.2 MGD.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual and shall monitor total chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Parameter	Monitoring Requirement
Flow, MGD	Continuous
BOD_5	Two/week
TSS	Two/week
Total P	Two/week
DO	Two/week
E. coli	One/week

B. INTERIM II PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall 002

The annual average flow of effluent shall not exceed 9.3 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 19,375 gallons per minute.

Parameter	30-Day Average		7-Day Average	Daily Maximum
	mg/l	lbs/day	mg/l	mg/l
$CBOD_5$	10	776	15	25
TSS	15	1,163	25	40
NH_3-N	3	233	6	10
Total Phosphorus	1	78	2	4
DO (minimum)	4.0	N/A	N/A	N/A
E. coli, CFU or MPN/100 ml	126	N/A	N/A	399

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored five times per week by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The permittee shall utilize a UV system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Parameter	Monitoring Requirement
Flow, MGD	Continuous
$CBOD_5$	Five/week
TSS	Five/week
NH_3-N	Five/week
Total P	Five/week
DO	Five/week
E. coli	Daily

C. FINAL PHASE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall 002

The annual average flow of effluent shall not exceed 15.4 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 32,083 gallons per minute.

Parameter	30-Day Average		7-Day Average	Daily Maximum
	mg/l	lbs/day	mg/l	mg/l
$CBOD_5$	10	1,284	15	25
TSS	15	1,927	25	40
NH_3-N	3	385	6	10
Total Phosphorus	0.8	103	1.6	3.2
DO (minimum)	4.0	N/A	N/A	N/A

E. coli, CFU or MPN/100 ml	126	N/A	N/A	N/A

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The permittee shall utilize a UV system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Parameter	Monitoring Requirement
Flow, MGD	Continuous
$CBOD_5$	One/day
TSS	One/day
NH_3-N	One/day
Total P	One/day
DO	One/day
E. coli	Daily

D. SEWAGE SLUDGE REQUIREMENTS

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ-permitted landfill, Mesquite Creek Landfill, Permit No. 66B, in Comal County. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

E. PRETREATMENT REQUIREMENTS

Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 305 which references 40 CFR Part 403, General Pretreatment Regulations for Existing and New Sources of Pollution *[rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].* The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

The permittee has a pretreatment program which was approved by the U.S. Environmental Protection Agency (EPA) on **December 4, 1992**, and modified on **September 30, 1993, August 19, 2011**, and **October 17, 2022** (Streamlining Rule and TBLLs). The permittee is required, under the conditions of the approved pretreatment program, to prepare annually a list of industrial users which during the preceding twelve months were in significant noncompliance with applicable pretreatment requirements for those facilities

covered under the program. This list is to be published annually during the month of **December** in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW.

Effective December 21, 2025, the permittee must submit the pretreatment program annual status report electronically using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. [rev. Federal Register/ Vol. 80/ No. 204/ Friday, October 22, 2015/ Rules and Regulations, pages 64064-64158].

The permittee is under a continuing duty to: establish and enforce specific local limits to implement the provisions of 40 CFR §403.5, to develop and enforce local limits as necessary, and to modify the approved POTW pretreatment program as necessary to comply with federal, state, and local law, as amended. The permittee is required to effectively enforce such limits and to modify their pretreatment program, including the Legal Authority, Enforcement Response Plan, and/or Standard Operating Procedures, if required by the Executive Director to reflect changing conditions at the POTW.

F. WHOLE EFFLUENT TOXICITY (BIOMONITORING) REQUIREMENTS

(1) The draft permit includes 48-hour acute freshwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%. The low-flow effluent concentration (critical dilution) is defined as 100% effluent. The critical dilution is in accordance with the "Aquatic Life Criteria" section of the "Water Quality Based Effluent Limitations/Conditions" section.

(a) Acute static renewal 48-hour definitive toxicity tests using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.

(b) Acute static renewal 48-hour definitive toxicity test using the fathead minnow (*Pimephales promelas*). The frequency of the testing is once per quarter for at least the first year of testing, after which the permittee may apply for a testing frequency reduction.

(2) The draft permit includes the following minimum 24-hour acute freshwater biomonitoring requirements at a frequency of once per six months:

(a) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*).

(b) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*).

G. BUFFER ZONE REQUIREMENTS

The draft permit includes a requirement for the permittee to obtain legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3).

H. SUMMARY OF CHANGES FROM APPLICATION

None.

I. SUMMARY OF CHANGES FROM EXISTING PERMIT

The Standard Permit Conditions, Sludge Provisions, Other Requirements, and Biomonitoring sections of the draft permit have been updated.

For Publicly Owned Treatment Works (POTWs), permitted facilities should continue reporting unauthorized discharges, sanitary sewer overflows, and bypasses using the Noncompliance Notification form (TCEQ-00501) until the online electronic reporting system is available through the TCEQ website.

8. DRAFT PERMIT RATIONALE

A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated in Title 40 of the CFR require that technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, or on best professional judgment (BPJ) in the absence of guidelines.

Effluent limitations for maximum and minimum pH are in accordance with 40 CFR § 133.102(c) and 30 TAC § 309.1(b).

B. WATER QUALITY SUMMARY AND COASTAL MANAGEMENT PLAN

(1) WATER QUALITY SUMMARY

The treated effluent is discharged via Outfall 001 and Outfall 002 to an unnamed tributary of the Guadalupe River, thence to the Guadalupe River Below Comal River in Segment No. 1804 of the Guadalupe River Basin. The unclassified receiving water use is minimal aquatic life use for the unnamed tributary. The designated uses for Segment No. 1804 are primary contact recreation, public water supply, aquifer protection, and high aquatic life use. The effluent limitations in the draft permit will maintain and protect the existing instream uses. All determinations are preliminary and subject to additional review and/or revisions.

No priority watershed of critical concern has been identified in Segment 1804. However, the Peck's cave amphipod (*Stygobromus pecki*), Comal Springs dryopid beetle (*Stygoparnus comalensis*), Comal Springs riffle beetle (*Heterelmis comalensis*), and the Fountain Darter (*Etheostoma fonticola*) can occur in Comal County. This determination is based on the

United States Fish and Wildlife Service's (USFWS's) biological opinion on the State of Texas authorization of the TPDES (September 14, 1998; October 21, 1998, update). To make this determination for TPDES permits, TCEQ and EPA only consider 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 permit does not require EPA review with respect to the presence of endangered or threatened species. This determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion.

Segment No. 1804 is currently listed on the State's inventory of impaired or threatened waters (the 2024 CWA § 303(d) list). The listing is for bacteria in water (recreation use) from TP-1 dam on Lake Dunlap upstream to a point immediately upstream of the confluence of the Comal River in Comal County (Assessment Unit [AU] 1804_04). This facility is designed to provide adequate disinfection and, when operated properly, should not add to the bacterial impairment of the segment. In addition, in order to ensure that the proposed discharge meets the stream bacterial standard, an effluent limitation of 126 CFU or MPN of *E. coli* per 100 ml has been continued in the draft permit.

The pollutant analysis of treated effluent provided by the permittee in the application indicated 559 mg/l total dissolved solids (TDS), 80 mg/l sulfate, and 173 mg/l chloride present in the effluent. The segment criteria for Segment No. 1804 are 400 mg/l for TDS, 50 mg/l for sulfate, and 100 mg/l for chlorides. Based on dissolved solids screening, no additional limits or monitoring requirements are needed for total dissolved solids, chloride, or sulfate. See Attachment A of this Fact Sheet.

The effluent limitations and conditions in the draft permit comply with EPA-approved portions of the 2018 Texas Surface Water Quality Standards (TSWQS), 30 TAC §§ 307.1 - 307.10, effective March 1, 2018; 2014 TSWQS, effective March 6, 2014; 2010 TSWQS, effective July 22, 2010; and 2000 TSWQS, effective July 26, 2000. The effluent limitations and/or conditions in the draft permit comply with the requirements in 30 TAC Chapter 311: Statewide Lake Rule.

(2) CONVENTIONAL PARAMETERS

Effluent limitations for the conventional effluent parameters (i.e., Five-Day Biochemical Oxygen Demand or Five-Day Carbonaceous Biochemical Oxygen Demand, Ammonia Nitrogen, etc.) are based on stream standards and waste load allocations for water quality-limited streams as established in the TSWQS and the State of Texas Water Quality Management Plan (WQMP).

The effluent limitations in the draft permit have been reviewed for consistency with the WQMP. The existing effluent limitations are consistent with the approved WQMP.

The effluent limitations in the draft permit meet the requirements for

secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Effluent Limitations.

(3) COASTAL MANAGEMENT PLAN

The facility is not located in the Coastal Management Program boundary.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

(1) GENERAL COMMENTS

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

(2) AQUATIC LIFE CRITERIA

(a) SCREENING

Water quality-based effluent limitations are calculated from freshwater aquatic life criteria found in Table 1 of the Texas Surface Water Quality Standards (30 TAC Chapter 307).

There is no mixing zone or zone of initial dilution for this discharge directly to an intermittent stream; acute freshwater criteria apply at the end of pipe. Chronic freshwater criteria are applied in the perennial freshwater stream.

For the intermittent stream, the percent effluent for acute protection of aquatic life is 100% because the 7Q2 of the intermittent stream is 0.0 cfs. This effluent percentage also provides acute protection of aquatic life in the perennial stream. TCEQ uses the mass balance equation to estimate dilution in the perennial stream during critical conditions. The estimated dilution for chronic protection of aquatic life is calculated using the permitted flow of 15.4 MGD and the 7-day, 2-year (7Q2) flow of 274 cfs for Guadalupe River Below Comal River**,** the perennial stream. The following critical effluent percentages are being used:

Acute Effluent %: 100% Chronic Effluent %: 8%

Waste load allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-of-

pipe effluent concentration that can be discharged when, after mixing in the receiving stream, instream numerical criteria will not be exceeded. From the WLA, a long-term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 90th percentile confidence level. The LTA is the long-term average effluent concentration for which the WLA will never be exceeded using a selected percentile confidence level. The lower of the two LTAs (acute and chronic) is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99th percentile confidence level and a standard number of monthly effluent samples collected (12). Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH, and total suspended solids (TSS) according to the segment-specific values contained in the TCEQ guidance document *"Procedures to Implement the Texas Surface Water Quality Standards*." The segment values are 216 mg/l for hardness (as calcium carbonate), 19 mg/l chlorides, 7.7 standard units for pH, and 4.7 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

TCEQ practice for determining significant potential is to compare the reported analytical data 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% of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70% of the calculated daily average water quality-based effluent limitation. See Attachment B of this Fact Sheet.

(b) PERMIT ACTION

Analytical data reported in the application was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitations for aquatic life protection.

(3) AQUATIC ORGANISM BIOACCUMULATION CRITERIA

(a) SCREENING

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue (and drinking water) found in Table 2 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Freshwater fish tissue bioaccumulation (and drinking water) criteria are applied for human health protection in the perennial stream. TCEQ uses the mass balance equation to estimate dilution in the perennial stream during average flow conditions. The estimated dilution for human health protection is calculated using the permitted flow of 15.4 MGD and the harmonic mean flow of 369 cfs for the Guadalupe River Below Comal River. The following

critical effluent percentage is being used:

Human Health Effluent %: 6.066%

Water quality-based effluent limitations for human health protection against the consumption of fish tissue are calculated using the same procedure as outlined for calculation of water quality-based effluent limitations for aquatic life protection. A 99th percentile confidence level in the long-term average calculation is used with only one long-term average value being calculated.

Significant potential is again determined by comparing reported analytical data against 70% and 85% of the calculated daily average water quality-based effluent limitation. See Attachment B of this Fact Sheet.

(b) PERMIT ACTION

Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for human health protection.

(4) DRINKING WATER SUPPLY PROTECTION

(a) SCREENING

Water Quality Segment No. 1804, which receives the discharge from this facility, is designated as a public water supply. The screening procedure used to calculate water quality-based effluent limitations and determine the need for effluent limitations or monitoring requirements is identical to the procedure outlined in the aquatic organism bioaccumulation section of this fact sheet. Criteria used in the calculation of water quality-based effluent limitations for the protection of a drinking water supply are outlined in Table 2 (Water and Fish) of the Texas Surface Water Quality Standards (30 TAC Chapter 307). These criteria are developed from either drinking water maximum contaminant level (MCL) criteria outlined in 30 TAC Chapter 290 or from the combined human health effects of exposure to consumption of fish tissue and ingestion of drinking water.

(b) PERMIT ACTION

Criteria in the "Water and Fish" section of Table 2 do not distinguish if the criteria is based on a drinking water standard or the combined effects of ingestion of drinking water and fish tissue. Effluent limitations or monitoring requirements to protect the drinking water supply (and other human health effects) were previously calculated and outlined in the aquatic organism bioaccumulation criteria section of this fact sheet.

(5) WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA

(a) SCREENING

TCEQ has determined that there may be pollutants present in the effluent that may have the potential to cause toxic conditions in the receiving stream. Whole effluent biomonitoring is the most direct measure of potential toxicity that incorporates the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

The existing permit includes 48-hour acute freshwater biomonitoring requirements. A summary of the biomonitoring testing for the facility indicates that in the past three years, the permittee performed seven 48-hour acute tests, with zero demonstrations of significant toxicity (i.e., zero failures).

A reasonable potential (RP) determination was performed in accordance with 40 CFR §122.44(d)(1)(ii) to determine whether the discharge will reasonably be expected to cause or contribute to an exceedance of a state water quality standard or criterion within that standard. Each test species is evaluated separately. The RP determination is based on representative data from the previous three years of WET testing. This determination was performed in accordance with the methodology outlined in the TCEQ letter to the EPA dated December 28, 2015, and approved by the EPA in a letter dated December 28, 2015.

With zero failures, a determination of no RP was made. WET limits are not required, and both test species may be eligible for the testing frequency reduction after one year of testing.

(b) PERMIT ACTION

The test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge. This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body.

(6) WHOLE EFFLUENT TOXICITY CRITERIA (24-HOUR ACUTE)

(a) SCREENING

The existing permit includes 24-hour acute freshwater biomonitoring language. A summary of the biomonitoring testing for the facility indicates that in the past three years, the permittee has performed twelve 24-hour acute tests, with no demonstrations of significant mortality by either test species.

(b) PERMIT ACTION

The draft permit includes 24-hour 100% acute biomonitoring tests for the life of the permit.

9. WATER QUALITY VARIANCE REQUESTS

No variance requests have been received.

10. 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, the 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 Abdur Rahim at (512) 239-0504.

11. ADMINISTRATIVE RECORD

The following items were considered in developing the draft permit:

A. PERMIT(S)

TPDES Permit No. WQ0010232001 issued on April 30, 2021.

B. APPLICATION

Application received on October 14, 2025, and additional information received on October 21, 2025.

C. MEMORANDA

Interoffice Memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division. Interoffice Memorandum from the Pretreatment Team of the TCEQ Water Quality Division.

D. MISCELLANEOUS

Federal Clean Water Act § 402; Texas Water Code § 26.027; 30 TAC Chapters 30, 305, 309, 312, and 319; Commission policies; and U.S. Environmental Protection Agency guidelines.

Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10.

Procedures to Implement the Texas Surface Water Quality Standards (IP), Texas Commission on Environmental Quality, June 2010, as approved by the U.S. Environmental Protection Agency, and the IP, January 2003, for portions of the 2010 IP not approved by the U.S. Environmental Protection Agency.

Texas 2024 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 26, 2024; approved by the U.S. Environmental Protection Agency on November 13, 2024.

Texas Natural Resource Conservation Commission, Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, Document No. 98-001.000-OWR-WQ, May 1998.

Attachment A: Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate

Screening Calculations for Total Dissolved Solids, Chloride, and Sulfate

Menu 2 - Discharge to an Intermittent Stream within 3 Miles of a Perennial Stream

Screen the Perennial Stream

Applicant Name:	**New Braunfels Utilities**
Permit Number, Outfall:	**10232-001, 001**
Segment Number:	**1804**

Enter values needed for screening:			**Data Source (edit if different)**
QE - Average effluent flow	**15.4**	MGD	Permit application
QS - Perennial stream harmonic mean flow	**369.00**	cfs	2025 Critical conditions memo
QE - Average effluent flow	**23.8273**	cfs	Calculated
CA - TDS - ambient segment concentration	**297**	mg/L	2010 IP, Appendix D
CA - chloride - ambient segment concentration	**18**	mg/L	2010 IP, Appendix D
CA - sulfate - ambient segment concentration	**24**	mg/L	2010 IP, Appendix D
CC - TDS - segment criterion	**400**	mg/L	2010 TSWQS, Appendix A
CC - chloride - segment criterion	**100**	mg/L	2010 TSWQS, Appendix A
CC - sulfate - segment criterion	**50**	mg/L	2010 TSWQS, Appendix A
CE - TDS - average effluent concentration	**559**	mg/L	Permit application
CE - chloride - average effluent concentration	**173**	mg/L	Permit application
CE - sulfate - average effluent concentration	**80**	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	1995.10
Calculate the LTA	LTA = WLA * 0.93	1855.44
Calculate the daily average	Daily Avg. = LTA * 1.47	**2727.50**
Calculate the daily maximum	Daily Max. = LTA * 3.11	**5770.43**
Calculate 70% of the daily average	70% of Daily Avg. =	1909.25
Calculate 85% of the daily average	85% of Daily Avg. =	2318.38

No permit limitations needed if:	**559**	**≤**	**1909.25**

Reporting needed if:	**559**	**>**	**1909.25**	**but ≤**	**2318.38**
Permit limits may be needed if:	**559**	**>**	**2318.38**		

No permit limitations needed for TDS

Chloride

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	1369.89
Calculate the LTA	LTA = WLA * 0.93	1273.99
Calculate the daily average	Daily Avg. = LTA * 1.47	**1872.77**
Calculate the daily maximum	Daily Max. = LTA * 3.11	**3962.12**
Calculate 70% of the daily average	70% of Daily Avg. =	1310.94
Calculate 85% of the daily average	85% of Daily Avg. =	1591.86

No permit limitations needed if:	**173**	**≤**	**1310.94**		
Reporting needed if:	**173**	**>**	**1310.94**	**but ≤**	**1591.86**
Permit limits may be needed if:	**173**	**>**	**1591.86**		

No permit limitations needed for chloride

Sulfate

Calculate the WLA	WLA= [CC(QE+QS) - (QS)(CA)]/QE	452.65
Calculate the LTA	LTA = WLA * 0.93	420.96
Calculate the daily average	Daily Avg. = LTA * 1.47	**618.81**
Calculate the daily maximum	Daily Max. = LTA * 3.11	**1309.19**
Calculate 70% of the daily average	70% of Daily Avg. =	433.17
Calculate 85% of the daily average	85% of Daily Avg. =	525.99

No permit limitations needed if:	**80**	**≤**	**433.17**		
Reporting needed if:	**80**	**>**	**433.17**	**but ≤**	**525.99**
Permit limits may be needed if:	**80**	**>**	**525.99**		

No permit limitations needed for sulfate

Attachment B: Calculated Water Quality Based Effluent Limitations

TEXTOX MENU #2 - INTERMITTENT STREAM WITHIN 3 MILES OF A FRESHWATER PERENNIAL STREAM/RIVER

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

Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Freshwater Aquatic Life
Table 2, 2018 Texas Surface Water Quality Standards for Human Health
"Procedures to Implement the Texas Surface Water Quality Standards," TCEQ, June 2010

PERMIT INFORMATION

Permittee Name:	New Braunfels Utilities
TPDES Permit No.:	WQ0010232001
Outfall No.:	001 & 002
Prepared by:	Abdur Rahim
Date:	March 5, 2026

DISCHARGE INFORMATION

Intermittent Receiving Waterbody:	an unnamed tributary
Perennial Stream/River within 3 Miles:	Guadalupe River Below Comal River (Segment No. 1804)
Segment No.:	1804
TSS (mg/L):	4.7
pH (Standard Units):	7.7
Hardness (mg/L as $CaCO_3$):	216
Chloride (mg/L):	19
Effluent Flow for Aquatic Life (MGD):	15.4
Critical Low Flow [7Q2] (cfs) for intermittent:	0
Critical Low Flow [7Q2] (cfs) for perennial:	274
% Effluent for Chronic Aquatic Life (Mixing Zone):	8.00
% Effluent for Acute Aquatic Life (ZID):	100
Effluent Flow for Human Health (MGD):	15.4
Harmonic Mean Flow (cfs) for perennial:	369
% Effluent for Human Health:	6.066
Human Health Criterion (select: PWS, FISH, or INC)	**PWS**

CALCULATE DISSOLVED FRACTION (AND ENTER WATER EFFECT RATIO IF APPLICABLE):

Stream/River Metal	*Intercept (b)*	*Slope (m)*	*Partition Coefficient (Kp)*	*Dissolved Fraction (Cd/Ct)*	*Source*	*Water Effect Ratio (WER)*	*Source*
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	154656.64	0.579		1.00	Assumed
Cadmium	6.60	-1.13	692674.85	0.235		1.00	Assumed
Chromium (total)	6.52	-0.93	785143.41	0.213		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	785143.41	0.213		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	333155.96	0.390		1.00	Assumed
Lead	6.45	-0.80	817187.50	0.207		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	5.69	-0.57	202723.56	0.512		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	487235.82	0.304		1.00	Assumed
Zinc	6.10	-0.70	426119.59	0.333		1.00	Assumed

AQUATIC LIFE

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*FW Acute Criterion (µg/L)*	*FW Chronic*	*WLAa (µg/L)*	*WLAc (µg/L)*	*LTAa (µg/L)*	*LTAc (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*

		Criterion (µg/L)						
Aldrin	3.0	N/A	3.00	N/A	1.72	N/A	2.52	5.34
Aluminum	991	N/A	991	N/A	568	N/A	834	1765
Arsenic	340	150	587	3238	336	2493	494	1046
Cadmium	18.1	0.420	77.2	22.3	44.2	17.2	25.2	53.4
Carbaryl	2.0	N/A	2.00	N/A	1.15	N/A	1.68	3.56
Chlordane	2.4	0.004	2.40	0.0500	1.38	0.0385	0.0565	0.119
Chlorpyrifos	0.083	0.041	0.0830	0.512	0.0476	0.395	0.0699	0.147
Chromium (trivalent)	1071	139	5021	8164	2877	6286	4229	8947
Chromium (hexavalent)	15.7	10.6	15.7	132	9.00	102	13.2	27.9
Copper	29.3	18.3	75.3	586	43.1	452	63.4	134
Cyanide (free)	45.8	10.7	45.8	134	26.2	103	38.5	81.6
4,4'-DDT	1.1	0.001	1.10	0.0125	0.630	0.00962	0.0141	0.0299
Demeton	N/A	0.1	N/A	1.25	N/A	0.962	1.41	2.99
Diazinon	0.17	0.17	0.170	2.12	0.0974	1.64	0.143	0.302
Dicofol [Kelthane]	59.3	19.8	59.3	247	34.0	191	49.9	105
Dieldrin	0.24	0.002	0.240	0.0250	0.138	0.0192	0.0282	0.0598
Diuron	210	70	210	875	120	674	176	374
Endosulfan I (*alpha*)	0.22	0.056	0.220	0.700	0.126	0.539	0.185	0.392
Endosulfan II (*beta*)	0.22	0.056	0.220	0.700	0.126	0.539	0.185	0.392
Endosulfan sulfate	0.22	0.056	0.220	0.700	0.126	0.539	0.185	0.392
Endrin	0.086	0.002	0.0860	0.0250	0.0493	0.0192	0.0282	0.0598
Guthion [Azinphos Methyl]	N/A	0.01	N/A	0.125	N/A	0.0962	0.141	0.299
Heptachlor	0.52	0.004	0.520	0.0500	0.298	0.0385	0.0565	0.119
Hexachlorocyclohexane (*gamma*) [Lindane]	1.126	0.08	1.13	1.000	0.645	0.770	0.948	2.00
Lead	148	5.76	715	348	410	268	394	834
Malathion	N/A	0.01	N/A	0.125	N/A	0.0962	0.141	0.299
Mercury	2.4	1.3	2.40	16.2	1.38	12.5	2.02	4.27
Methoxychlor	N/A	0.03	N/A	0.375	N/A	0.289	0.424	0.897
Mirex	N/A	0.001	N/A	0.0125	N/A	0.00962	0.0141	0.0299
Nickel	898	99.8	1754	2435	1005	1875	1477	3125
Nonylphenol	28	6.6	28.0	82.5	16.0	63.5	23.5	49.8
Parathion (ethyl)	0.065	0.013	0.0650	0.162	0.0372	0.125	0.0547	0.115
Pentachlorophenol	17.6	13.5	17.6	169	10.1	130	14.8	31.4
Phenanthrene	30	30	30.0	375	17.2	289	25.2	53.4
Polychlorinated Biphenyls [PCBs]	2.0	0.014	2.00	0.175	1.15	0.135	0.198	0.419
Selenium	20	5	20.0	62.5	11.5	48.1	16.8	35.6
Silver	0.8	N/A	5.51	N/A	3.16	N/A	4.64	9.82
Toxaphene	0.78	0.0002	0.780	0.00250	0.447	0.00192	0.00282	0.00598
Tributyltin [TBT]	0.13	0.024	0.130	0.300	0.0745	0.231	0.109	0.231
2,4,5 Trichlorophenol	136	64	136	800	77.9	616	114	242
Zinc	225	227	676	8515	387	6557	569	1204

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*Water and Fish Criterion (µg/L)*	*Fish Only Criterion (µg/L)*	*Incidental Fish Criterion (µg/L)*	*WLAh (µg/L)*	*LTAh (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*
Acrylonitrile	1.0	115	1150	1896	1763	2591	5483
Aldrin	1.146E-05	1.147E-05	1.147E-04	0.000189	0.000176	0.000258	0.000546
Anthracene	1109	1317	13170	21713	20193	29683	62799
Antimony	6	1071	10710	17657	16421	24138	51069
Arsenic	10	N/A	N/A	N/A	N/A	N/A	N/A
Barium	2000	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	5	581	5810	9579	8908	13094	27704
Benzidine	0.0015	0.107	1.07	1.76	1.64	2.41	5.10
Benzo(*a*)anthracene	0.024	0.025	0.25	0.412	0.383	0.563	1.19

Benzo(*a*)pyrene	0.0025	0.0025	0.025	0.0412	0.0383	0.0563	0.119
Bis(chloromethyl)ether	0.0024	0.2745	2.745	4.53	4.21	6.18	13.0
Bis(2-chloroethyl)ether	0.60	42.83	428.3	706	657	965	2042
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	6	7.55	75.5	124	116	170	360
Bromodichloromethane [Dichlorobromomethane]	10.2	275	2750	4534	4216	6198	13113
Bromoform [Tribromomethane]	66.9	1060	10600	17476	16252	23891	50544
Cadmium	5	N/A	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	4.5	46	460	758	705	1036	2193
Chlordane	0.0025	0.0025	0.025	0.0412	0.0383	0.0563	0.119
Chlorobenzene	100	2737	27370	45124	41965	61688	130510
Chlorodibromomethane [Dibromochloromethane]	7.5	183	1830	3017	2806	4124	8726
Chloroform [Trichloromethane]	70	7697	76970	126897	118014	173480	367022
Chromium (hexavalent)	62	502	5020	8276	7697	11314	23937
Chrysene	2.45	2.52	25.2	41.5	38.6	56.7	120
Cresols [Methylphenols]	1041	9301	93010	153341	142607	209632	443507
Cyanide (free)	200	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	0.002	0.002	0.02	0.0330	0.0307	0.0450	0.0953
4,4'-DDE	0.00013	0.00013	0.0013	0.00214	0.00199	0.00293	0.00619
4,4'-DDT	0.0004	0.0004	0.004	0.00659	0.00613	0.00901	0.0190
2,4'-D	70	N/A	N/A	N/A	N/A	N/A	N/A
Danitol [Fenpropathrin]	262	473	4730	7798	7252	10660	22554
1,2-Dibromoethane [Ethylene Dibromide]	0.17	4.24	42.4	69.9	65.0	95.5	202
m-Dichlorobenzene [1,3-Dichlorobenzene]	322	595	5950	9809	9123	13410	28371
o-Dichlorobenzene [1,2-Dichlorobenzene]	600	3299	32990	54389	50582	74355	157309
p-Dichlorobenzene [1,4-Dichlorobenzene]	75	N/A	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	0.79	2.24	22.4	36.9	34.3	50.4	106
1,2-Dichloroethane	5	364	3640	6001	5581	8204	17356
1,1-Dichloroethylene [1,1-Dichloroethene]	7	55114	551140	908637	845032	1242197	2628050
Dichloromethane [Methylene Chloride]	5	13333	133330	219814	204427	300508	635769
1,2-Dichloropropane	5	259	2590	4270	3971	5837	12350
1,3-Dichloropropene [1,3-Dichloropropylene]	2.8	119	1190	1962	1825	2682	5674
Dicofol [Kelthane]	0.30	0.30	3	4.95	4.60	6.76	14.3
Dieldrin	2.0E-05	2.0E-05	2.0E-04	0.000330	0.000307	0.000450	0.000953
2,4-Dimethylphenol	444	8436	84360	139080	129344	190136	402261
Di-*n*-Butyl Phthalate	88.9	92.4	924	1523	1417	2082	4405
Dioxins/Furans [TCDD Equivalents]	7.80E-08	7.97E-08	7.97E-07	0.0000013	0.0000012	0.0000018	0.0000038
Endrin	0.02	0.02	0.2	0.330	0.307	0.450	0.953
Epichlorohydrin	53.5	2013	20130	33187	30864	45370	95987
Ethylbenzene	700	1867	18670	30780	28626	42079	89025
Ethylene Glycol	46744	1.68E+07	1.68E+08	27697317	25758505	37865003	80108952
Fluoride	4000	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor	8.0E-05	0.0001	0.001	0.00165	0.00153	0.00225	0.00476
Heptachlor Epoxide	0.00029	0.00029	0.0029	0.00478	0.00445	0.00653	0.0138
Hexachlorobenzene	0.00068	0.00068	0.0068	0.0112	0.0104	0.0153	0.0324
Hexachlorobutadiene	0.21	0.22	2.2	3.63	3.37	4.95	10.4
Hexachlorocyclohexane (*alpha*)	0.0078	0.0084	0.084	0.138	0.129	0.189	0.400
Hexachlorocyclohexane (*beta*)	0.15	0.26	2.6	4.29	3.99	5.86	12.3
Hexachlorocyclohexane (*gamma*) [Lindane]	0.2	0.341	3.41	5.62	5.23	7.68	16.2
Hexachlorocyclopentadiene	10.7	11.6	116	191	178	261	553
Hexachloroethane	1.84	2.33	23.3	38.4	35.7	52.5	111
Hexachlorophene	2.05	2.90	29	47.8	44.5	65.3	138
4,4'-Isopropylidenediphenol [Bisphenol A]	1092	15982	159820	263487	245043	360213	762084
Lead	1.15	3.83	38.3	306	284	417	884
Mercury	0.0122	0.0122	0.122	0.201	0.187	0.274	0.581
Methoxychlor	2.92	3.0	30	49.5	46.0	67.6	143
Methyl Ethyl Ketone	13865	9.92E+05	9.92E+06	16354607	15209784	22358382	47302428
Methyl *tert*-butyl ether [MTBE]	15	10482	104820	172811	160715	236250	499822
Nickel	332	1140	11400	36702	34133	50175	106153
Nitrate-Nitrogen (as Total Nitrogen)	10000	N/A	N/A	N/A	N/A	N/A	N/A

Nitrobenzene	45.7	1873	18730	30879	28718	42214	89311
N-Nitrosodiethylamine	0.0037	2.1	21	34.6	32.2	47.3	100
N-Nitroso-di-*n*-Butylamine	0.119	4.2	42	69.2	64.4	94.6	200
Pentachlorobenzene	0.348	0.355	3.55	5.85	5.44	8.00	16.9
Pentachlorophenol	0.22	0.29	2.9	4.78	4.45	6.53	13.8
Polychlorinated Biphenyls [PCBs]	6.4E-04	6.4E-04	6.40E-03	0.0106	0.00981	0.0144	0.0305
Pyridine	23	947	9470	15613	14520	21344	45156
Selenium	50	N/A	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.23	0.24	2.4	3.96	3.68	5.40	11.4
1,1,2,2-Tetrachloroethane	1.64	26.35	263.5	434	404	593	1256
Tetrachloroethylene [Tetrachloroethylene]	5	280	2800	4616	4293	6310	13351
Thallium	0.12	0.23	2.3	3.79	3.53	5.18	10.9
Toluene	1000	N/A	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.011	0.011	0.11	0.181	0.169	0.247	0.524
2,4,5-TP [Silvex]	50	369	3690	6084	5658	8316	17595
1,1,1-Trichloroethane	200	784354	7843540	12931251	12026064	17678313	37401057
1,1,2-Trichloroethane	5	166	1660	2737	2545	3741	7915
Trichloroethylene [Trichloroethene]	5	71.9	719	1185	1102	1620	3428
2,4,5-Trichlorophenol	1039	1867	18670	30780	28626	42079	89025
TTHM [Sum of Total Trihalomethanes]	80	N/A	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	0.23	16.5	165	272	253	371	786

CALCULATE 70% AND 85% OF DAILY AVERAGE EFFLUENT LIMITATIONS:

Aquatic Life	***70% of Daily Avg.***	***85% of Daily Avg.***
Parameter	***(µg/L)***	***(µg/L)***
Aldrin	1.76	2.14
Aluminum	584	709
Arsenic	346	420
Cadmium	17.6	21.4
Carbaryl	1.17	1.43
Chlordane	0.0396	0.0481
Chlorpyrifos	0.0489	0.0594
Chromium (trivalent)	2960	3594
Chromium (hexavalent)	9.25	11.2
Copper	44.3	53.8
Cyanide (free)	27.0	32.7
4,4'-DDT	0.00990	0.0120
Demeton	0.990	1.20
Diazinon	0.100	0.121
Dicofol [Kelthane]	34.9	42.4
Dieldrin	0.0198	0.0240
Diuron	123	150
Endosulfan I (*alpha*)	0.129	0.157
Endosulfan II (*beta*)	0.129	0.157
Endosulfan sulfate	0.129	0.157
Endrin	0.0198	0.0240
Guthion [Azinphos Methyl]	0.0990	0.120
Heptachlor	0.0396	0.0481
Hexachlorocyclohexane (*gamma*) [Lindane]	0.663	0.806
Lead	275	335
Malathion	0.0990	0.120
Mercury	1.41	1.71
Methoxychlor	0.297	0.360
Mirex	0.00990	0.0120
Nickel	1034	1255
Nonylphenol	16.5	20.0
Parathion (ethyl)	0.0383	0.0465
Pentachlorophenol	10.3	12.6
Phenanthrene	17.6	21.4

Polychlorinated Biphenyls [PCBs]	0.138	0.168
Selenium	11.7	14.3
Silver	3.24	3.94
Toxaphene	0.00198	0.00240
Tributyltin [TBT]	0.0766	0.0930
2,4,5 Trichlorophenol	80.1	97.3
Zinc	398	483

Human Health ***Parameter***	***70% of Daily Avg. (µg/L)***	***85% of Daily Avg. (µg/L)***
Acrylonitrile	1814	2203
Aldrin	0.000180	0.000219
Anthracene	20778	25230
Antimony	16897	20518
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	9166	11130
Benzidine	1.68	2.04
Benzo(*a*)anthracene	0.394	0.478
Benzo(*a*)pyrene	0.0394	0.0478
Bis(chloromethyl)ether	4.33	5.25
Bis(2-chloroethyl)ether	675	820
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	119	144
Bromodichloromethane [Dichlorobromomethane]	4338	5268
Bromoform [Tribromomethane]	16723	20307
Cadmium	N/A	N/A
Carbon Tetrachloride	725	881
Chlordane	0.0394	0.0478
Chlorobenzene	43181	52435
Chlorodibromomethane [Dibromochloromethane]	2887	3505
Chloroform [Trichloromethane]	121436	147458
Chromium (hexavalent)	7920	9617
Chrysene	39.7	48.2
Cresols [Methylphenols]	146742	178187
Cyanide (free)	N/A	N/A
4,4'-DDD	0.0315	0.0383
4,4'-DDE	0.00205	0.00249
4,4'-DDT	0.00631	0.00766
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	7462	9061
1,2-Dibromoethane [Ethylene Dibromide]	66.8	81.2
m-Dichlorobenzene [1,3-Dichlorobenzene]	9387	11398
o-Dichlorobenzene [1,2-Dichlorobenzene]	52048	63201
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	35.3	42.9
1,2-Dichloroethane	5742	6973
1,1-Dichloroethylene [1,1-Dichloroethene]	869538	1055867
Dichloromethane [Methylene Chloride]	210355	255432
1,2-Dichloropropane	4086	4961
1,3-Dichloropropene [1,3-Dichloropropylene]	1877	2279
Dicofol [Kelthane]	4.73	5.74
Dieldrin	0.000315	0.000383
2,4-Dimethylphenol	133095	161615
Di-*n*-Butyl Phthalate	1457	1770
Dioxins/Furans [TCDD Equivalents]	0.0000013	0.0000015
Endrin	0.315	0.383
Epichlorohydrin	31759	38564
Ethylbenzene	29455	35767

	26505502	32185252
Ethylene Glycol	2	7
Fluoride	N/A	N/A
Heptachlor	0.00157	0.00191
Heptachlor Epoxide	0.00457	0.00555
Hexachlorobenzene	0.0107	0.0130
Hexachlorobutadiene	3.47	4.21
Hexachlorocyclohexane (*alpha*)	0.132	0.160
Hexachlorocyclohexane (*beta*)	4.10	4.98
Hexachlorocyclohexane (*gamma*) [Lindane]	5.37	6.53
Hexachlorocyclopentadiene	183	222
Hexachloroethane	36.7	44.6
Hexachlorophene	45.7	55.5
4,4'-Isopropylidenediphenol [Bisphenol A]	252149	306181
Lead	292	355
Mercury	0.192	0.233
Methoxychlor	47.3	57.4
Methyl Ethyl Ketone	15650867	19004625
Methyl *tert*-butyl ether [MTBE]	165375	200812
Nickel	35122	42649
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A
Nitrobenzene	29550	35882
N-Nitrosodiethylamine	33.1	40.2
N-Nitroso-di-*n*-Butylamine	66.2	80.4
Pentachlorobenzene	5.60	6.80
Pentachlorophenol	4.57	5.55
Polychlorinated Biphenyls [PCBs]	0.0100	0.0122
Pyridine	14940	18142
Selenium	N/A	N/A
1,2,4,5-Tetrachlorobenzene	3.78	4.59
1,1,2,2-Tetrachloroethane	415	504
Tetrachloroethylene [Tetrachloroethylene]	4417	5364
Thallium	3.62	4.40
Toluene	N/A	N/A
Toxaphene	0.173	0.210
2,4,5-TP [Silvex]	5821	7069
1,1,1-Trichloroethane	12374819	15026566
1,1,2-Trichloroethane	2618	3180
Trichloroethylene [Trichloroethene]	1134	1377
2,4,5-Trichlorophenol	29455	35767
TTHM [Sum of Total Trihalomethanes]	N/A	N/A
Vinyl Chloride	260	316