

# This file contains the following documents:

- 1. Summary of application (in plain language)
  - English
  - Alternative Language (Spanish)
- 2. First notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
  - English
  - Alternative Language (Spanish)
- 3. Second notice (NAPD-Notice of Preliminary Decision)
  - Enalish
  - Alternative Language (Spanish)
- 4. Application materials \*
- 5. Draft permit \*
- 6. Technical summary or fact sheet \*
- \* **NOTE:** This application was declared Administratively Complete before June 1, 2024. The application materials, draft permit, and technical summary or fact sheet are available for review at the Public Viewing Location provided in the NAPD.



# Este archivo contiene los siguientes documentos:

- 1. Resumen de la solicitud (en lenguaje sencillo)
  - Inglés
  - Idioma alternativo (español)
- 2. Primer aviso (NORI, Aviso de Recepción de Solicitud e Intención de Obtener un Permiso)
  - Inglés
  - Idioma alternativo (español)
- 3. Segundo aviso (NAPD, Aviso de Decisión Preliminar)
  - Inglés
  - Idioma alternativo (español)
- 4. Materiales de la solicitud \*\*
- 5. Proyecto de permiso \*\*
- 6. Resumen técnico u hoja de datos \*\*
- \*\* **NOTA:** Esta solicitud se declaró administrativamente completa antes del 1 de junio de 2024. Los materiales de la solicitud, el proyecto de permiso, y los resumen técnico u hoja de datos están disponibles para revisión en la ubicación de consulta pública que se indica en el NAPD.

# 简明摘要 Taylor Lane废水处理厂 7535 Taylor Lane, Manor, Texas 78725

CN600135198

RN105331755

TX0129950

WQ0010543014

根据《Texas州行政法规》第30篇第39章的规定,Texas州环境质量委员会正在审查水质许可证申请,现提供该待处理申请的以下摘要。本摘要中提供的信息可能会在该申请的技术审查过程中发生变化,这些信息并不属于联邦对许可证申请的强制性陈述。

Austin市 (CN600135198) 运营着Austin市Taylor Lane废水处理厂 (RN105331755), 这是一座传统的活性污泥废水处理厂。该设施的地址是7535 Taylor Lane, City of Manor, Travis County, Texas 78653, 它位于Lower Colorado River流域第1428号区段Lady Bird Lake/Town Lake下方的 Gilleland Creek至Colorado River的排水区。

本申请旨在更新其排放许可,以获准每天通过001号排放口排放经处理的生活废水,日均流量不超过100万加仑。

该设施排出的废水预计含有五日碳质生化需氧量(CBOD5)、总悬浮固体(TSS)、氨氮(NH3-N)、大肠杆菌、余氯和总磷。生活废水由Aeromod活性污泥废水处理厂进行处理。其各个阶段的处理工艺包括筛选、除砂、细泡和粗泡曝气、化学磷沉淀、澄清、过滤、氯消毒和级联曝气。

# Resumen en lenguaje sencillo Planta de tratamiento de aguas residuales de Taylor Lane 7535 Taylor Lane, Manor, Texas 78725

CN600135198 RN105331755 TX0129950 WQ0010543014

El siguiente resumen de esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas se proporciona según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no son declaraciones federales ejecutables de la solicitud de permiso.

La Ciudad de Austin (CN600135198) opera la Planta de tratamiento de aguas residuales de Taylor Lane de la Ciudad de Austin (RN105331755), una planta de tratamiento de aguas residuales convencionales con lodos activados. La instalación está ubicada en 7535 Taylor Lane en la Ciudad de Manor, Condado de Travis, Texas 78653 La planta está en la zona de drenaje del arroyo Gilleland, desde allí va al río Colorado por debajo del lago Lady Bird/lago Town en el segmento número 1428 de la cuenca del río Colorado bajo.

Esta solicitud es para una renovación para descargar con un caudal promedio diario que no supere 0.5 millón de galones por día de agua residual doméstica tratada a través del Desagüe 001.

Se espera que las descargas de la planta tengan demanda bioquímica de oxígeno carbonácea a cinco días (DBOC 5), sólidos suspendidos totales (SST), nitrógeno amoniacal (NH3-N), *Escherichia coli*, cloro residual y fósforo total. El agua residual doméstica se trata en una planta de tratamiento de aguas residuales con lodos activados de Aeromod. Los procesos de la planta para todas las fases incluyen cribado, remoción de arenas, aireación de burbujas finas y gruesas, precipitación química del fósforo, clarificación, filtración, desinfección con cloro y aireación en cascada.

# Tóm tắt bằng ngôn ngữ đơn giản Nhà Máy Xử Lý Nước Thải Taylor Lane 7535 Taylor Lane, Manor, Texas 78725

CN600135198

RN105331755

TX0129950

WQ0010543014

Bản tóm tắt sau đây được cung cấp cho đơn xin giấy phép chất lượng nước đang chờ xử lý này đang được Ủy ban Chất lượng Môi trường Texas xem xét theo yêu cầu của 30 Bộ luật Hành chánh Texas Chương 39. Thông tin cung cấp trong bản tóm tắt này có thể thay đổi trong quá trình duyệt xét chuyên môn đối với đơn đăng ký và không phải là thông tin đại diện có hiệu lực thi hành của liên bang đối với đơn xin giấy phép.

Thành phố Austin (CN600135198) vận hành Nhà Máy Xử Lý Nước Thải Taylor Lane của Thành Phố Austin (RN105331755), một nhà máy xử lý nước thải bằng bùn hoạt tính thông thường. Cơ sở xử lý được đặt tại 7535 Taylor Lane, trong Thành Phố Manor, Quận Travis, Texas 78653. Cơ sở nằm trong khu vực thoát nước của Gilleland Creek từ đó đến sông Colorado bên dưới Hồ Lady Bird/ Town Lake trong Đoạn số 1428 của Lưu vực hạ lưu sông Colorado.

Đơn xin này nhằm mục đích gia hạn hoạt động xả nước thải sinh hoạt đã qua xử lý với lưu lượng trung bình hàng ngày không vượt quá 0,5 triệu gallon mỗi ngày thông qua Cửa xả 001.

Chất thải từ cơ sở này dự kiến sẽ bao gồm nhu cầu oxy sinh hóa cacbon (CBOD5) trong 5 ngày, tổng chất rắn lơ lửng (TSS), nitơ amoniac (NH3-N), Escherichia coli, clo dư và tổng phốt pho. Nước thải sinh hoạt được xử lý bằng hệ thống xử lý nước thải bùn hoạt tính Aeromod. Quy trình xử lý nước thải trong nhà máy bao gồm các giai đoạn như lọc sơ bộ, tách cát và các hạt sạn, sục khí bọt mịn và bọt thô, kết tủa phốt pho hóa học, loại bỏ phốt pho khỏi nước thải, làm trong, loại bỏ các hạt nhỏ còn sót lại, khử trùng bằng clo, và sục khí bậc thang.

# Plain Language Summary Taylor Lane Wastewater Treatment Plant 7535 Taylor Lane, Manor, Texas 78725

CN600135198 RN105331755 TX0129950 WQ0010543014

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

The City of Austin (CN600135198) operates the City of Austin Taylor Lane Wastewater Treatment Plant (RN105331755), a conventional activated sludge wastewater treatment plant. The facility is located at 7535 Taylor Lane, in the City of Manor, Travis County, Texas 78653. The facility is in the drainage area of Gilleland Creek, thence to the Colorado River Below Lady Bird Lake/Town Lake in Segment Number 1428 of the Lower Colorado River Basin.

This application is for a renewal to discharge at a daily average flow not to exceed 0.5 million gallons per day of treated domestic wastewater via Outfall 001.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), Escherichia coli, residual chlorine, and total phosphorus. Domestic wastewater is treated by an Aeromod activated sludge wastewater treatment plant. Plant processes for all phases include screening, grit removal, fine and coarse bubble aeration, chemical phosphorus precipitation, clarification, filtration, chlorine disinfection, and cascade aeration.

# **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**



# NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT RENEWAL

#### PERMIT NO. WQ0010543014

APPLICATION. City of Austin, 625 East 10th Street, Suite 800, Austin, Texas 78701, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010543014 (EPA I.D. No. TX0129950) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 500,000 gallons per day. The domestic wastewater treatment facility is located at 7535 Taylor Lane, near the city of Austin, in Travis County, Texas 78653. The discharge route is from the plant site to Gilleland Creek, thence to Colorado River Below Lady Bird Lake/Town Lake. TCEQ received this application on March 18, 2024. The permit application will be available for viewing and copying at Austin Water - Waller Creek Center, 625 East 10th Street, Suite 315, Austin, in Travis County, Texas prior to the date this notice is published in the newspaper. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.551388,30.269444&level=18

**ALTERNATIVE LANGUAGE NOTICE.** Alternative language notices in Spanish, Vietnamese, and Simplified Chinese are available at

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices. El aviso de idioma alternativo en español está disponible en

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices. Thông báo bằng tiếng Tây Ban Nha, tiếng Việt và tiếng Trung giản thể có sẵn tại https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-

notices. 我们还提供西班牙语、越南语和简体中文版本的通知,请访问以下链接

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices.

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. Notice of the Application and Preliminary Decision will be published and mailed to those who are on the countywide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.

**PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application.** The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing. A contested case hearing is a legal proceeding similar to a civil trial in state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period. TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county.

If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

**INFORMATION AVAILABLE ONLINE.** For details about the status of the application, visit the Commissioners' Integrated Database at <a href="www.tceq.texas.gov/goto/cid">www.tceq.texas.gov/goto/cid</a>. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at <a href="https://www14.tceq.texas.gov/epic/eComment/">https://www14.tceq.texas.gov/epic/eComment/</a>, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at <a href="www.tceq.texas.gov/goto/pep">www.tceq.texas.gov/goto/pep</a>. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from City of Austin at the address stated above or by calling Ms. Tammy Y. West, Wastewater Regulatory Manager, at 512-972-0143.

Issuance Date: April 16, 2024

# TEXAS 州环境质量委员会



#### 收到申请及获得水质许可续延的意向之通知

许可证号: WQ0010543014

申请。Austin 市(625 East 10th Street, Suite 800, Austin, Texas 78701)已向 Texas 州环境质量委员会(Texas Commission on Environmental Quality,简称 TCEQ)申请续延 Texas 州污染物排放消除系统(Texas Pollutant Discharge Elimination System,简称 TPDES)第 WQ0010543014号许可(美国国家环境保护局 ID号: TX0129950),以授权排放经处理的废水,日均流量不超过500,000万加仑。该生活废水处理设施位于Texas州Travis县的7535 Taylor Lane,靠近 Austin 市,邮政编码为78653。排放路线从厂区延伸至Gilleland Creek;然后延伸至Lady Bird Lake/Town Lake下游的Colorado River。TCEQ 于 2024年3月18日收到了此申请。在本通知公开见报之前,相关的许可证申请可前往位于 Texas 州 Travis 县的 Austin Water - Waller Creek Center(地址: 625 East 10th Street, Suite 315, Austin)查看和复制。显示工厂或设施总体位置的电子地图链接系为方便公众而提供,并非申请或通知的组成部分。具体位置请参阅申请。

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.551388, 30.269444&level=18

**备选语言版本的通知。** 我们还提供西班牙语、越南语和简体中文版本的通知,请访问以下链接: <a href="https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices">https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices</a>。

附加通知。经 TCEQ 执行董事确认,申请已完成行政审核,接下来将进行技术审核。当技术审核完成后,执行董事可能会拟定一份许可草案并就申请做出初步决定。申请通知及初步决定将公布并邮寄给全县邮寄名单上的人员以及本申请的邮寄名单上的人员。该通知中还将公布提交公众意见的截止日期。

公众意见/公开会议。您可以就此申请提交公众意见或请求举行公开会议。举行公开会议的目的是为了 让相关人员有机会就申请提交意见或提出问题。若执行董事认为此申请涉及重大的公众利益,或者当地 议员有所要求,则 TCEQ 将举行公开会议。公开会议并非争议案件听审会。

有机会召开争议案件听审会。在提交公众意见的截止日期过后,执行董事将考虑所有及时提出的公众意见,并就所有相关且重大的意见做好回应的准备。除非申请需直接移交至争议案件听审会,否则对公众意见的回应以及执行董事对申请的决定都将邮寄给所有提交公众意见的人以及本申请的邮寄名单上的所有人。对于收到回应的公众意见,邮寄资料中还将提供相关指示,说明如何就执行董事的决定提出复议申请以及如何请求召开争议案件听审会。争议案件听审会是类似于州地区法院民事审判的一道法律程序。

如想请求召开争议案件听审会,您必须提交以下信息:

您的姓名、地址、电话号码;申请人的姓名及提议的许可证号;您的物业/活动与拟议设施之间的相对位置与距离;具体说明该设施会如何以某种大众所不常见的方式给您造成不良影响;公众评议期内您提交的所有事实争议的清单,以及明确提到"[我/我们]请求召开争议案件听审会"的声明。若是代某个团体或协会请求召开争议案件听审会,则在提交请求时必须指派代表来负责接收今后的通信内容;提供团体中某位会因为拟议设施或活动而受到不良影响的成员的姓名和实际地址;和前面提过的信息一样,提供该成员与拟议设施或活动之间的相对位置和距离;说明该成员会受到哪些影响以及为何会受到这些影响;以及解释团体想要保护的利益与他们的宗旨之间有何关联。

当适用的评议与请求提交期全部结束后,执行董事便会将申请及所有要求复议或召开争议案件听审会的请求都提交给 TCEQ 委员,供他们在定期召开的委员会大会上进行审议。

委员会只会应符合以下条件的请求准予召开争议案件听审会:在公众评议期内及时提交相关问题且后续没有撤销意见。对于准予召开的听审会,其主题将仅限于公众评议期内提交的涉及相关且重大的水质问题的事实争议或事实+法律争议。在满足特定标准的情况下,TCEQ 有权对续延废水排放许可的申请采取行动,而无需提供召开争议案件听审会的机会。

**邮寄名单。**如果您提交了公众意见、请求召开争议案件听审会或对执行董事的决定予以复议,则您将被添加到这一特定申请的邮寄名单中,后续将收到书记官办公室(Office of the Chief Clerk)邮寄来的公告。此外,您还可以请求加入:(1)具体某个申请人及许可证号的永久邮寄名单;和/或(2)具体某个县的邮寄名单。如果您想加入某个/某些永久邮寄名单和/或县级邮寄名单,请说明清楚并将请求发送至以下地址的 TCEQ 书记官办公室。

**可在线上获取的信息。**如想详细了解申请的状态,请访问委员会综合数据库(Commissioners' Integrated Database): <u>www.tceq.texas.gov/goto/cid</u>。本通知开头部分提供了此申请的许可证号,您可以利用它来搜索数据库。

机构联系人及联系信息。公众意见和请求必须通过以下任一方式提交:一是通过 https://www14.tceq.texas.gov/epic/eComment/ 线上提交,二是邮寄信函至 Texas 州环境质量委员会书记官办公室(地址: Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105,

P.O. Box 13087, Austin, Texas 78711-3087)。请注意,您提供的任何联系信息,包括您的姓名、电话号码、电子邮件地址和实际地址,都将成为该机构公共记录的一部分。如想了解有关此许可证申请或许可流程的更多信息,请致电 TCEQ 公共教育计划(Public Education Program)的免费电话 1-800-687-4040; 或者您也可以访问他们的网站: www.tceq.texas.gov/goto/pep。Si desea información en Español, puede llamar al 1-800-687-4040.

如想获取更多信息,您还可以前往 Austin 市的上述地址,或者拨打电话 512-972-0143,联系废水监管经理 Tammy Y. West 女士。

发布日期: 2024 年 4 月 16 日

# COMISIÓN DE CALIDAD AMBIENTAL DEL ESTADO DE TEXAS



#### AVISO DE RECIBO DE LA SOLICITUD Y EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA RENOVACION

#### **PERMISO NRO. WQ0010543014**

**SOLICITUD.** La Ciudad de Austin. 625 East 10th Street. Suite 800. Austin. Texas 78701. solicitó a la Comisión de Calidad Ambiental de Texas (Texas Commission on Environmental Quality, TCEQ) que renueve el permiso del sistema de eliminación de vertidos contaminantes de Texas (Texas Pollutant Discharge Elimination System, TPDES) Nro. WQ0010543014 (ID de la EPA [Agencia de Protección Ambiental] Nro. TX0129950) para autorizar la descarga de agua residual tratada a un volumen que no supere un caudal promedio diario de 500.000 galones por día. La instalación de tratamiento de agua residual doméstica está ubicada en 7535 Taylor Lane, cerca de la ciudad de Austin en el Condado de Travis, Texas 78653. La ruta de descarga va desde el predio de la planta hasta Gilleland Creek, a partir de allí al río Colorado por debajo del lago Lady Bird/lago Town. La TCEQ recibió esta solicitud el 18 de marzo de 2024. La solicitud del permiso estará disponible para su visualización y copiado en Austin Water. Waller Creek Center, 625 East 10th Street, Suite 315, Austin, en el Condado de Travis, Texas antes de la fecha en que este aviso se publique en el periódico. Este enlace a un mapa electrónico del predio o de la ubicación general de la instalación se proporciona como cortesía pública y no forma parte de la solicitud ni del aviso. Para conocer la ubicación exacta, remítase a la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.551388,30.269444&level=18

**AVISO DE IDIOMA ALTERNATIVO.** El aviso está disponible en español, vietnamita y chino simplificado como idioma alternativo en <a href="https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices">https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices</a>.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ determinó que la solicitud está completa en materia administrativa y efectuará su revisión técnica. Una vez finalizada la revisión técnica de la solicitud, el Director Ejecutivo puede preparar un borrador del permiso y expedirá una decisión preliminar sobre la solicitud. El Aviso de la solicitud y decisión preliminar se publicará y se enviará por correo a quienes estén en la lista de correo de todo el condado y a quienes estén en la lista de correo de esta solicitud. Ese aviso indicará el plazo para presentar comentarios públicos.

COMENTARIO PÚBLICO / REUNIÓN PÚBLICA. Puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es proporcionar la oportunidad de presentar comentarios o hacer preguntas sobre la solicitud. La TCEQ llevará a cabo una reunión pública si el Director Ejecutivo determina que existe un nivel significativo de interés público en la solicitud o si un legislador local lo requiere. Una reunión pública no es una audiencia de caso impugnado.

OPORTUNIDAD PARA UNA AUDIENCIA DE CASO IMPUGNADO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios oportunos y preparará una respuesta a todos los comentarios públicos esenciales y pertinentes, o significativos. A menos que la solicitud se refiera directamente a una audiencia de caso impugnado, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud se enviarán a toda persona que haya presentado comentarios públicos y a aquellas personas que estén en la lista de correo de esta solicitud. Si se reciben comentarios, la correspondencia también proporcionará instrucciones para pedir la reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia de caso impugnado. Una audiencia de caso impugnado es un procedimiento legal similar a un juicio civil en un tribunal de distrito del estado.

#### PARA PEDIR UNA AUDIENCIA DE CASO IM

PUGNADO, DEBE INCLUIR LOS SIGUIENTES PUNTOS EN SU PEDIDO: su nombre, dirección, número de teléfono; nombre del solicitante y número de permiso propuesto; la ubicación y distancia de su propiedad/actividades en relación con la instalación propuesta; una descripción específica de cómo la instalación lo perjudicaría de una manera que no sea común al público general; una lista de todas las cuestiones de hechos en disputa que presente durante el periodo de comentarios y la declaración: "[Solicito/solicitamos] una audiencia de caso impugnado". Si el pedido de audiencia de caso impugnado se presenta en nombre de un grupo o una asociación, el pedido debe designar al representante del grupo para que reciba la futura correspondencia; identificar con nombre y dirección física a un miembro del grupo que se vería perjudicado por la instalación o actividad propuesta; proporcionar la información mencionada anteriormente sobre la ubicación del miembro afectado y su distancia de la instalación o actividad; explicar por qué y cómo el miembro se vería afectado y explicar cómo los intereses que el grupo procura proteger son pertinentes al propósito del grupo.

Tras el cierre de todo periodo correspondiente de comentarios o pedidos, el Director Ejecutivo enviará la solicitud y cualquier pedido de reconsideración o de audiencia de caso impugnado a los comisionados de la TCEQ para que los analicen en una asamblea programada de la Comisión.

La Comisión solo puede conceder una pedido de audiencia de caso impugnado sobre cuestiones que el solicitante haya presentado en sus comentarios oportunos y que no hayan sido retirados posteriormente. En caso de concederse una audiencia, el tema de la audiencia se limitará a las cuestiones de hechos en disputa o preguntas mixtas de hechos y de derecho esenciales y pertinentes a las preocupaciones sobre calidad del agua presentadas durante el periodo de comentarios. La TCEQ puede actuar sobre una solicitud para renovar un permiso para descarga de agua residual sin proveer una oportunidad de una audiencia de caso impugnado si se satisfacen determinados criterios.

LISTA DE CORREO. Si envía comentarios públicos, un pedido de audiencia de caso impugnado o de reconsideración de la decisión del Director Ejecutivo, usted será agregado a la lista de correo para esta solicitud específica para recibir futuros avisos públicos que la Oficina del Secretario Oficial enviará por correo. Además, puede pedir que lo agreguen a: (1) la lista de correo permanente para un nombre de solicitante o número de permiso específicos; y/o (2) la lista de correo para un condado específico. Si quiere que lo agreguen a la lista de correo permanente y/o de un condado, especifique claramente a qué lista o listas y envíe su pedido a la Oficina del Secretario Oficial de la TCEQ a la dirección que figura abajo.

INFORMACIÓN DISPONIBLE EN INTERNET. Para conocer los detalles sobre el estado de la solicitud, visite la Base de Datos Integrada de los Comisionados en <a href="https://www.tceq.texas.gov/goto/cid">www.tceq.texas.gov/goto/cid</a>. Busque en la base de datos usando el número de permiso para esta solicitud, que se proporciona en la parte superior de este aviso.

CONTACTOS E INFORMACIÓN DE LA AGENCIA. Todos los comentarios públicos y pedidos deben enviarse ya sea de forma electrónica a través de <a href="https://www14.tceq.texas.gov/epic/eComment/">https://www14.tceq.texas.gov/epic/eComment/</a>, o por escrito a la Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga presente que toda información de contacto que proporcione, incluidos su nombre, número de teléfono, dirección de correo electrónico y dirección física, pasarán a integrar el registro público de la agencia. Para obtener información sobre esta solicitud de permiso o el proceso de obtención de permisos, llame gratis al Programa de Educación Pública de la TCEQ al 1-800-687-4040 o visite el sitio web en <a href="https://www.tceq.texas.gov/goto/pep.">www.tceq.texas.gov/goto/pep.</a>. Si desea información en español, puede llamar al 1-800-687-4040.

Se puede obtener información adicional de la Ciudad de Austin en la dirección indicada anteriormente o llamando a la Sra. Tammy Y. West, responsable de reglamentación de aguas residuales, al 512-972-0143.

Fecha de expedición: 16 de abril de 2024

# ỦY BAN CHẤT LƯỢNG MÔI TRƯỜNG TEXAS



# THÔNG BÁO VỀ VIỆC NHẬN ĐƠN XIN VÀ Ý ĐỊNH GIA HẠN GIẤY PHÉP CHẤT LƯỢNG NƯỚC

#### GIẤY PHÉP SỐ WQ0010543014

ĐƠN XIN. Thành phố Austin, 625 East 10th Street, Suite 800, Austin, Texas 78701, đã nộp đơn xin gia hạn Giấy Phép Sử Dụng Hệ Thống Loại Bỏ Chất Ô Nhiễm Texas (TPDES) số WQ0010543014 (EPA I.D. No. TX0129950) đến Ủy ban Chất lượng Môi trường Texas (TCEQ) để cho phép xả nước thải đã qua xử lý với lưu lượng không vượt quá lưu lượng trung bình hàng ngày là 500,000 gallon mỗi ngày. Cơ sở xử lý nước thải sinh hoạt được đặt tại 7535 Taylor Lane, gần thành phố Austin, trong Quận Travis, Texas 78653. Tuyến xả thải đi từ khu vực nhà máy đến Gilleland Creek; từ đó chảy vào Sông Colorado bên dưới Hồ Lady Bird/Town Lake. TCEQ nhận được đơn xin này vào ngày 18 tháng Ba, 2024. Đơn xin cấp phép sẽ có sẵn để xem và sao chép tại Cơ Quan Cung Cấp Nước Thành Phố Austin (Austin Water), Trung tâm Waller Creek, 625 East 10th Street, Suite 315, Austin, trong Quận Travis, Texas trước ngày thông báo này được đăng trên báo. Liên kết đến bản đồ điện tử về vị trí tổng quan của địa điểm hoặc cơ sở được cung cấp như một phép lịch sự công cộng và không phải là một phần của đơn xin hoặc thông báo. Để biết địa điểm chính xác, vui lòng tham khảo đơn xin.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.551388,30.269444&level=18

**THÔNG BÁO BẰNG NGÔN NGỮ KHÁC.** Thông báo bằng tiếng Tây Ban Nha, tiếng Việt và tiếng Trung giản thể có sẵn tại <a href="https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices">https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices</a>.

THÔNG BÁO BỔ SUNG. Giám Đốc Điều Hành của TCEQ xác định rằng đơn xin đã hoàn tất về mặt hành chính và sẽ tiến hành đánh giá kỹ thuật. Sau khi đánh giá kỹ thuật của đơn xin hoàn tất, Giám đốc Điều hành có thể chuẩn bị một bản dự thảo giấy phép và sẽ ban hành quyết định sơ bộ về đơn xin. Thông báo về Đơn xin và Quyết định Sơ bộ sẽ được công bố và gửi qua thư cho các đơn vị nằm trong danh sách gửi thư toàn địa hạt và các cá nhân nằm trong danh sách gửi thư cho đơn xin này. Thông báo sẽ bao gồm thời hạn nộp các ý kiến công khai.

Ý KIẾN CÔNG KHAI / HỌP CÔNG KHAI. Quý vị có thể nộp ý kiến công khai hoặc yêu cầu một buổi họp công khai về đơn xin này. Mục đích của buổi họp công khai là cung cấp cơ hội để quý vị đệ trình ý kiến hoặc đặt câu hỏi về đơn xin. TCEQ sẽ tổ chức một buổi họp công khai nếu Giám đốc Điều hành xác định rằng có mức độ quan tâm đáng kể từ phía công chúng đối với đơn xin hoặc nếu được yêu cầu bởi một cơ quan lập pháp địa phương. Một buổi họp công khai không phải là một phiên điều trần tranh chấp.

CƠ HỘI ĐỂ MỞ MỘT PHIÊN ĐIỀU TRẦN TRANH CHẤP. Sau thời hạn đệ trình các ý kiến công khai, Giám đốc Điều hành sẽ xem xét tất cả ý kiến đúng hạn và chuẩn bị phản hồi cho tất cả ý kiến công khai có liên quan và quan trọng hoặc các ý kiến công khai có ảnh hưởng đáng kể. Trừ khi đơn xin được trực tiếp chuyển đến một phiên điều trần tranh chấp, phản hồi cho các ý kiến, và quyết định của Giám đốc Điều hành về đơn xin, sẽ được gửi qua thư cho tất cả những người đã nộp ý kiến công khai và những cá nhân nằm trong danh sách gửi thư cho đơn xin này. Nếu có ý kiến được nhận, thư sẽ cung cấp hướng dẫn về cách yêu cầu xem xét lại quyết định của Giám đốc Điều Hành và yêu cầu một phiên điều trần tranh chấp. Một phiên điều trần tranh chấp là một thủ tục pháp lý tương tự như một phiên xử dân sự tại tòa án quận hạt.

### ĐỂ YÊU CẦU MỘT PHIÊN ĐIỀU TRẦN TRANH CHẤP,

QUÝ VỊ PHẢI BAO GỒM CÁC MỤC SAU TRONG YÊU CẦU CỦA QUÝ VỊ: tên của quý vị, địa chỉ, số điện thoại; tên của người đề nghị và số giấy phép đề xuất; vị trí và khoảng cách của phần đất/hoạt động của quý vị so với cơ sở được đề xuất; mô tả cụ thể về lý do mà quý vị cho là mình sẽ bị ảnh hưởng tiêu cực bởi cơ sở đó một cách không phổ biến đối với công chúng chung; danh sách tất cả các vấn đề tranh chấp về sự thật mà quý vị đệ trình trong thời hạn đề ra ý kiến và, tuyên bố "[Tôi/chúng tôi] yêu cầu một phiên điều trần tranh chấp." Nếu yêu cầu phiên điều trần tranh chấp được nộp thay mặt cho một nhóm hoặc hiệp hội, yêu cầu phải chỉ định đại diện của nhóm để nhận thông tin phản hồi trong tương lai; xác định bằng tên và địa chỉ thực tế của một thành viên cá nhân trong nhóm sẽ bị ảnh hưởng tiêu cực bởi cơ sở hoặc hoạt động đề xuất; cung cấp thông tin đã thảo luận ở trên về vị trí và khoảng cách của thành viên bị ảnh hưởng từ cơ sở hoặc hoạt động; giải thích cách và tại sao thành viên sẽ bị ảnh hưởng; và giải thích lý do tại sao những lợi ích mà nhóm đang tìm cách bảo vệ liên quan đến mục đích của nhóm.

Sau khi kết thúc tất cả các thời hạn ý kiến và yêu cầu áp dụng, Giám đốc Điều hành sẽ chuyển đơn xin và bất kỳ yêu cầu xem xét lại hoặc một phiên điều trần tranh chấp đến Hội đồng Quản lý TCEQ để xem xét tại một cuộc họp Hội đồng được lên lịch.

Ủy ban chỉ có thể chấp thuận yêu cầu một phiên điều trần tranh chấp về các vấn đề mà người yêu cầu đã nộp trong ý kiến đúng hạn của họ mà sau đó không bị rút lại. **Nếu một phiên điều trần được chấp thuận, nội dung của phiên sẽ bị giới hạn chỉ đối với các vấn đề tranh chấp về sự thật hoặc các câu hỏi khác nhau về sự thật và luật liên quan đến các vấn đề về chất lượng nước có tính liên quan và quan trọng mà đã được đệ trình trong thời gian nêu ý kiến. TCEQ có thể xem xét và quyết định về đơn xin gia hạn giấy phép xả nước thải mà không cần mở thêm một phiên điều trần tranh chấp nếu các tiêu chí cụ thể được đáp ứng.** 

DANH SÁCH GỬI THƯ. Nếu quý vị nộp ý kiến công khai, yêu cầu một phiên điều trần tranh chấp hoặc xem xét lại quyết định của Giám đốc Điều Hành, quý vị sẽ được thêm vào danh sách gửi thư cho đơn xin cụ thể này để nhận các thông báo công khai trong tương lai được gửi bằng thư bởi Văn phòng Thư ký Trưởng. Ngoài ra, quý vị có thể yêu cầu được đặt vào: (1) danh sách gửi thư cố định cho tên ứng viên và số giấy phép cụ thể; và/hoặc (2) danh sách gửi thư cho một địa hạt cụ thể. Nếu quý vị muốn được đặt vào danh sách gửi thư cố định và/hoặc danh sách gửi thư cho địa hạt cụ thể, hãy nêu rõ rằng quý vị muốn ở trong danh sách nào và gửi yêu cầu của quý vị đến Văn phòng Thư ký trưởng TCEQ theo địa chỉ dưới đây.

THÔNG TIN CÓ SẪN TRỰC TUYẾN. Để biết chi tiết về tình trạng đơn xin cấp phép, vui lòng truy cập Cơ sở dữ liệu Tích hợp của Ủy ban tại địa chỉ <a href="www.tceq.texas.gov/goto/cid">www.tceq.texas.gov/goto/cid</a>. Sử dụng số giấy phép cho đơn xin này, mà quý vị được cung cấp ở đầu thông báo này, để tìm kiếm trong cơ sở dữ liêu.

THÔNG TIN VÀ CÁCH LIÊN HỆ VỚI CƠ QUAN. All public comments and requests must be submitted either electronically at <a href="https://www14.tceq.texas.gov/epic/eComment/">https://www14.tceq.texas.gov/epic/eComment/</a>, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Hãy lưu ý rằng mọi thông tin liên hệ quý vị cung cấp, bao gồm tên, số điện thoại, địa chỉ email và địa chỉ vật lý, sẽ trở thành một phần của hồ sơ công khai của cơ quan. Để biết thêm thông tin về đơn xin cấp phép này hoặc quy trình cấp phép, vui lòng gọi Chương trình Giáo dục Công chúng TCEQ, Miễn phí, tại số 1-800-687-4040 hoặc truy cập trang web của họ tại <a href="www.tceq.texas.gov/goto/pep.">www.tceq.texas.gov/goto/pep.</a>. Si desea información en Español, puede llamar al 1-800-687-4040.

Thông tin thêm có thể được thu thập từ Thành phố Austin theo địa chỉ đã nêu ở trên hoặc gọi Cô Tammy Y. West, Quản Lý Quy Định Xử Lý Nước Thải, tại số 512-972-0143.

Ngày Ban Hành: Ngày 16 tháng 4 năm 2024

# **Texas Commission on Environmental Quality**



# NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR TPDES PERMIT FOR MUNICIPAL WASTEWATER

#### **RENEWAL**

#### **PERMIT NO. WQ0010543014**

**APPLICATION AND PRELIMINARY DECISION**. City of Austin, 625 East 10th Street, Suite 800, Austin, Texas 78701, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010543014 which authorizes the discharge of treated domestic wastewater at a daily average flow not to exceed 500,000 gallons per day. TCEQ received this application on March 18, 2024.

The facility is located at 7535 Taylor Lane, near the city of Austin, in Travis County, Texas 78653. The treated effluent is discharged to Gilleland Creek, thence to Colorado River Below Lady Bird Lake/Town Lake in Segment No. 1428 of the Colorado River Basin. The unclassified receiving water use is high aquatic life use for Gilleland Creek. The designated uses for Segment No. 1428 are primary contact recreation, public water supply, and exceptional aquatic life use. All determinations are preliminary and subject to additional review and/or revisions. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.551388,30.269444&level=18

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Austin Water - Waller Creek Center, 625 East 10th Street, Suite 315, Austin, in Travis County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage:

https://www.tceq.texas.gov/permitting/wastewater/tpdes-applications.

**ALTERNATIVE LANGUAGE NOTICE.** Alternative language notice in Spanish, Vietnamese, and Simplified Chinese is available at

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices. El aviso de idioma alternativo en español está disponible en

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices. Thông báo sử dụng ngôn ngữ thay thế bằng tiếng Việt có sẵn tại trang web sau đây

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices. 我们还提供简体中文版本的通知,前往以下链接即可查看https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices.

**PUBLIC COMMENT / PUBLIC MEETING.: You may submit public comments or request a public meeting about this application.** The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ holds a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. Unless the application is directly referred for a contested case hearing, the response to comments will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting a contested case hearing or reconsideration of the Executive Director's decision. A contested case hearing is a legal proceeding similar to a civil trial in a state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period; and the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period. TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.

**EXECUTIVE DIRECTOR ACTION**. The Executive Director may issue final approval of the application unless a timely contested case hearing request or request for reconsideration is filed. If a timely hearing request or request for reconsideration is filed, the Executive Director will not issue final approval of the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

**MAILING LIST**. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

All written public comments and public meeting requests must be submitted to the Office of the Chief Clerk, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 or electronically at <a href="https://www.tceq.texas.gov/goto/comment">www.tceq.texas.gov/goto/comment</a> within 30 days from the date of newspaper publication of this notice.

**INFORMATION AVAILABLE ONLINE.** For details about the status of the application, visit the Commissioners' Integrated Database at <a href="https://www.tceq.texas.gov/goto/cid">www.tceq.texas.gov/goto/cid</a>. Search the database using the permit number for this application, which is provided at the top of this notice.

**AGENCY CONTACTS AND INFORMATION.** Public comments and requests must be submitted either electronically at <a href="www.tceq.texas.gov/goto/comment">www.tceq.texas.gov/goto/comment</a>, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC 105, P.O. Box 13087, Austin, Texas 78711-3087. Any personal information you submit to the TCEQ will become part of the agency's record; this includes email addresses. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at <a href="www.tceq.texas.gov/goto/pep">www.tceq.texas.gov/goto/pep</a>. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from City of Austin at the address stated above or by calling Ms. Tammy Y. West, Wastewater Regulator Manager, City of Austin-Austin Water, at 512-972-0143.

Issuance Date: September 4, 2024

#### Comisión de Calidad Ambiental de Texas



# AVISO DE SOLICITUD Y DECISIÓN PRELIMINAR PARA PERMISO TPDES PARA AGUA RESIDUAL MUNICIPAL

#### RENOVACIÓN

#### PERMISO NRO. WQoo10543014

**SOLICITUD Y DECISIÓN PRELIMINAR**. La Ciudad de Austin, 625 East 10th Street, Suite 800, Austin, Texas 78701, solicitó a la Comisión de Calidad Ambiental de Texas (Texas Commission on Environmental Quality, TCEQ) una renovación del permiso del sistema de eliminación de vertidos contaminantes de Texas (Texas Pollutant Discharge Elimination System, TPDES) Nro. WQ0010543014 que autoriza la descarga de agua residual doméstica tratada a un caudal promedio diario que no supere los 500 mil galones por día. La TCEQ recibió esta solicitud el 18 de marzo de 2024.

La planta está ubicada en 7535 Taylor Lane, cerca de la ciudad de Austin en el Condado de Travis, Texas 78653. El efluente tratado se descarga en el arroyo Gilleland, desde allí va al Río Colorado por debajo del Lago Lady Bird/Lago Town en el segmento número 1428 de la cuenca del Río Colorado. El uso no clasificado del agua receptora es alto uso de vida acuática para el arroyo Gilleland. Los usos designados del segmento Nro. 1428 son recreación de contacto primario, suministro de agua pública y uso excepcional de vida acuática. Todas las determinaciones son preliminares y están sujetas a revisión y/o correcciones adicionales. Este enlace a un mapa electrónico del predio o de la ubicación general de la instalación se proporciona como cortesía pública y no forma parte de la solicitud ni del aviso. Para conocer la ubicación exacta, remítase a la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.551388,30.269444&level=18

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y preparó un borrador del permiso. El borrador del permiso, en caso de aprobarse, establecería las condiciones de operación de la instalación. El Director Ejecutivo ha tomado una decisión preliminar de que este permiso, en caso de expedirse, cumple con todos los requisitos legales y regulatorios. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para consulta y copia en Austin Water - Waller Creek Center, 625 East 10th Street, Suite 315, Austin en el Condado de Travis, Texas. La solicitud, incluso cualquier actualización, y los avisos asociados están disponibles electrónicamente en la siguiente página web: <a href="https://www.tceq.texas.gov/permitting/wastewater/tpdes-applications">www.tceq.texas.gov/permitting/wastewater/tpdes-applications</a>.

#### AVISO DE IDIOMA ALTERNATIVO.

El aviso está disponible en español como idioma alternativo en:

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices.

Thông báo bằng tiếng Việt có sẵn tai:

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices. 我们还提供简体中文版本的通知,前往以下链接即可查看:

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices.

COMENTARIO PÚBLICO / REUNIÓN PÚBLICA.: Puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es proporcionar la oportunidad de presentar comentarios o hacer preguntas sobre la solicitud. La TCEQ organiza una reunión pública si el Director Ejecutivo determina que hay un grado significativo de interés público en la solicitud o ante el pedido de un legislador de la localidad. Una reunión pública no es una audiencia de caso impugnado.

OPORTUNIDAD PARA UNA AUDIENCIA DE CASO IMPUGNADO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios oportunos y preparará una respuesta a todos los comentarios públicos esenciales y pertinentes o significativos. A menos que la solicitud se remita directamente a una audiencia de caso impugnado, la respuesta a los comentarios se enviará a toda persona que haya presentado comentarios públicos y a aquellas personas que estén en la lista de correo de esta solicitud. Si se reciben comentarios, la correspondencia también proporcionará instrucciones para pedir una audiencia de caso impugnado o la reconsideración de la decisión del Director Ejecutivo. Una audiencia de caso impugnado es un procedimiento legal similar a un juicio civil en un tribunal de distrito del estado.

PARA PEDIR UNA AUDIENCIA DE CASO IMPUGNADO, DEBE INCLUIR LOS SIGUIENTES PUNTOS EN SU PEDIDO: su nombre, dirección, número de teléfono; nombre del solicitante y número de permiso propuesto; la ubicación y distancia de su propiedad/actividades en relación con la instalación propuesta: una descripción específica de cómo la instalación lo perjudicaría de una manera que no sea común al público general; una lista de todas las cuestiones de hechos en disputa que presente durante el periodo de comentarios y la declaración: "[Solicito/solicitamos] una audiencia de caso impugnado". Si el pedido de audiencia de caso impugnado se presenta en nombre de un grupo o una asociación, el pedido debe designar al representante del grupo para que reciba la futura correspondencia; identificar con nombre y dirección física a un miembro del grupo que se vería perjudicado por la instalación o actividad propuesta; proporcionar la información mencionada anteriormente sobre la ubicación del miembro afectado y su distancia de la instalación o actividad; explicar por qué y cómo el miembro se vería afectado y explicar cómo los intereses que el grupo procura proteger son pertinentes al propósito del grupo.

Tras el cierre de todo periodo correspondiente de comentarios o pedidos, el Director Ejecutivo enviará la solicitud y cualquier pedido de reconsideración o de audiencia de caso impugnado a los comisionados de la TCEQ para que los analicen en una asamblea programada de la Comisión.

La Comisión solo puede conceder un pedido de audiencia de caso impugnado sobre cuestiones que el solicitante haya presentado en sus comentarios oportunos y que no hayan sido retirados posteriormente. En caso de concederse una audiencia, el tema de la audiencia se limitará a las cuestiones de hechos en disputa o preguntas mixtas de hechos y de derecho esenciales y pertinentes a las preocupaciones sobre calidad del agua presentadas durante el periodo de comentarios. La TCEQ puede actuar sobre una solicitud para renovar un permiso para descarga de agua residual sin proveer una oportunidad de una audiencia de caso impugnado si se satisfacen determinados criterios.

**MEDIDA DEL DIRECTOR EJECUTIVO.** El Director Ejecutivo puede expedir una aprobación definitiva de la solicitud a menos que se tramite oportunamente un pedido de audiencia de caso impugnado o un pedido de reconsideración. En caso de que se tramite oportunamente un pedido de audiencia de caso impugnado o de reconsideración, el Director Ejecutivo no expedirá la aprobación definitiva del permiso y remitirá la solicitud y el pedido a los Comisionados de la TCEQ para que los analicen en una asamblea programada de la Comisión.

LISTA DE CORREO. Si envía comentarios públicos, un pedido de audiencia de caso impugnado o de reconsideración de la decisión del Director Ejecutivo, usted será agregado a la lista de correo para esta solicitud específica para recibir futuros avisos públicos que la Oficina del Secretario Oficial enviará por correo. Además, puede pedir que lo agreguen a: (1) la lista de correo permanente para un nombre de solicitante o número de permiso específicos; y/o (2) la lista de correo para un condado específico. Si quiere que lo agreguen a la lista de correo permanente y/o de un condado, específique claramente a qué lista o listas y envíe su pedido a la Oficina del Secretario Oficial de la TCEQ a la dirección que figura abajo.

Todos los comentarios públicos por escrito y los pedidos de reunión pública por escrito deben ser enviados a Office of the Chief Clerk, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 o de forma electrónica a través de www.tceq.texas.gov/goto/comment dentro de los 30 días de la fecha de publicación en un periódico de este aviso.

**INFORMACIÓN DISPONIBLE EN LÍNEA.** Para conocer los detalles sobre el estado de la solicitud, visite la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Busque en la base de datos usando el número de permiso para esta solicitud, que se proporciona en la parte superior de este aviso.

CONTACTOS E INFORMACIÓN DE LA AGENCIA. Los comentarios públicos y pedidos deben presentarse ya sea de forma electrónica en www.tceq.texas.gov/goto/comment, o por escrito a la Texas Commission on Environmental Quality, Office of the Chief Clerk, MC 105, P.O. Box 13087, Austin, Texas 78711-3087. Toda información personal que envíe a la TCEQ se incorporará al registro de la agencia; esto incluye direcciones de correo electrónico. Para obtener información sobre esta solicitud de permiso o el proceso de obtención de permisos, llame gratis al Programa de Educación Pública de la TCEQ al 1-800-687-4040 o visite el sitio web en www.tceq.texas.gov/goto/pep. Si desea información en español, puede llamar al 1-800-687-4040.

Se puede obtener información adicional en la Ciudad de Austin en la dirección indicada anteriormente o llamando a la Sra. Tammy Y. West, responsable de reglamentación de aguas residuales de la Ciudad de Austin-Austin Water al 512-972-0143.

Fecha de publicación: 4 de septiembre de 2024

## Texas 州环境质量委员会



#### 市政废水TPDES许可证续延申请及初步决定之通知

许可证号: WQ0010543014

申请及初步决定。Austin 市 (625 East 10th Street, Suite 800, Austin, Texas 78701) 已向 Texas 州 环境质量委员会 (Texas Commission on Environmental Quality, 简称 TCEQ) 申请续延 Texas 州污染物排放消除系统 (Texas Pollutant Discharge Elimination System, 简称 TPDES) 第 WQ0010543014 号许可,以授权排放经处理的生活废水,日均流量不超过 500,000 加仑。TCEQ 于 2024 年 3 月 18 日收到了此申请。

该设施位于Texas州Travis县的7535 Taylor Lane,**靠近** Austin 市,邮政编码为78653。经处理的 污水排放到 Gilleland Creek,**再流入** Colorado River **流域第** 1428 号段的 Colorado River,该河段位于 Lady Bird Lake/Town Lake 的下游。Gilleland Creek的受纳水体用途为高水生生物用途。第 1428 号段的指定用途包括主要接触式娱乐、公共供水和特殊水生生物用途。所有决定均为初步决定,可能会根据额外的审核和/或修订进行调整。显示工厂或设施总体位置的电子地图链接系为方便公众而提供,并非申请或通知的组成部分。具体位置请参阅申请。

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.551388,30.269444&level=18

TCEQ 执行董事已完成对申请的技术审核,并拟定了一份许可证草案。许可证草案如获批准,将规定该设施必须遵守的运营条件。执行董事已作出初步决定,认定此许可证如获颁发,将符合所有法定和监管要求。许可证申请、执行董事的初步决定以及许可证草案可前往位于 Texas 州 Travis 县的 Austin Water - Waller Creek Center, 625 East 10th Street, Suite 315, Austin 查看和复制。该申请(包括任何更新)以及相关通知的电子版可从以下网页获取:

https://www.tceq.texas.gov/permitting/wastewater/tpdes-applications。 备选语言版本的通知。

El aviso está disponible en español como idioma alternativo en:

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices.

Thông báo bằng tiếng Việt có sẵn tai:

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices. 我们还提供简体中文版本的通知,前往以下链接即可查看:
https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices.

公众意见/公开会议。您可以就此申请提交公众意见或请求举行公开会议。举行公开会议的目的是为了让相关人员有机会就申请提交意见或提出问题。若执行董事认为此申请涉及重大的公众利益,或者当地议员有所要求,则 TCEQ 将举行公开会议。公开会议并非争议案件听审会。

**有机会召开争**议案件听审会。在提交公众意见的截止日期过后,执行董事将考虑所有及时提出的公众意见,并就所有相关且重大的意见做好回应的准备。除非申请需直接移交至争议案件听审会,否则对公众意见的回应将邮寄给所有提交公众意见的人以及本申请的邮寄名单上的所有人。对于收到回应的公众意见,邮寄资料中还将提供相关指示,说明如何请求召开争议案件听审会或如何就执行董事的决定提出复议申请。争议案件听审会是类似于州地区法院民事审判的一道法律程序。

如想请求召开争议案件听审会·您必须提交以下信息:您的姓名、地址、电话号码;申请人的姓名及提议的许可证号;您的物业/活动与拟议设施之间的相对位置与距离;具体说明该设施会如何以某种大众所不常见的方式给您造成不良影响;公众评议期内您提交的所有事实争议的清单·以及明确提到"[我/我们]请求召开争议案件听审会"的声明。若是代某个团体或协会请求召开争议案件听审会,则在提交请求时必须指派代表来负责接收今后的通信内容;提供团体中某位会因为拟议设施或活动而受到不良影响的成员的姓名和实际地址;和前面提过的信息一样·提供该成员与拟议设施或活动之间的相对位置和距离;说明该成员会受到哪些影响以及为何会受到这些影响;以及解释团体想要保护的利益与他们的宗旨之间有何关联。

**当适用的**评议与请求提交期全部结束后,执行董事便会将申请及所有要求复议或召开争议案件听审会的请求都提交给 TCEQ **委**员,供他们在定期召开的委员会大会上进行审议。

委员会只会应符合以下条件的请求准予召开争议案件听审会:在公众评议期内及时提交相关问题 且后续没有撤销意见。对于准予召开的听审会,其主题将仅限于公众评议期内提交的涉及相关且 重大的水质问题的事实争议或事实+**法律争**议。在满足特定标准的情况下,TCEQ 有权对续延废水 排放许可的申请采取行动,而无需提供召开争议案件听审会的机会。

执行董事的行动。除非及时提出争议案件听审会请求或复议请求,否则执行董事有权对申请作出最终批准。如果及时提出了争议案件听审会请求或复议请求,执行董事将不会对许可证作出最终批准,并会将请求提交给 TCEQ 委员,供他们在定期召开的委员会大会上进行审议。

邮寄名单。如果您提交了公众意见、请求召开争议案件听审会或对执行董事的决定予以复议,则您将被添加到这一特定申请的邮寄名单中,后续将收到书记官办公室 (Office of the Chief Clerk)邮寄来的公告。此外,您还可以请求加入:(1) 具体某个申请人及许可证号的永久邮寄名单;和/或(2) 具体某个县的邮寄名单。如果您想加入某个/某些永久邮寄名单和/或县级邮寄名单,请说明清楚并将请求发送至以下地址的 TCEQ 书记官办公室。

所有书面的公众意见和公开会议请求必须通过以下任一方式提交:一是邮寄信函至 Texas 州环境质量委员会书记官办公室(地址:Office of the Chief Clerk, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087),二是自本通知在报纸上刊登之日起30日内,通过www.tceq.texas.gov/goto/comment线上提交。

**可在**线上获取的信息。如想详细了解申请的状态,请访问委员会综合数据库 (Commissioners' Integrated Database): www.tceq.texas.gov/goto/cid。本通知开头部分提供了此申请的许可证号,您可以利用它来搜索数据库。

机构联系人及联系信息。公众意见和请求必须通过以下任一方式提交:一是通过www.tceq.texas.gov/goto/comment 线上提交,二是邮寄信函至 Texas 州环境质量委员会书记官办公室(地址:Texas Commission on Environmental Quality, Office of the Chief Clerk, MC 105, P.O. Box 13087, Austin, Texas 78711-3087)。您向 TCEQ 提交的任何个人信息都将成为该机构档案的一部分,包括电子邮件地址。如想了解有关此许可证申请或许可流程的更多信息,请致电TCEQ 公共教育计划 (Public Education Program) 的免费电话 1-800-687-4040;或者您也可以访问他们的网站:www.tceq.texas.gov/goto/pep。

**如想**获取更多信息,您还可以前往 Austin **市的上述地址,或者**拨打电话 512-972-0143,联系 City of Austin-Austin Water 废水监管经理 Tammy Y. West 女士。

发布日期: 2024年9月4日

# Ủy Ban Chất Lượng Môi Trường Texas



## THÔNG BÁO VỀ ĐƠN XIN VÀ QUYẾT ĐỊNH SƠ BỘ CẤP GIẤY PHÉP TPDES CHO NƯỚC THẢI THÀNH PHỐ

#### **GIA HAN**

### GIẤY PHÉP SỐ WQ0010543014

**ĐƠN XIN VÀ QUYẾT ĐỊNH SƠ BỘ CẤP** Thành phố Austin, 625 East 10th Street, Suite 800, Austin, Texas 78701, đã nộp đơn xin gia hạn Giấy Phép Sử Dụng Hệ Thống Loại Bỏ Chất Ô Nhiễm Texas (Texas Pollutant Discharge Elimination System, TPDES) số WQ0010543014 đến Ủy ban Chất lượng Môi trường Texas (Texas Commission on Environmental Quality, TCEQ) để cho phép xả nước thải sinh hoạt đã qua xử lý với lưu lượng trung bình hàng ngày không vượt quá 500,000 gallon mỗi ngày. TCEQ nhận được đơn xin này vào ngày 18 tháng Ba, 2024.

Cơ sở được đặt tại 7535 Taylor Lane, gần thành phố Austin, trong Quận Travis, Texas 78653. Nước thải đã qua xử lý được thải ra Gilleland Creek, sau đó chảy ra Sông Colorado bên dưới Hồ Lady Bird/TownLake ở Đoạn số 1428 của Lưu vực Sông Colorado. Việc sử dụng nguồn nước tiếp nhận chưa được phân loại là sử dụng cho đời sống thủy sinh cao đối với Gilleland Creek. Các mục đích sử dụng được chỉ định cho Đoạn số 1428 là giải trí tiếp xúc chính, cung cấp nước công cộng và sử dụng đặc biệt cho đời sống thủy sinh. Tất cả các quyết định đều mang tính sơ bộ và có thể được xem xét và/hoặc sửa đổi bổ sung. Liên kết này dẫn đến bản đồ điện tử về vị trí tổng quan của địa điểm hoặc cơ sở được cung cấp như một phép lịch sự công cộng và không phải là một phần của đơn xin hoặc thông báo. Để biết địa điểm chính xác, vui lòng tham khảo đơn xin. <a href="https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.551388,30.269444&level=18">https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.551388,30.269444&level=18</a>

Giám đốc Điều hành TCEQ đã hoàn thành đánh giá kỹ thuật đối với đơn xin và chuẩn bị một bản dự thảo giấy phép. Nếu được phê duyệt thì bản dự thảo giấy phép sẽ thiết lập các điều kiện quy định hoạt động của cơ sở. Giám đốc Điều hành đã đưa ra quyết định sơ bộ rằng nếu được cấp thì giấy phép này sẽ đáp ứng tất cả các yêu cầu theo luật định và quy định. Đơn xin cấp phép, quyết định sơ bộ của Giám đốc Điều hành và bản dự thảo giấy phép sẽ có sẵn để xem và sao chép tại Austin Water - Trung tâm Waller Creek, 625 East 10th Street, Suite 315, Austin, tại Quận Travis, Texas. Đơn xin, bao gồm mọi cập nhật, và thông báo liên quan đều có sẵn dưới dạng điện tử tại trang web sau: <a href="https://www.tceq.texas.gov/permitting/wastewater/tpdes-applications">https://www.tceq.texas.gov/permitting/wastewater/tpdes-applications</a>.

**THÔNG BÁO BẰNG NGỐN NGỮ KHÁC.** El aviso está disponible en español como idioma alternativo en: https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices. Thông báo bằng tiếng Việt có sẵn tại:

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices. 我们还提供简体中文版本的通知,前往以下链接即可查看:

https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices.

Ý KIẾN CÔNG KHAI / HỌP CÔNG KHAI.: Quý vị có thể nộp ý kiến công khai hoặc yêu cầu một buổi họp công khai về đơn xin này. Mục đích của buổi họp công khai là cung cấp cơ hội để quý vị đệ trình ý kiến hoặc đặt câu hỏi về đơn xin. TCEQ sẽ tổ chức một buổi họp công khai nếu Giám đốc Điều hành xác định rằng có mức độ quan tâm đáng kể từ phía công chúng đối với đơn xin hoặc nếu được yêu cầu bởi một cơ quan lập pháp địa phương. Một buổi họp công khai không phải là một phiên điều trần tranh chấp.

CƠ HỘI ĐỂ MỞ MỘT PHIÊN ĐIỀU TRẦN TRANH CHẤP. Sau thời hạn đệ trình các ý kiến công khai, Giám đốc Điều hành sẽ xem xét tất cả ý kiến đúng hạn và chuẩn bị phản hồi cho tất cả ý kiến công khai có liên quan và quan trọng hoặc các ý kiến công khai có ảnh hưởng đáng kể. Trừ khi đơn xin được trực tiếp chuyển đến một phiên điều trần tranh chấp, phản hồi cho các ý kiến sẽ được gửi qua thư cho tất cả những người đã nộp ý kiến công khai và những cá nhân nằm trong danh sách gửi thư cho đơn xin này. Nếu có ý kiến được nhận, thư cũng sẽ cung cấp hướng dẫn về cách yêu cầu phiên điều trần tranh chấp hoặc xem xét lại quyết định của Giám đốc Điều Hành. Một phiên điều trần tranh chấp là thủ tục pháp lý tương tự như phiên xử dân sự tại một tòa án khu vực của tiểu bang.

ĐỂ YÊU CẦU MỘT PHIÊN ĐIỀU TRẦN TRANH CHẤP, QUÝ VỊ PHẢI BAO GỒM CÁC MỤC SAU TRONG YÊU CẦU CỦA QUÝ VỊ: tên của quý vị, địa chỉ, số điện thoại; tên của người đề nghị và số giấy phép đề xuất; vị trí và khoảng cách của phần đất/hoạt động của quý vị so với cơ sở được đề xuất; mô tả cụ thể về lý do mà quý vị cho là mình sẽ bị ảnh hưởng tiêu cực bởi cơ sở đó theo một cách không phổ biến đối với công chúng; danh sách tất cả các vấn đề tranh chấp về sự việc mà quý vị đệ trình trong thời hạn đề ra ý kiến; và, tuyên bố "[Tôi/chúng tôi] yêu cầu một phiên điều trần tranh chấp." Nếu yêu cầu phiên điều trần tranh chấp được nộp thay mặt cho một nhóm hoặc hiệp hội, yêu cầu phải chỉ định đại diện của nhóm để nhận thông tin phản hồi trong tương lai; xác định bằng tên và địa chỉ thực tế của một thành viên cá nhân trong nhóm sẽ bị ảnh hưởng tiêu cực bởi cơ sở hoặc hoạt động đề xuất; cung cấp thông tin đã thảo luận ở trên về vị trí và khoảng cách của thành viên sẽ bị ảnh hưởng từ cơ sở hoặc hoạt động; giải thích cách và tại sao thành viên sẽ bị ảnh hưởng; và giải thích lý do tại sao những lợi ích mà nhóm đang tìm cách bảo vệ liên quan đến mục đích của nhóm.

Sau khi kết thúc tất cả các thời hạn ý kiến và yêu cầu áp dụng, Giám đốc Điều hành sẽ chuyển đơn xin và bất kỳ yêu cầu xem xét lại hoặc một phiên điều trần tranh chấp đến Hội đồng Quản lý TCEQ để xem xét tại một cuộc họp Hội đồng được lên lịch.

Ủy ban chỉ có thể chấp thuận yêu cầu một phiên điều trần tranh chấp về các vấn đề mà người yêu cầu đã nộp trong ý kiến đúng hạn của họ mà sau đó không bị rút lại. **Nếu một phiên điều trần được chấp thuận, nội dung của phiên sẽ bị giới hạn chỉ đối với các vấn đề tranh chấp về sự thật hoặc các câu hỏi khác nhau về sự thật và luật liên quan đến các vấn đề về chất lượng nước có tính liên quan và quan trọng mà đã được đệ trình trong thời gian nêu ý kiến. TCEQ có thể xem xét và quyết định về đơn xin gia hạn giấy phép xả nước thải mà không cần phải mở một phiên điều trần tranh chấp nếu các tiêu chí cụ thể được đáp ứng.** 

HÀNH ĐỘNG CỦA GIÁM ĐỐC ĐIỀU HÀNH. Giám đốc Điều hành có thể đưa ra phê duyệt cuối cùng cho đơn xin trừ khi có yêu cầu được nộp đúng hạn về phiên điều trần tranh chấp hoặc xem xét lại. Nếu có yêu cầu được nộp đúng hạn về phiên điều trần hoặc xem xét lại thì Giám đốc Điều hành sẽ không ban hành phê duyệt cuối cùng đối với giấy phép cũng như sẽ chuyển đơn xin và yêu cầu đến Hội đồng Quản lý TCEQ để xem xét tại một cuộc họp Hội đồng được lên lịch.

**DANH SÁCH GỬI THƯ.** Nếu quý vị nộp ý kiến công khai, yêu cầu một phiên điều trần tranh chấp hoặc xem xét lại quyết định của Giám đốc Điều Hành, quý vị sẽ được thêm vào danh sách gửi thư cho đơn xin cụ thể này để nhận các thông báo công khai trong tương lai được gửi bằng thư bởi Văn phòng Thư ký Trưởng. Ngoài ra, quý vị có thể yêu cầu được đặt vào: (1) danh sách gửi thư cố định cho tên ứng viên và số giấy phép cụ thể; và/hoặc (2) danh sách gửi thư cho một địa hạt cụ thể. Nếu quý vị muốn được đưa vào danh sách gửi thư lâu dài và/hoặc danh sách gửi thư cho quận cụ thể, hãy nêu rõ rằng quý vị muốn ở trong danh sách nào và gửi yêu cầu của quý vị đến Văn phòng Thư ký trưởng TCEQ theo đia chỉ dưới đây.

Tất cả các ý kiến công khai và yêu cầu cuộc họp công khai bằng văn bản phải được nộp cho Office of the Chief Clerk, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 hoặc theo đường điện tử tại www.tceq.texas.gov/goto/comment trong vòng 30 ngày kể từ ngày đăng thông báo này.

**THÔNG TIN CÓ SẮN TRỰC TUYẾN.** Để biết chi tiết về tình trạng đơn xin cấp phép, vui lòng truy cập Cơ sở dữ liệu Tích hợp của Ủy ban tại địa chỉ www.tceq.texas.gov/goto/cid. Sử dụng số giấy phép cho đơn xin này, mà quý vị được cung cấp ở đầu thông báo, để tìm kiếm trong cơ sở dữ liệu.

**THÔNG TIN VÀ CÁCH LIÊN HỆ VỚI CƠ QUAN.** Tất cả các ý kiến công khai và các yêu cầu phải được nộp thông qua hệ thống điện tử tại www.tceq.texas.gov/goto/comment, hoặc bằng văn bản gửi đến Texas Commission on Environmental Quality, Office of the Chief Clerk, MC 105, P.O. Box 13087, Austin, Texas 78711-3087. Bất kỳ thông tin cá nhân nào quý vị gửi cho TCEQ sẽ trở thành một phần trong hồ sơ của cơ quan; điều này bao gồm các địa chỉ email. Để biết thêm thông tin về đơn xin cấp phép này hoặc quy trình cấp phép, vui lòng gọi Chương trình Giáo dục Công chúng TCEQ, Miễn phí, tại số 1-800-687-4040 hoặc truy cập trang web của họ tại www.tceq.texas.gov/goto/pep.

Thông tin thêm có thể được thu thập từ Thành phố Austin theo địa chỉ đã nêu ở trên hoặc gọi Cô Tammy Y. West, Quản Lý Quy Định Xử Lý Nước Thải, Thành Phố Austin - Cơ Quan Thủy Cục Austin tại số 512-972-0143.

Ngày ban hành: Ngày 4 tháng 9 năm 2024



TPDES PERMIT NO. WQ0010543014 [For TCEQ office use only - EPA I.D. No. TX0129950]

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

This is a renewal that replaces TPDES Permit No. WQ0010543014 issued on October 7, 2019.

#### PERMIT TO DISCHARGE WASTES

under provisions of Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code

City of Austin

whose mailing address is

625 East 10th Street, Suite 800 Austin, Texas 78701

is authorized to treat and discharge wastes from the Taylor Lane Wastewater Treatment Facility, SIC Code 4952

located at 7535 Taylor Lane, near the city of Austin, in Travis County, Texas 78653

to Gilleland Creek, thence to Colorado River Below Lady Bird Lake/Town Lake in Segment No. 1428 of the Colorado 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, five years from the date of issuance.

ISSUED DATE:	
	For the Commission

#### INTERIM I EFFLUENT LIMITATIONS AND MONITORING REOUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 0.25 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.1 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 278 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Max. Single Gra	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Five/week	Instantaneous
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (4.2)	10	20	30	One/week	Grab
<b>Total Suspended Solids</b>	5 (4.2)	10	20	30	One/week	Grab
Ammonia Nitrogen	2 (1.7)	5	10	15	One/week	Grab
Total Phosphorus	1 (0.8)	2	4	6	One/week	Grab
E. coli, colony-forming units or most probable number per 100 ml	120	N/A	N/A	379	One/month	Grab

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

#### INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of completion of expansion to the 0.25 million gallons per day (MGD) facility and lasting through the completion of expansion to the 0.5 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.25 million gallons per day MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 694 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	<b>Totalizing Meter</b>
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (10)	10	20	30	One/week	Composite
Total Suspended Solids	5 (10)	10	20	30	One/week	Composite
Ammonia Nitrogen	2 (4.2)	5	10	15	One/week	Composite
Total Phosphorus	1 (2.09)	2	4	6	One/week	Composite
E. coli	126	N/A	399	N/A	One/month	Grab

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

#### FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the completion of expansion to the 3.0 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.5 million gallons per day MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,389 gallons per minute (gpm).

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	<b>Totalizing Meter</b>
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (21)	10	20	30	One/week	Composite
Total Suspended Solids	5 (21)	10	20	30	One/week	Composite
Ammonia Nitrogen	2 (8.3)	5	10	15	One/week	Composite
Total Phosphorus	1 (4.2)	2	4	6	One/week	Composite
E. coli	126	N/A	399	N/A	One/month	Grab

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

#### **DEFINITIONS AND STANDARD PERMIT CONDITIONS**

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

#### 1. Flow Measurements

- a. Annual average flow the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.
- b. Daily average flow the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) the highest 2-hour peak flow for any 24-hour period in a calendar month.

#### 2. Concentration Measurements

- a. Daily average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
  - i. For domestic wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

- ii. For all other wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

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

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

## 3. Sample Type

a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

- b. Grab sample an individual sample collected in less than 15 minutes.
- 4. Treatment Facility (facility) wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
- 5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.
- 6. The term "biosolids" is defined as sewage sludge that has been tested or processed to meet Class A, Class AB, or Class B pathogen standards in 30 TAC Chapter 312 for beneficial use.
- 7. 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, effluent monitoring data shall be submitted each month, to the Compliance Monitoring Team of the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

#### 2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

#### 3. Records of Results

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

- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids 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 Compliance

Monitoring Team of the Enforcement Division (MC 224).

#### 7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
  - i. Unauthorized discharges as defined in Permit Condition 2(g).
  - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
  - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
- c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Compliance Monitoring Team of 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 Compliance Monitoring Team of 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 Compliance Monitoring Team of the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i. One hundred micrograms per liter (100  $\mu$ g/L);
  - ii. Two hundred micrograms per liter (200  $\mu$ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu$ g/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i. Five hundred micrograms per liter (500  $\mu$ g/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 POTWs must provide adequate notice to the Executive Director of the following:
  - a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;
  - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
  - c. For the purpose of this paragraph, adequate notice shall include information on:
    - i. The quality and quantity of effluent introduced into the POTW; and
    - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

#### PERMIT CONDITIONS

#### 1. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
  - i. Violation of any terms or conditions of this permit;
  - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

#### 2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance

with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 7.075 (relating to Administrative Penalties), 7.101 7.111 (relating to Civil Penalties), and 7.141 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

#### 3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

#### 4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
  - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or
  - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or
  - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the

regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

#### 5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

#### 6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

#### 7. Relationship to Water Rights

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

#### 8. Property Rights

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

#### 9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

#### 10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

#### 11. Notice of Bankruptcy

- a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
  - i. the permittee;
  - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
  - iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

- b. This notification must indicate:
  - i. the name of the permittee;
  - 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 or biosolids use and disposal and 30 TAC §§ 319.21 319.29 concerning the discharge of certain hazardous metals.
- 3. Domestic wastewater treatment facilities shall comply with the following provisions:
  - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
  - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
- 4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
- 5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
- 6. The permittee shall remit an annual water quality fee to the Commission as required by 30

TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).

#### 7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

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

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) 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 Registration 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 § 335 and must include the following, as it pertains to wastewater treatment and discharge:
  - i. Volume of waste and date(s) generated from treatment process;
  - ii. Volume of waste disposed of on-site or shipped off-site;
  - iii. Date(s) of disposal;
  - iv. Identity of hauler or transporter;
  - v. Location of disposal site; and
  - vi. Method of final disposal.

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

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

TCEO Revision 06/2020

#### **SLUDGE PROVISIONS**

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

## SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS LAND APPLICATION

#### A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.
- 2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
- 3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

#### **B.** Testing Requirements

1. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 11) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30<sup>th</sup> of each year. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

TABLE 1

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

<sup>\*</sup> Dry weight basis

#### 3. Pathogen Control

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

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

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

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

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

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

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

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

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

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

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

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

criteria.

#### Alternative 1

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

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

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

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

i. Prior to use or disposal, all the sewage sludge must have been generated from a

single location, except as provided in paragraph v. below;

- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and
- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1 - 3, the following site restrictions must be met if Class B biosolids are land applied:

- Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.
- v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.
- vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of biosolids.

- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.
- ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

#### 4. Vector Attraction Reduction Requirements

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

- Alternative 1 The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- Alternative 2 If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.
- Alternative 3 If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.
- Alternative 4 The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.
- Alternative 5 Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.
- Alternative 6 The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- Alternative 7 The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

#### Alternative 8 -

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

#### Alternative 9 -

- i. Biosolids shall be injected below the surface of the land.
- ii. No significant amount of the biosolids shall be present on the land surface within one hour after biosolids are injected.
- iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

#### Alternative 10-

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

#### **C.** Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test
PCBs

- once during the term of this permit
- once during the term of this permit

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

Amount of biosolids (\*)

metric tons per 365-day period Monitoring Frequency

o to less than 290 Once/Year

290 to less than 1,500 Once/Quarter

1,500 to less than 15,000 Once/Two Months

15,000 or greater Once/Month

(\*) The amount of bulk biosolids applied to the land (dry wt. basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge or biosolids for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

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

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

#### A. Pollutant Limits

#### Table 2

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

#### Table 3

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

<sup>\*</sup>Dry weight basis

#### **B.** Pathogen Control

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

#### **C.** Management Practices

- 1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk biosolids enters a wetland or other waters in the State.
- 2. Bulk biosolids not meeting Class A biosolids requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.
- 3. Bulk biosolids shall be applied at or below the agronomic rate of the cover crop.
- 4. An information sheet shall be provided to the person who receives bulk Class A or AB biosolids sold or given away. The information sheet shall contain the following information:
  - a. The name and address of the person who prepared the Class A or AB biosolids that are sold or given away in a bag or other container for application to the land.
  - b. A statement that application of the biosolids to the land is prohibited except in accordance with the instruction on the label or information sheet.
  - c. The annual whole sludge application rate for the biosolids application rate for the biosolids that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

#### **D. Notification Requirements**

- 1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:
  - a. The location, by street address, and specific latitude and longitude, of each land application site.
  - b. The approximate time period bulk biosolids will be applied to the site.
  - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.
- 2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the biosolids disposal practice.

#### E. Record Keeping Requirements

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

of <u>five years</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

- 1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
- 2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).
- 3. A description of how the vector attraction reduction requirements are met.
- 4. A description of how the management practices listed above in Section II.C are being met
- 5. The following certification statement:

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

- 6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative <u>indefinitely</u>. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
  - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
  - b. The location, by street address, and specific latitude and longitude, of each site on which biosolids are applied.
  - c. The number of acres in each site on which bulk biosolids are applied.
  - d. The date and time biosolids are applied to each site.

- e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
- f. The total amount of biosolids applied to each site in dry tons.

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

#### F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30<sup>th</sup> of each year the following information. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

- 1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.
- 3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
- 4. The frequency of monitoring listed in Section I.C. that applies to the permittee.
- 5. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 6. PCB concentration in sludge or biosolids in mg/kg.
- 7. Identity of hauler(s) and TCEQ transporter number.
- 8. Date(s) of transport.
- 9. Texas Commission on Environmental Quality registration number, if applicable.
- 10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.
- 11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
- 12. Level of pathogen reduction achieved (Class A, Class AB or Class B).
- 13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.

- 14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.
- 15. Vector attraction reduction alternative used as listed in Section I.B.4.
- 16. Amount of sludge or biosolids transported in dry tons/year.
- 17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.
- 18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
  - a. The location, by street address, and specific latitude and longitude.
  - b. The number of acres in each site on which bulk biosolids are applied.
  - c. The date and time bulk biosolids are applied to each site.
  - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.
  - e. The amount of biosolids (i.e., dry tons) applied to each site.

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

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

- A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge or biosolids meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge or biosolids and supplies that sewage sludge or biosolids to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge or biosolids disposal practice.
- D. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

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

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

- E. Sewage sludge or biosolids shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- F. Record Keeping Requirements

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

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

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

#### G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30<sup>th</sup> of each year the following information. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

- 1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 3. Annual sludge or biosolids production in dry tons/year.
- 4. Amount of sludge or biosolids disposed in a municipal solid waste landfill in dry tons/year.
- 5. Amount of sludge or biosolids transported interstate in dry tons/year.
- 6. A certification that the sewage sludge or biosolids meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- 7. Identity of hauler(s) and transporter registration number.
- 8. Owner of disposal site(s).
- 9. Location of disposal site(s).
- 10. Date(s) of disposal.

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

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

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

#### A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
- 2. Sludge or biosolids may only be transported using a registered transporter or using an approved pipeline.

#### **B.** Record Keeping Requirements

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

#### **C.** Reporting Requirements

The permittee shall report the following information annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30<sup>th</sup> of each year. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

- 1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. the annual sludge or biosolids production;
- 3. the amount of sludge or biosolids transported;
- 4. the owner of each receiving facility;
- 5. the location of each receiving facility; and
- 6. the date(s) of disposal at each receiving facility.

TCEQ Revision 06/2020

#### OTHER REQUIREMENTS

- 1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.
  - This Category C facility must be operated by a chief operator or an operator holding a Class C license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.
- 2. The facility is not located in the Coastal Management Program boundary.
- 3. The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).
- 4. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
- In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEO Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, 1/month may be reduced to 1/quarter in the Interim I, II, phase and Final phases. A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater **Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.
- 6. Prior to construction of the treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the effluent limitations required on Pages 2, 2a and 2b of this permit. A copy of the summary transmittal letter shall

be available at the plant site for inspection by authorized representatives of the TCEQ.

7. Reporting requirements according to 30 TAC §§ 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge, whichever occurs first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 11) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing at least forty-five days prior to plant startup or anticipated discharge, whichever occurs first, and prior to completion of each additional phase on Notification of Completion Form 20007.

#### CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

- 1. The following pollutants may not be introduced into the treatment facility:
  - a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed-cup flash point of less than 140° Fahrenheit (60° Celsius) using the test methods specified in 40 CFR § 261.21;
  - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with a pH lower than 5.0 standard units, unless the works are specifically designed to accommodate such discharges;
  - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;
  - d. Any pollutant, including oxygen-demanding pollutants (e.g., biochemical oxygen demand or BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
  - e. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104° Fahrenheit (40° Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;
  - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
  - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
  - h. Any trucked or hauled pollutants except at discharge points designated by the POTW.
- 2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403 [rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].
- 3. The permittee shall provide adequate notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of either of the following:
  - a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and
  - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Any notice shall include information on the quality and quantity of effluent to be introduced into the treatment works and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Revised July 2007

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

#### **DESCRIPTION OF APPLICATION**

Applicant: City of Austin

Texas Pollutant Discharge Elimination System (TPDES) Permit

No. WQ0010543014, EPA ID No. TX0129950

Regulated Activity: Domestic Wastewater Permit

Type of Application: Renewal

Request: Renewal with no changes

Authority: Federal Clean Water Act (CWA) § 402; Texas Water Code (TWC)

§ 26.027; 30 Texas Administrative Code (TAC) Chapters 30, 305, 307, 309, 312, and 319; Commission policies; and United States Environmental Protection Agency (EPA) guidelines.

#### 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**.

#### REASON FOR PROJECT PROPOSED

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 a daily average flow not to exceed 0.01 million gallons per day (MGD) in the Interim I phase, at a daily average flow not to exceed 0.25 MGD in the Interim II phase and a daily average flow not to exceed 0.5 MGD in the Final phase. The existing wastewater treatment facility serves the Taylor Lane.

#### PROJECT DESCRIPTION AND LOCATION

The Taylor Lane Wastewater Treatment Plant Wastewater Treatment Facility is an activated sludge process plant operated in the conventional mode. Treatment units in Interim I phase include two bar screens, two aeration basin, a final clarifier, one combination sludge holding tank/aerobic sludge digesters and a chlorine contact basin. Treatment units in Interim II phase include a bar screen, a grit separator, two first stage aeration basins, two second stage aeration basins, two final clarifiers, two cloth disc filters, two combination sludge holding tank/aerobic sludge digesters, and two chlorine contact basin. Treatment units in the Final phase include one bar screen, one grit separators, two first stage aeration basins, two second stage aeration basins, two final clarifiers, three cloth disc filters, two combination sludge holding tank/aerobic sludge digesters, two chlorine contact basin and a decloronation basin. The facility is operating in the Interim I phase.

Sludge generated from the treatment facility is hauled by a registered transporter to Walnut Creek Wastewater Treatment Facility, Permit No. WQ0010543011, to be digested, dewatered,

and then disposed of with the bulk of the sludge from the plant accepting the sludge. 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.

The plant site is located at 7535 Taylor Lane, near the city of Austin, in Travis County, Texas 78653.

#### **Outfall Location:**

Outfall Number	Latitude	Longitude
001	30.269444 N	97.551388 W

The treated effluent is discharged to Gilleland Creek, thence to Colorado River Below Lady Bird Lake/Town Lake in Segment No. 1428 of the Colorado River Basin. The unclassified receiving water use is high aquatic life use for Gilleland Creek. The designated uses for Segment No. 1428 are primary contact recreation, public water supply, and exceptional 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.

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 Texas Surface Water Quality Standards (TSWQS) and the State of Texas Water Quality Management Plan (WQMP).

In a case such as this, end-of-pipe compliance with pH limits between 6.0 and 9.0 standard units reasonably assures instream compliance with the TSWQS for pH when the discharge authorized is from a minor facility. This technology-based approach reasonably assures instream compliance with TSWQS criteria due to the relatively smaller discharge volumes authorized by these permits. This conservative assumption is based on TCEQ sampling conducted throughout the state which indicates that instream buffering quickly restores pH levels to ambient conditions. Similarly, this approach has been historically applied within EPA issued NPDES general permits where technology-based pH limits were established to be protective of water quality criteria.

The effluent limits recommended above have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The proposed limits are consistent with the approved WQMP.

The discharge from this permit action 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'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 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. 1428 is not currently listed on the State's inventory of impaired and threatened waters (the 2022 Clean Water Act Section 303(d) list).

One finalized Total Maximum Daily Load (TMDL) Project is available for Gilleland Creek: *One Total Maximum Daily Load for Bacteria in Gilleland Creek Segment 1428C* (Project No. 69).

On August 8, 2007, the Texas Commission on Environmental Quality (TCEQ) adopted *One Total Maximum Daily Load for Bacteria in Gilleland Creek*, which was also approved by the EPA on April 21, 2009. This document describes a project to address an impairment of water quality in Gilleland Creek, where concentrations of *Escherichia coli* (*E. coli*) exceed the criteria used to evaluate the attainment of the contact recreation use.

The waste load allocation for all of the domestic wastewater treatment plants was calculated in the TMDL using an adjusted criterion for *E. coli* equal to the geometric mean criterion of 120 cfu/100ml (126 cfu/100 ml minus 5 percent for a margin of safety). Effluent limits and monitoring requirements for bacteria are included in the draft permit based on this requirement.

#### SUMMARY OF EFFLUENT DATA

The following is a summary of the applicant's effluent monitoring data for the period February 2019 through February 2024. 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, total suspended solids (TSS), ammonia nitrogen (NH<sub>3</sub>-N) and total Phosphorus. The average of Daily Average value for *E. coli* in colony-forming units (CFU) or most probable number (MPN) per 100 ml is calculated via geometric mean.

<u>Average of Daily Average</u>
0.035
2.17
1.53
0.29
0.44
1

#### **DRAFT PERMIT CONDITIONS**

The draft permit authorizes a discharge of treated domestic wastewater at an interim volume not to exceed a daily average flow of 0.1 MGD, an interim volume not to exceed a daily average flow of 0.25 MGD and a final volume not to exceed a daily average flow of 0.5 MGD.

The effluent limitations in the all phases of the draft permit, based on a 30-day average, are 5 mg/l CBOD $_5$ , 5 mg/l TSS, 2.0 mg/l ammonia-nitrogen (NH $_3$ -N), total phosphorus, 120 CFU or MPN of *E. coli* per 100 ml, and 4.0 mg/l minimum dissolved oxygen (DO). The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes based on peak flow.

The facility does not appear to receive significant industrial wastewater contributions. Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 305, which references 40 Code of Federal Regulations (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 draft 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 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 to Walnut Creek Wastewater Treatment Facility, Permit No. WQ0010543011, to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. 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.

#### SUMMARY OF CHANGES FROM APPLICATION

None.

#### SUMMARY OF CHANGES FROM EXISTING PERMIT

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

For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

Certain accidental discharges or spills of treated or untreated wastewater from wastewater treatment facilities or collection systems owned or operated by a local government may be reported on a monthly basis in accordance with 30 TAC § 305.132.

Applicant applied for reduced the flow from 3.0 MGD to 0.5 MGD.

The draft permit includes all updates based on the 30 TAC 312 rule change effective April 23, 2020.

#### BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on March 18, 2024, and additional information received on April 16, 2024.

- 2. TPDES Permit No. WQ0010543014 issued on October 7, 2019.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. Consistency with the Coastal Management Plan: The facility is not located in the Coastal Management Program boundary.
- 7. Procedures to Implement the Texas Surface Water Quality Standards (IP), Texas Commission on Environmental Quality, June 2010, as approved by EPA, and the IP, January 2003, for portions of the 2010 IP not approved by EPA.
- 8. Texas 2022 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 1, 2022; approved by the U.S. Environmental Protection Agency on July 7, 2022.
- 9. 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.
- 10. One Total Maximum Daily Load for Bacteria in Gilleland Creek Segment 1428C (Project No. 69).

#### 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 Sonia Bhuiya at (512) 239-1205.

Sonia Bhuiya	July 17, 2024
Sonia Bhuiya	Date
Municipal Permits Team	
Wastewater Permitting Section (MC 148)	

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014

Application for Domestic WWTP
TCEQ Form 10053
Administrative Report

# TCFO

#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT: City of Austin-Austin Water

PERMIT NUMBER: WQ0010543014

Indicate if each of the following items is included in your application.

	Y	N		Y	N
Administrative Report 1.0	$\boxtimes$		Original USGS Map	$\boxtimes$	
Administrative Report 1.1	$\boxtimes$		Affected Landowners Map	$\boxtimes$	
SPIF	$\boxtimes$		Landowner Disk or Labels	$\boxtimes$	
Core Data Form	$\boxtimes$		Buffer Zone Map		$\boxtimes$
Public Involvement Plan Form		$\boxtimes$	Flow Diagram	$\boxtimes$	
Technical Report 1.0	$\boxtimes$		Site Drawing	$\boxtimes$	
Technical Report 1.1	$\boxtimes$		Original Photographs		$\boxtimes$
Worksheet 2.0	$\boxtimes$		Design Calculations		$\boxtimes$
Worksheet 2.1		$\boxtimes$	Solids Management Plan		$\boxtimes$
Worksheet 3.0			Water Balance		$\boxtimes$
Worksheet 3.1		$\boxtimes$			
Worksheet 3.2		$\boxtimes$			
Worksheet 3.3		$\boxtimes$			
Worksheet 4.0		$\boxtimes$			
Worksheet 5.0		$\boxtimes$			
Worksheet 6.0	$\boxtimes$				
Worksheet 7.0		$\boxtimes$			
For TCEQ Use Only					

Expiration Date \_\_\_\_\_Region \_\_\_\_

Segment Number \_\_\_\_\_

**Permit Number** 

\_County \_\_\_\_\_



#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## APPLICATION FOR A DOMESTIC WASTEWATER PERMIT ADMINISTRATIVE REPORT 1.0

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

#### Section 1. Application Fees (Instructions Page 29)

Indicate the amount submitted for the application fee (check only one).

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 □	\$315.00 □
≥0.05 but <0.10 MGD	\$550.00 □	\$515.00 □
≥0.10 but <0.25 MGD	\$850.00 □	\$815.00 □
≥0.25 but <0.50 MGD	\$1,250.00 □	\$1,215.00
≥0.50 but <1.0 MGD	\$1,650.00 □	\$1,615.00 <b>⊠</b>
≥1.0 MGD	\$2,050.00 <b>□</b>	\$2,015.00

Minor Amendment (for any flow) \$150.00 ₺

Mailed Check/Money Order Number: 4675411 & 4690339

Check/Money Order Amount: **See Attachment 1** 

Name Printed on Check: TCEQ

EPAY Voucher Number:

Copy of Payment Voucher enclosed? Yes  $\square$ 

#### Section 2. Type of Application (Instructions Page 29)

	New TPDES		New TLAP		
	Major Amendment with Renewal	$\boxtimes$	Minor Amendment with Renewal		
	Major Amendment without Renewal		Minor Amendment <u>without</u> Renewal		
	Renewal without changes		Minor Modification of permit		
For	For amendments or modifications, describe the proposed changes:				

#### For existing permits:

Permit Number: WQ00<u>10543014</u> EPA I.D. (TPDES only): TX<u>0129950</u>

Expiration Date: 10/5/2024

# Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 29)

#### A. The owner of the facility must apply for the permit.

What is the Legal Name of the entity (applicant) applying for this permit?

City of Austin-Austin Water

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal documents forming the entity.)

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a>

CN: 600135198

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Prefix (Mr., Ms., Miss): Ms.

First and Last Name: Shay Ralls Roalson

Credential (P.E, P.G., Ph.D., etc.): P.E.

Title: Director, Austin Water

**B. Co-applicant information.** Complete this section only if another person or entity is required to apply as a co-permittee.

What is the Legal Name of the co-applicant applying for this permit?

n/a

(The legal name must be spelled exactly as filed with the TX SOS, with the County, or in the legal documents forming the entity.)

If the co-applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at: http://www15.tceq.texas.gov/crpub/

CN: <u>n/a</u>

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Prefix (Mr., Ms., Miss): <u>n/a</u>

First and Last Name: n/a

Credential (P.E, P.G., Ph.D., etc.): n/a

Title: n/a

Provide a brief description of the need for a co-permittee: n/a

#### C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0.

Attachment: **Attachment 2** 

#### Section 4. Application Contact Information (Instructions Page 30)

This is the person(s) TCEQ will contact if additional information is needed about this application. Provide a contact for administrative questions and technical questions.

A. Prefix (Mr., Ms., Miss): Ms.

First and Last Name: <u>Tammy Y West</u> Credential (P.E, P.G., Ph.D., etc.): <u>n/a</u> Title: Wastewater Regulatory Manager

Organization Name: Austin Water-City of Austin

Mailing Address: <u>625 East 10th St., Ste 315</u> City, State, Zip Code: <u>Austin, Texas 78701</u> Phone No.: 512-972-0143 Ext.: n/a Fax No.:

E-mail Address: tammy.yates.west@austintexas.gov

B. Prefix (Mr., Ms., Miss): Mr.

First and Last Name: <u>Ayman Benyamin</u> Credential (P.E., P.G., Ph.D., etc.): P.E.

Title: Assistant Director, Operations

Organization Name: City of Austin-Austin Water

Mailing Address: 625 East 10th St, Ste 800

City, State, Zip Code: <u>Austin, TX 78701</u>

Phone No.: <u>512-972-0127</u> Ext.: <u>Fax No.:</u>

 $\hbox{E-mail Address:}\ \underline{ayman.benyamin@austintexas.gov}$ 

Check one or both: oximes Administrative Contact oximes Technical Contact

#### Section 5. Permit Contact Information (Instructions Page 30)

Provide two names of individuals that can be contacted throughout the permit term. **A.** Prefix (Mr., Ms., Miss): Ms.

First and Last Name: Tammy Y West

Credential (P.E, P.G., Ph.D., etc.):

Title: Wastewater Regulatory Manager

Organization Name: <u>City of Austin-Austin Water</u> Mailing Address: 625 East 10th Street, Ste 315

City, State, Zip Code: Austin, TX 78701

Phone No.: 512-972-0143 Ext.: Fax No.:

E-mail Address: <a href="mailto:tammy.yates.west@austintexas.gov">tammy.yates.west@austintexas.gov</a>

B. Prefix (Mr., Ms., Miss): Mr.

First and Last Name: <u>Ayman Benyamin</u> Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u> Title: Assistant Director, Operations

Organization Name: <u>City of Austin-Austin Water</u>

Mailing Address: <u>625 East 10 St, Ste 800</u> City, State, Zip Code: Austin, TX 78701

Phone No.: 512-972-0127 Ext.: Fax No.:

E-mail Address: ayman.benyamin@austintexas.gov

#### Section 6. Billing Information (Instructions Page 30)

The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits *in effect on September 1 of each year*. The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (using form TCEQ-20029).

Prefix (Mr., Ms., Miss): Ms.

First and Last Name: <u>Tammy Y West</u>

Credential (P.E, P.G., Ph.D., etc.):

Title: Wastewater Regulatory Manager

Organization Name: <u>City of Austin-Austin Water</u> Mailing Address: <u>625 East 10th Street, Ste 315</u>

City, State, Zip Code: Austin, TX 78701

Phone No.: <u>512-972-0143</u> Ext.: <u>Fax No.:</u>

E-mail Address: <a href="mailto:tammy.yates.west@austintexas.gov">tammy.yates.west@austintexas.gov</a>

#### Section 7. DMR/MER Contact Information (Instructions Page 31)

Provide the name and complete mailing address of the person delegated to receive and submit Discharge Monitoring Reports (EPA 3320-1) or maintain Monthly Effluent Reports.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Ayman Benyamin Credential (P.E, P.G., Ph.D., etc.): P.E.

Title: Assistant Director, Operations

Organization Name: City of Austin-Austin Water

Mailing Address: 625 East 10th St, Ste 800 City, State, Zip Code: Austin, Texas 78701

Phone No.: 512-972-0127 Ext.: Fax No.:

text. E-mail Address: ayman.benyamin@austintexas.gov

DMR data is required to be submitted electronically. Create an account at:

https://www.tceq.texas.gov/permitting/netdmr/netdmr.html.

#### Section 8. Public Notice Information (Instructions Page 31)

#### A. Individual Publishing the Notices

Prefix (Mr., Ms., Miss): Ms.

First and Last Name: Tammy Y West

Credential (P.E, P.G., Ph.D., etc.):

Title: Wastewater Regulatory Manager

Organization Name: City of Austin-Austin Water Mailing Address: 625 East 10th Street, Ste 315

City, State, Zip Code: <u>Austin, TX 78701</u>

Phone No.: <u>512-972-0143</u> Ext.: Fax No.:

E-mail Address: tammy.yates.west@austintexas.gov

#### B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit **Package**

Indicate by a check mark the preferred method for receiving the first notice and instructions:

E-mail Address

Fax

Regular Mail

#### C. Contact person to be listed in the Notices

Prefix (Mr., Ms., Miss): Ms.

First and Last Name: Tammy Y West

	Cre	edential	l (P.E, P.G.,	Ph.D., (	etc.): Hick here to enter text
	Tit	le: <u>Was</u> t	tewater Reg	gulator	ry Manager
	Or	ganizat	ion Name:	City of	<u>Austin-Austin Water</u>
	Ph	one No.	: <u>512-972-</u> (	0143 Ex	xt.: Tick here to enter text.
	E-n	nail: <u>tar</u>	nmy.yates.	west@a	austintexas.gov
D.	Pu	blic Vie	ewing Info	rmatio	n
	If t	he facil	ity or outfo	all is lo	cated in more than one county, a public viewing place for each
	coi	unty mi	ist be provi	ided.	
	Pul	blic bui	lding name	e: <u>Walle</u>	er Creek Center
	Lo	cation v	vithin the b	ouildin	g: <u>Suite 315</u>
	Ph	ysical A	ddress of l	Buildin	g: <u>625 East 10th Street</u>
	Cit	y: <u>Aust</u>	<u>i</u> n		Co <u>unty:</u> <u>Travis</u>
	Co	ntact N	ame: <u>Tamn</u>	ny Y W	<u>'est</u>
	Ph	one No.	: <u>512-972-</u> 0	0143 E	xt.: Click here to enter text
E.	Bil	ingual l	Notice Reg	uirem	ents:
	Thi	is inforn	nation <b>is re</b>	quire	d for new, major amendment, minor amendment or
	mi	inor m	odificatio	n, and	d renewal applications.
	be	needed		instru	ion is only used to determine if alternative language notices will actions on publishing the alternative language notices will be in
	ob.				L coordinator at the nearest elementary and middle schools and nation to determine whether an alternative language notices are
	1.				program required by the Texas Education Code at the chool nearest to the facility or proposed facility?
		$\boxtimes$	Yes		No
		If <b>no</b> , p	oublication	of an	alternative language notice is not required; <b>skip to</b> Section 9
	2.				tend either the elementary school or the middle school enrolled in ogram at that school?
		$\boxtimes$	Yes		No
	3.	Do the locatio		it these	e schools attend a bilingual education program at another
			Yes	$\boxtimes$	No

	4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?
	□ Yes ⊠ No
	5. If the answer is yes to question 1, 2, 3, or 4, public notices in an alternative language ar required. Which language is required by the bilingual program? Simplified Chinese, Vietnamese, and Spanish.
F.	Public Involvement Plan Form
	Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a <b>new permit or major amendment to a permit</b> and include as an attachment.
	Attachment: n/a
Se	ction 9. Regulated Entity and Permitted Site Information (Instructions
_	Page 33)
Α.	If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. $RN_{105331755}$
	Search the TCEQ's Central Registry at <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a> to determine if the site is currently regulated by TCEQ.
В.	Name of project or site (the name known by the community where located):
	Taylor Lane Wastewater Treatment Plant
C.	Owner of treatment facility: <u>City of Austin-Austin Water</u>
	Ownership of Facility: $oximes$ Public $oximes$ Private $oximes$ Both $oximes$ Federal
D.	Owner of land where treatment facility is or will be:
	Prefix (Mr., Ms., Miss):
	First and Last Name: <u>Club Deal 120 Whisper Valley LP</u>
	Mailing Address: <u>9285 Huntington Square</u>
	City, State, Zip Code: North Richland Hills, TX 76182-4366
	Phone No.: E-mail Address:
	If the landowner is not the same person as the facility owner or co-applicant, attach a least
	agreement or deed recorded easement. See instructions.
	Attachment: <u>Attachment 3</u>
Ε.	Owner of effluent disposal site:
	Prefix (Mr., Ms., Miss): <u>n/a</u>
	First and Last Name: <u>n/a</u>
	Mailing Address: <u>n/a</u>

	City, State, Zip Code: <u>n/a</u>
	Phone No.: <u>n/a</u> E-mail Address: <u>n/a</u>
	If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.
	Attachment: <u>n/a</u>
F.	Owner of sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant):
	Prefix (Mr., Ms., Miss): <u>n/a</u>
	First and Last Name: <u>n/a</u>
	Mailing Address: <u>n/a</u>
	City, State, Zip Code: <u>n/a</u>
	Phone No.: <u>n/a</u> E-mail Address: <u>n/a</u>
	If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.
	Attachment: <u>n/a</u>
Se	ection 10. TPDES Discharge Information (Instructions Page 34)
	Is the wastewater treatment facility location in the existing permit accurate?
	⊠ Yes □ No
	If <b>no</b> , <b>or a new permit application</b> , please give an accurate description:
	<u>n/a</u>
В.	Are the point(s) of discharge and the discharge route(s) in the existing permit correct?
	⊠ Yes □ No
	If <b>no</b> , <b>or a new or amendment permit application</b> , provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:
	<u>n/a</u>
	City nearest the outfall(s): <u>Austin</u>
	County in which the outfalls(s) is/are located: <u>Travis</u>
	Outfall Latitude: <u>30.267014</u> Longitude: <u>-97.554318</u>
C.	Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

	□ Yes ⊠ No
	If <b>yes</b> , indicate by a check mark if:
	$\square$ Authorization granted $\square$ Authorization pending
	For <b>new and amendment</b> applications, provide copies of letters that show proof of contact and the approval letter upon receipt.
	Attachment: <u>n/a</u>
D.	For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge.
	<u>n/a</u>
Se	ction 11. TLAP Disposal Information (Instructions Page 36)
<b>A</b>	For TLADs is the location of the offluent disposal site in the existing permit accurate?
A.	For TLAPs, is the location of the effluent disposal site in the existing permit accurate?  Yes No
	If <b>no, or a new or amendment permit application</b> , provide an accurate description of the
	disposal site location:
	<u>n/a</u>
B.	City nearest the disposal site: <u>n/a</u>
C.	County in which the disposal site is located: $n/a$
D.	Disposal Site Latitude: <u>n/a</u> Longitude: <u>n/a</u>
E.	For <b>TLAPs</b> , describe the routing of effluent from the treatment facility to the disposal site:
	<u>n/a</u>
F.	For <b>TLAPs</b> , please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained:
	<u>n/a</u>
	l l

#### Section 12. Miscellaneous Information (Instructions Page 37)

A. Is the facility located on or does the treated effluent cross American Indian Land?

	□ Yes ⊠ No	
В.	If the existing permit contains an onsite sludge of sewage sludge disposal site in the existing permit	
	□ Yes □ No ⊠ Not Applicable	
	If No, or if a new onsite sludge disposal authoriz application, provide an accurate location descrip	
	n/a	
C.	Did any person formerly employed by the TCEQ service regarding this application?	represent your company and get paid for
	□ Yes ⊠ No	
	If yes, list each person formerly employed by the was paid for service regarding the application:	TCEQ who represented your company and
	n/a	
D.	Do you owe any fees to the TCEQ?	
	□ Yes ⊠ No	
	If <b>yes</b> , provide the following information:	
	Account number: <u>n/a</u>	Amount past due: <u>n/a</u>
E.	Do you owe any penalties to the TCEQ?	
	□ Yes ⊠ No	
	If <b>yes</b> , please provide the following information:	
	Enforcement order number: <u>n/a</u>	Amount past due: <u>n/a</u>

#### Section 13. Attachments (Instructions Page 38)

Indicate which attachments are included with the Administrative Report. Check all that apply:

- Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.
- Original full-size USGS Topographic Map with the following information:
  - Applicant's property boundary
  - Treatment facility boundary
  - Labeled point of discharge for each discharge point (TPDES only)

- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.
- ☐ Attachment 1 for Individuals as co-applicants
- ☑ Other Attachments. Please specify:

#### **Domestic WWTP ADMIN Report** Attachment # Item Name Application Fee 1 2 Core Data Form 3 Easement USGS Topo Map 4 Plain language summary 5 Landowner Map 6 Landowner list/labels

#### **Domestic WWTP Technical Report Item Name** Attachment # Permitted/Proposed Flow 1 2 **Treatment Units** 3 Process Flow Diagram 4 Site Diagram Unbuilt Phases 5 Summary Transmittal Letters 6 **Laboratory Analysis** 7 **Operator List** 8 Transported sludge Statement 9 Transporter paperwork 10 **Influent Analysis** 11 **Design Calculations** 12 FEMA Map 13 Wind Rose 14 Pretreatment Program IW User 15

#### Section 14. Signature Page (Instructions Page 39)

Signatory name (typed or printed): Shay Ralls Roalson

(Use blue ink)

If co-applicants are necessary, each entity must submit an original, separate signature page.

Permit Number: WQ0010543014

Applicant: <u>City of Austin-Austin Water</u>

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory title: <u>Director, Austin Water</u>		
Signature: Shan Pulls Rods	Date: 3/11/2024	

Subscribed and Sworn to before me by the said Shay Ralls Roalson on this 114h day of March , 20 24 .

My commission expires on the 21st day of June , 20 25 .

Notary Public

County, Texas

DEBORAN SEAL TREE
Notary ID #5173787
My Commission Expires
June 21, 2025

#### **DOMESTIC ADMINISTRATIVE REPORT 1.1**

The following information is required for new and amendment applications.

# Section 1. Affected Landowner Information (Instructions Page 41)

A.		cate by a check mark that the landowners map or drawing, with scale, includes the owing information, as applicable:
	$\boxtimes$	The applicant's property boundaries
	$\boxtimes$	The facility site boundaries within the applicant's property boundaries
		The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
		The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
		The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
		The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
		The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
		The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
		The property boundaries of all landowners surrounding the effluent disposal site
		The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
		The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
В.		Indicate by a check mark that a separate list with the landowners' names and mailing resses cross-referenced to the landowner's map has been provided.
C.	Indi	cate by a check mark in which format the landowners list is submitted:
		□ USB Drive ☑ Four sets of labels
D.	Prov	vide the source of the landowners' names and mailing addresses:
E.		required by $Texas\ Water\ Code\ \S\ 5.115$ , is any permanent school fund land affected by this lication?
		T Ves X No

	If <b>yes</b> , land(s	provide the location and foreseeable impacts and effects this application has on the ):
	Click	here to enter text.
S	ectio	n 2. Original Photographs (Instructions Page 44)
Pro	ovide o	riginal ground level photographs. Indicate with checkmarks that the information is provided. $N/A$
		t least one original photograph of the new or expanded treatment unit location
	d a e	t least two photographs of the existing/proposed point of discharge and as much area lownstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to n open water body (e.g., lake, bay), the point of discharge should be in the right or left dge of each photograph showing the open water and with as much area on each espective side of the discharge as can be captured.
	□ A	t least one photograph of the existing/proposed effluent disposal site
	□ A	plot plan or map showing the location and direction of each photograph
S	ectio	n 3. Buffer Zone Map (Instructions Page 44)
Α.	inforn	zone map. Provide a buffer zone map on $8.5 \times 11$ -inch paper with all of the following nation. The applicant's property line and the buffer zone line may be distinguished by dashes or symbols and appropriate labels. <b>Buffer Zones achieved by ownership.</b>
	•	The applicant's property boundary; The required buffer zone; and Each treatment unit; and The distance from each treatment unit to the property boundaries.
В.		zone compliance method. Indicate how the buffer zone requirements will be met. all that apply.
	$\boxtimes$	Ownership
		Restrictive easement
		Nuisance odor control
		Variance
C.		table site characteristics. Does the facility comply with the requirements regarding table site characteristic found in 30 TAC § 309.13(a) through (d)?
		Yes ⊠ No

# ATTACHMENT 1 APPLICATION FEE

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP Please note that AW submitted a permit application fee of \$2,015.00 for >1.0 MGD prior to any knowledge that AW would not pursue the 1.0 MGD phase during this renewal application. The correct permit fee should have been \$1,615.00. AW overpaid the permit application fee by \$400.00.

A check of \$150.00 was submitted separately for a minor amendment. The decision to request a minor amendment was not decided until after the original permit fee was paid.



#### City of Austin | Austin Water

P.O. Box 1088 Austin, TX 78767 AustinWater.org

Certified Mail

Article No.: 7022 1670 0001 2933 6500

Return Receipt Requested

November 15, 2023

TCEQ Revenues Section (MC 214) P.O. Box 13088 Austin, Texas 78711-3088

RE: Renewal Application Fee for Taylor Lane WWTP, CN600135198, RN105331755, WQ00010543014

Renewal Application for Domestic Wastewater Permit

To Whom it May Concern:

Please see the enclosed check number 4675411 for \$2,015.00 made payable to the Texas Commission on Environmental Quality for the renewal application fee for Taylor Lane WWTP, CN600135198, RN105331755, WQ00010543014 for the Application for Domestic Wastewater Permit.

Upon receipt of this check please email the receipt to <a href="mailto:tammy.yates.west@austintexas.gov">tammy.yates.west@austintexas.gov</a>. For any questions or concerns please feel free to reach to me via telephone at 512.972.0143.

Sincerely,

Tammy West

Wastewater Regulatory Manager

**Austin Water** 

CC: S

Sandra Zuniga

Misty Klein



#### **WATER QUALITY PERMIT**

#### PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- Do not mail this form with the application form.
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

#### Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 P.O. Box 13088 Austin, Texas 78711-3088 BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 12100 Park 35 Circle Austin, Texas 78753

#### Fee Code: WQP Waste Permit No:

1. Check or Money Order Number: 4675411

2. Check or Money Order Amount: \$2,015.00

3. Date of Check or Money Order: 10/31/2023

4. Name on Check or Money Order: TCEQ

5. APPLICATION INFORMATION

Name of Project or Site: Taylor Lane Wastewater Treatment Plant

Physical Address of Project or Site: 7535 Taylor Lane, Manor, Texas 78653

If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

#### **Staple Check or Money Order in This Space**



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON D	DELIVERY
Complete items 1, 2, and 3.  Print your name and address on the reverse	A. Signature	☐ Agent
so that we can return the card to you.  Attach this card to the back of the mailpiece, or on the front if space permits.	B. Received by (Printed Name)	C. Date of Delivery
1. Article Addressed to: TCEQ Revenue Section	D. Is delivery address different from If YES, enter delivery address better the property address better the property and the property and the property address better the property and the p	item 1? Yes
PO BOX 13088	NOV 27 2	122
MC214 PO BOX 13088 Austin, TX 78711-308	NOV 27 2	723
Austin, TX 78711-308	3. Service Type  Adult Signature  Adult Signature Restricted Delivery  Certified Mail®	☐ Priority Mail Express®☐ Registered Mail™☐ Registered Mail Restrict Delivery
9590 9402 7888 2234 1303 76	3. Service Type Adult Signature Adult Signature Restricted Delivery Certified Mail® Certified Mail®	☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restrict



#### City of Austin | Austin Water P.O. Box 1088 Austin, TX 78767 AustinWater.org

**Certified Mail** 

Article No.: 7021 2720 0000 9790 4451

**Return Receipt Requested** 

February 15, 2024

TCEQ Financial Administration Division (MC 214) Cashier's Office P.O. Box 13088 Austin, Texas 78711-3088

RE: Minor Amendment Application Fee for Taylor Lane WWTP, CN600135198, RN105331755, WQ00010543014 Renewal Application for Domestic Wastewater Permit

To Whom it May Concern:

Please see the enclosed check number 4690339 for \$150.00 made payable to the Texas Commission on Environmental Quality for the minor amendment application fee for Taylor Lane WWTP, CN600135198, RN105331755, WQ00010543014 for the Application for Domestic Wastewater Permit.

Upon receipt of this check please email the receipt to <a href="mailto:tammy.yates.west@austintexas.gov">tammy.yates.west@austintexas.gov</a>. For any questions or concerns please feel free to reach to me via telephone at 512.972.0143.

Sincerely,

**Tammy West** 

Wastewater Regulatory Manager

curry > 4

**Austin Water** 

CC: Sandra Zuniga

Misty Klein



#### WATER QUALITY PERMIT

#### PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- Do not mail this form with the application form.
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

#### Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 P.O. Box 13088 Austin. Texas 78711-3088 BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 12100 Park 35 Circle Austin, Texas 78753

#### Fee Code: WQP Waste Permit No:

1. Check or Money Order Number: 4690339

2. Check or Money Order Amount: \$150.00

3. Date of Check or Money Order: 02/12/2024

4. Name on Check or Money Order: <u>TCEQ</u>

5. APPLICATION INFORMATION

Name of Project or Site: <u>Taylor Lane Wastewater Treatment Plant</u> Physical Address of Project or Site: <u>7535 Taylor Lane</u>, Manor, Texas 78653

If the check is for more than one application, attach a list which includes the name of each

Project or Site (RE) and Physical Address, exactly as provided on the application.

#### Staple Check or Money Order in This Space

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT 4457 Domestic Mail Only For delivery information, visit our website at www.usps.com® Aus (1) | X | Z | 8 | 1 | 9790 Certified Mail Fee \$4,40 0153 44 Extra Services & Fees (check box, add fee as poprogriate)

Return Receipt (hardcopy) 0000 Return Receipt (electronic) Postmark \$ \$0.00 Certified Mail Restricted Delivery \$ \_\_\_\_\_\_\$\_\_\_ Here Adult Signature Required \$ \$0.00 Adult Signature Restricted Delivery \$ \_ 2720 Postage \$0.68 Total Postage and Fees 02/16/2024 Wino 7057 Sent To laylor Street and Apt. 3088 City, State, ZIP+ PS Form 3800, April 2015 PSN 7530-02-000

# ATTACHMENT 2 CORE DATA FORM

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP



### **TCEQ Core Data Form**

TCEQ Use Only

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information	n
--------------------------------	---

1. Reason for Submission (If other is checked please describe in space provided.)														
New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)														
⊠ Renewa	l (Core Da	ta Form should b	e submitted w	ith the r	enewa	al form)	)		Other	r				
2. Customer	Referenc	Follow this link to search			erch	3. Regulated Entity Reference Number (if issued)								
CN 6001	35198		·	for CN	or RN	number: egistry**	s in	RN 105331755					,	
SECTION II: Customer Information														
4. General C	ustomer li	5. Effective	Date for Customer Information Updates (mm/dd/yyyy)         3/1/2024								)24			
□ New Customer         □ Update to Customer Information         □ Change in Regulated Entity Ownership											Intity Ownership			
		ne (Verifiable wit												
		ne submitted FState (SOS)	•	•				•				rrent and	active with the	
		me (If an individual		<u> </u>							tomer, enter previ	ous Custome	er below:	
		stin Water	, <u>, , , , , , , , , , , , , , , , , , </u>		<u> </u>	,					•			
7. TX SOS/CI			8. TX State	Tax ID	(11 digit	ts)		- (	9. Fed	leral	Tax ID (9 digits)	10. DUNS	S Number (if applicable)	
	J					,					( 0 /		, ,,	
11. Type of C	ustomer:	☐ Corporati	on	☐ Individual Partnership				nership: 🗌 Gener	al Limited					
Government:	☐ City ☐ 0	County 🔲 Federal 🗆	☐ State ☐ Other			Sole Pr	roprieto	orship	p		Other:			
12. Number 0	of Employ	ees 101-250	251-500		501 or	nd highe	or		13. Ind		endently Owned	and Opera	ted?	
		pposed or Actual) -										following		
Owner	1 11010 (1 11	Operat				wner &			01111. 1 1	70000	onoun one or the	lonowing		
Occupatio	nal Licenso		nsible Party			oluntary	•		Applica	ant	Other:			
	Shay F	Rolls Roalson	n, Director,	, Austi	in W	ater								
15. Mailing Address:	625 Ea	st 10 <sup>th</sup> Street	t, Suite 800	)										
Address.	City	Austin		State TX			ZIP	78701		ZIP + 4				
16. Country I	Mailing In	formation (if outsi	de USA)	17. E-N			E-Mail Address (if applicable)							
							shay	roa.	alson	n@a	ustintexas.g	ov		
18. Telephon	e Numbei			19. Ex	tensi	on or C	ode	20. Fax Number (if applicable)					ole)	
( 512 ) 972-0108					(						( ) -			
SECTION	III: Re	egulated En	tity Info	rmati	on									
		-	•			'v" is se	lected	belo	w this	form	should be acco	mpanied by	a permit application)	
	ulated Enti	-	to Regulated	-							Intity Information		, , , , , , , ,	
The Regula	ated Ent	ity Name sub	mitted may	/ be up	odate	ed in o	order	to n	neet	TCE	EQ Agency D	ata Stand	ards (removal	
of organiza	ational e	ndings such	as Inc, LP,	or LL	C).									
22. Regulate	d Entity N	ame (Enter name	of the site wher	e the reg	gulated	action i	is taking	g plac	e.)					
Taylor Lane Wastewater Treatment Plant														

TCEQ-10400 (02/21) Page 1 of 2

23. Street Addres	s of	7535 Taylor Lane													
the Regulated En	The state of the s														
(No PO Boxes)		City	I	Manor		State	TX	ZI	IP	7865	3	ZIP +	4		
24. County		Travi													
				r Physical	Loca	ation Descripti	on if no s	treet	address	is prov	ided.			3.45	
	25. Description to Physical Location:  26. Nearest City  State Nearest ZIP Code														
26. Nearest City										State		SMAR	Nea	rest Z	ZIP Code
Austin					mi,				1	ГХ			786	553	
27. Latitude (N) In	Decima	3	0.26926		28.	<b>28.</b> Longitude (W) In Decimal: -97.5524									
Degrees		Minutes			Sec	onds	Deg	rees			Minutes		$\dashv$	Seco	nds
				NI II											
29. Primary SIC C	<b>ode</b> (4 di	gits)	30. Se	condary S	IC Co	ode (4 digits)	31. Prim (5 or 6 dig		IAICS Co	de	<b>32. S</b> (5 or 6	econdary	NA	ICS C	ode
4952							22132				(0.0.0	-5.67			
33. What is the Pr	imary B	usines	s of th	is entity?	(Do	not repeat the SIC			on.)						
treat domestic	waste	water	•												
							753	5 Tay	lor Lane						
34. Mailing							1 1								
Address:		Cit	v	Manor		State	TX		ZIP		'8653	ZIP	+ 4		
35. E-Mail Ad	dress:						darrell.de	vooa					944.	1	
36. 1	elephor	ne Nun	nber			37. Extension				100000000000000000000000000000000000000	3. Fax Nu	mber (if	appl	icable	9)
(	512 ) 97	<b>72-150</b> 5	5				71 1				(	) -			
39. TCEQ Programs	and ID	Numbe	ers Che	ck all Progra	ams a	nd write in the pe	ermits/regist	ration	numbers t	hat will I	oe affected	by the up	dates	subm	itted on this
orm. See the Core Data  Dam Safety	a Form in		ns for ac stricts	Iditional guid	dance.	Edwards Aqu	iifor		Emission	no Invon	ton, Air	☐ Ind	uotrio	l Hore	ardous Waste
Dain Salety			SUICIS			Luwarus Aqu	ille!	+-	_ EIIII88101	IIS IIIVEI	IOI y All	l lilu	JSIIIa	Пага	ildous waste
☐ Municipal Solid W	aste	□ Ne	w Sour	ce Review A	ir	OSSF		Petroleum			ge Tank	PWS			
								_				-			
Sludge		St	orm Wa	ter		☐ Title V Air		☐ Tires				Us	Used Oil		
										Tri					
☐ Voluntary Cleanu	р	⊠ W	aste Wa	ter	_	☐ Wastewater	☐ Water Rights ☐				Other:				
		WQ0	01054	3014							-				
SECTION IV	: Prep	oarei	·Info	ormatic	<u>n</u>						- 100		9	. 7	
40. Name: Tammy	YW	est					41. Title	e:	Waste	ewate	r Regul	atory N	1an	ager	•
42. Telephone Nur	nber 4	3. Ext./	Code	44.	Fax N	lumber	45. E-	Mail	Address						
(512) 972-014	3			(	)	•	tamr	ny.y	ates.we	ites.west@austntexas.gov					
SECTION V:	Auth	<u>ioriz</u>	ed Si	gnatur	<u>e</u>										
<b>46.</b> By my signature signature authority to dentified in field 39.	submit														
Company:	City of	Austin-	Austin	Water			Job Ti	tle:	Direct	or, Aus	tin Water				
Name (In Print):	Shay R	alls Ro	alson							Pi	one:	(512)	972-	0108	
Signature:	Bla	y Ro	200	Cools	_			Ŋ.		Da	ite:	3/11/2	202	4	
		1		100000		and the second second			1 1	777					10,901-19

TCEQ-10400 (02/21) Page 2 of 2

# ATTACHMENT 3 EASEMENT

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

## EASEMENT FOR INTERIM WASTEWATER TREATMENT PLANT (WHISPER VALLEY WWTP) AND ACCESS AND UTILITY EASEMENT AND RIGHT OF WAY

THE STATE OF TEXAS §

**KNOW ALL BY THESE PRESENTS:** 

COUNTY OF TRAVIS §

GRANTOR: Club Deal 120 Whisper Valley, Limited Partnership.

**GRANTOR'S MAILING ADDRESS:** 9285 Huntington Square,

North Richland Hills, Texas 76180

GRANTEE: CITY OF AUSTIN, TEXAS, and its successors and assigns. ("City")

GRANTEE'S MAILING ADDRESS: CITY OF AUSTIN

P.O. Box 1088

Austin, Texas 78767-8839

ATTN: Director, Austin Water Utility

**CONSIDERATION:** TEN DOLLARS and no/100 (\$10.00) and other good and

valuable consideration, the receipt and sufficiency of

which are hereby acknowledged.

**EASEMENT TRACT:** That certain tract consisting of 117 acres, more or less,

more particularly described on **EXHIBIT A**.

GRANT OF EASEMENT FOR INTERIM WASTEWATER TREATMENT PLANT, ACCESS, UTILITY, AND RIGHT OF WAY: For the consideration, Grantor does hereby GRANT, SELL, and CONVEY to City a non-exclusive easement and right of way (the "Easement") for the construction, operation, maintenance, inspection, repair, upgrade, replacement, decommissioning, and removal of an interim wastewater treatment plant (the "Interim WWTP"), and related influent, effluent, and Interim WWTP process pipelines, tanks, lift stations, sludge handling facilities, wastewater reuse facilities, storage, warehouse and administration buildings, electric, telephone, water, and gas utility lines, access roads, security fencing, and all other structures, equipment, fixtures, facilities, and appurtenances necessary or incidental to the construction, operation, maintenance, repair, upgrade, replacement, decommissioning, and removal of the Interim WWTP (collectively, the "Interim WWTP Facilities") and for making utility connections therewith in, on, over, and across the Easement Tract, for the purposes described above and for no other purposes subject to the conditions set forth below.

**EASEMENT CONDITIONS:** Grantor and City agree that the Easement will be subject to the following conditions and limitations:

- 1. Upon the final acceptance by City of the Interim WWTP (the "Acceptance Date"), Grantor will cease any activities on the Easement Tract (other than those expressly set forth herein) and City will thereafter be solely responsible for the security of the Easement Tract and for the construction, operation, maintenance, inspection, repair, upgrade, replacement, decommissioning, and removal of the Interim WWTP on the Easement Tract in accordance with the terms of this Easement for Interim Wastewater Treatment Plant (Whisper Valley WWTP) and Access Easement and Right of Way between the Grantor and City executed to be effective on \_\_\_\_\_\_\_, 2007 (this "Easement Agreement"). Prior to the Acceptance Date, Grantor shall have any and all rights to use the Easement Tract for purposes related to the construction of the Interim WWTP.
- 2. Grantor reserves the right to grant utility easements to third parties on, over, under, and across the Easement Tract with the prior written consent of the Director of City's Austin Water Utility, which shall not be unreasonably withheld or delayed; provided, however, that any such utility easement proposed by Grantor shall not materially impair or substantially interfere with the City's use of the Easement Tract for the easement purposes described above.
- 3. In addition to Grantor's rights as provided in paragraphs (1) and (2) above, after the Acceptance Date, Grantor reserves the right to use the surface of the Easement Tract and to place landscaping, roads, and driveways thereon so long as the activities of Grantor thereon do not materially impair or substantially interfere with City's use of the Easement Tract for the easement purposes described above. If the Easement Tract conflicts with Grantor's future development plans for Grantor's surrounding property, City shall make reasonable efforts to work with Grantor in relocating the Easement Tract; provided, however, that City shall bear no obligation to contribute to the costs of relocating the Easement Tract or any water, wastewater, electric, gas, or telecommunication utility lines and their respectively related facilities, absent a further written agreement between Grantor and City. This easement may be amended for these purposes so long as the City's 10-acre Interim WWTP footprint, 700' buffer area surrounding the Interim WWP footprint, a corridor for the Interim WWTP's discharge outfall, and a 75' utility and access corridor to the site are retained.
- 4. City shall conduct all of its activities on the Easement Tract in accordance with all applicable federal, state and local laws and regulations.
- 5. City shall keep and maintain the Easement Tract in good condition and repair, including the Interim WWTP Facilities to be constructed thereon, using a standard of care equal to or greater than such standard of care employed by City in the operation and maintenance of City's other WWTP facilities. Following the initial construction of the Interim WWTP Facilities, City shall, at its sole cost and expense, keep and maintain the Easement Tract clear of high weeds, rubbish, and debris and shall suffer no waste or nuisance on the Easement Tract; provided, however, that the normal construction, operation, maintenance, inspection, repair, upgrade, replacement, decommissioning, and removal of the Interim WWTP Facilities on the Easement Tract in accordance with the conditions of its wastewater discharge permit(s), and

pursuant to the terms of this Easement Agreement, is specifically deemed not to constitute a nuisance. City shall be responsible for ensuring that hazardous substances employed by City in connection with the construction, operation, and maintenance of the Interim WWTP Facilities are transported, stored, used, and disposed of in accordance with all applicable laws and regulations regarding the same. Grantor shall remain responsible for the proper cleanup and disposal of any hazardous substances or environmental contaminants deposited on the Easement Tract by Grantor, whether before or after the date of this Easement. City shall remain responsible for the proper cleanup and disposal of any hazardous substances or environmental contaminants deposited on the Easement Tract by City after the date of this Easement.

- 6. Grantor shall have the right to enter upon and inspect, or cause to be inspected, the Easement Tract and the Interim WWTP Facilities on twenty-four (24) hours written or telephone notice to City for the purpose of determining compliance with this Easement.
- 7. Grantor shall ensure that all contractors engaged to perform the construction of the Interim WWTP Facilities and appurtenances provide insurance with coverages and liability limits no less stringent than those required for other major City public works projects of similar types of infrastructure, and shall include Grantor and City as additional insureds with respect to all such coverages except builder's risk and worker's compensation. City shall ensure that all contractors engaged to perform the construction, operation, and maintenance of the Interim WWTP Facilities and appurtenances provide insurance with coverages and liability limits no less stringent than those required for other major City public works projects of similar types of infrastructure, and shall include City and Grantor as additional insureds with respect to all such coverages except builder's risk and worker's compensation.
- 8. Grantor and City shall be solely responsible for injuries to persons or property caused by their respective employees performing activities on the Easement Tract and the employees of one shall not be deemed to be employees, agents, or borrowed servants of the other for any reason. The respective activities of Grantor and City on the Easement Tract shall not be construed as a joint enterprise under or in connection with the application of the Texas Tort Claims Act, as amended.
- 9. Upon the completion and final acceptance by City of a regional wastewater treatment plant downstream of the Interim WWTP Facilities to replace the Interim WWTP Facilities, and all wastewater interceptors and appurtenances necessary to transport wastewater from the Interim WWTP Facilities to the new wastewater treatment plant (collectively, the "Regional WWTP Facilities"), the City shall commence and diligently pursue the decommissioning and removal of the Interim WWTP Facilities, at its sole cost. The City shall exercise reasonable, diligent efforts to remove the Interim WWTP Facilities and all debris, materials, structures, waste, and environmental contaminants created, constructed, deposited, or placed by the City during its use of the Easement Tract within six (6) months after the construction and final acceptance of the Regional WWTP Facilities or such other time as may be agreed upon by Grantor and the City.
- 10. Within sixty (60) days of the City's request therefor, Grantor shall, at no cost to the City, grant a permanent access, utility, and wastewater facility easement of a reasonable size and in a mutually agreed upon location within the Easement Tract to accommodate wastewater facilities

and appurtenances necessary to transport wastewater from the location of the decommissioned Interim WWTP Facilities to the Regional WWTP Facilities.

- 11. Upon the substantial completion of the Regional WWTP Facilities, the City and Grantor shall coordinate the diversion of wastewater flows generated from the Interim WWTP Facilities to the Regional WWTP Facilities in a safe and efficient manner and so as to minimize interruptions in service to customers, injury to persons or property, or damage to the environment.
- 12. In the event that one party believes the other party has materially breached the terms and conditions of this Easement, the nondefaulting party will make written demand and notice to cure and give the defaulting party up to thirty (30) days to cure such material breach or, if the curative action cannot reasonably be completed within thirty (30) days of its receipt of such written demand and notice, then the defaulting party will commence the curative action within thirty (30) days and thereafter diligently pursue the curative action to completion. This period must pass before the nondefaulting party may initiate any remedies available to the nondefaulting party due to such breach.
- (a) The nondefaulting party shall mitigate direct or consequential damages, if any, arising from any breach or default to the extent reasonably possible under the circumstances.
- (b) The parties agree that they will use good faith efforts to resolve any disputes in an amicable manner and may engage in nonbinding arbitration or other alternative dispute resolution methods as recommended by the laws of the State of Texas before initiating any lawsuit to enforce their rights under this Agreement. Nothing in this Agreement shall be construed to limit either party's right to recover damages or to seek other appropriate curative remedies in the event that an action for breach of contract is filed.
- 13. The easement rights granted herein shall terminate and expire upon: (a) the decommissioning and removal of the Interim WWTP Facilities from the Easement Tract; (b) Grantor providing fully executed easements, in a form reasonably acceptable to the City, as required by Section 10 above; and (c) the City providing fully executed releases for those portions of the Easement excluded from the descriptions of the easements required by Section 10 above, and recording both the easements and easement releases required by this Section 13 (b) and (c), all easement rights released revert to Grantor. Grantor shall have the right to use and subdivide the released areas at its sole discretion, subject to compliance with applicable federal, state and local laws, ordinances, and regulations governing such proposed subdivision or use.

TO HAVE AND TO HOLD the same unto the City and its successors and assigns subject to the conditions stated above until the Easement terminates and expires in accordance with this Easement for Interim Wastewater Treatment Plant and Access and Utility Easement and Right of Way, and Grantor covenants and agrees to WARRANT AND FOREVER DEFEND title to the Easement herein granted unto the City and its successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof.

The Easement described herein is granted subject to all easements, encumbrances and other matters of record in Travis County, Texas.

#### **GRANTOR:**

CLUB DEAL 120 WHISPER VALLEY, LIMITED PARTNERSHIP, a Delaware limited partnership qualified to do business in Texas

By: CD120 GP, LLC, a Delaware limited liability company qualified to do business in Texas

Its: General Partner

By:

Douglas H. Gilliland Manage

Date: 06-07-07

STATE OF TEXAS

COUNTY OF IVALLS

THIS INSTRUMENT was acknowledged before me on this day of 2007, by Douglas H. Gilliland, Manager of CD120 GP, LLC, a Delaware limited liability company, general partner of Club Deal 120 Whisper Valley, Limited Partnership, a Delaware limited partnership, on behalf of said limited liability company and limited partnership.

(SEAL)

JUDI LOGAN

Notary Public, State of Texas

My Commission Expires

OCT. 21, 2010

Notary Public, State of

5

CONSENT TO SUBJECT MATTER OF THIS AGREEMENT:

CITY OF AUSTIN, TEXAS

By:

Rudy Garza, Assistant City Manager

**City of Austin** 

Date:

6/21/07

Project #

AFTER RECORDING, RETURN TO:

Sharon J. Smith Assistant City Attorney City of Austin Law Department P.O. Box 1088 Austin, Texas 78767-1088



WASTEWATER TRACT 117.768 ACRES WHISPER VALLEY FN NO. 07-335 (AJM) JUNE 05, 2007 BPI JOB NO. 1758-02

#### DESCRIPTION

OF 117.768 ACRES OF LAND OUT OF THE JOHN BURLESON SURVEY NO. 33, SITUATED IN TRAVIS COUNTY, TEXAS, BEING A PORTION OF THAT CERTAIN 750.533 ACRE TRACT OF LAND CONVEYED TO CLUB DEAL 120 WHISPER VALLEY, LIMITED PARTNERSHIP BY DEED OF RECORD UNDER DOCUMENT NO. 2006152076 AND BEING A PORTION OF THAT CERTAIN 213.568 ACRES OF LAND CONVEYED TO HORNSBY LAND PARTNERS, L.P. OF RECORD UNDER DOCUMENT NO. 2005129632, BOTH OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS; SAID 117.768 ACRES BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING, at a point in the westerly right-of-way line of Taylor Lane (80' right-of-way), same being a portion of the easterly line of said 213.568 acre tract from which an iron rod found bears N27°42'26"E a distance of 63.19 feet;

THENCE, S27°42'26"W, along the said westerly right-of-way line of Taylor Lane, same being a portion of the easterly line of said 213.568 acre tract a distance of 75.00 feet for an angle point hereof;

**THENCE**, leaving the westerly right-of-way line of Taylor Lane, over and across said 213.568 acre tract, with a portion of the easterly and southerly lines hereof, the following two (2) courses and distances:

- 1) N62°19'27"W, distance of 482.21 feet to an angle point;
- 2) S27°40'33"W, a distance of 2024.66 feet to a point at or near the centerline of Gilleland Creek for the southeasterly corner hereof;

**THENCE**, continuing along the centerline of Gilleland Creek for a portion of the southerly line hereof, the following fifty (50) courses and distances:

- 1) N42°14'24"W a distance of 18.70 feet for an angle point hereof;
- 2) N27°09'11"W a distance of 47.76 feet for an angle point hereof;
- 3) N54°26'20"W a distance of 39.65 feet for an angle point hereof;
- 4) N82°13'30"W a distance of 65.65 feet for an angle point hereof;
- 5) N46°05'56"W a distance of 27.98 feet for an angle point hereof;

6)	N31°32'22"W hereof;	a	distance	of	27.94	feet	for	an	angle	point
7)	N05°20'20"E hereof;	а	distance	of	48.36	feet	for	an	angle	point
8)	N10°58'42"W hereof;	a	distance	of	42.27	feet	for	an	angle	point
9)	N24°46'01"W hereof;	a	distance	of	31.22	feet	for	an	angle	point
10)	N23°34'32"E hereof;	a	distance	of	48.12	feet	for	an	angle	point
11)	N33°25'36"E hereof;	а	distance	of	53.14	feet	for	an	angle	point
12)	N42°34'19"E hereof;	а	distance	of	50.30	feet	for	an	angle	point
13)	N54°08'09"E hereof;	а	distance	of	95.80	feet	for	an	angle	point
14)	N32°58'03"E hereof;	a	distance	of	36.48	feet	for	an	angle	point
15)	N26°02'50"E hereof;	a	distance	of	41.61	feet	for	an	angle	point
16)	N09°52'03"E hereof;	а	distance	of	76.18	feet	for	an	angle	point
17)	N37°40'51"E hereof;	а	distance	of	37.41	feet	for	an	angle	point
18)	N04°12'35"W hereof;	a	distance	of	45.91	feet	for	an	angle	point
19)	N01°53'25"E hereof;	а	distance	of	41.93	feet	for	an	angle	point
20)	N65°36'18"E hereof;	a	distance	of	94.19	feet	for	an	angle	point
21)	N49°42'17"E hereof;	а	distance	of	50.69	feet	for	an	angle	point
22)	N07°42'17"E hereof;	а	distance	of	36.84	feet	for	an	angle	point

FN 07-335(AJM) JUNE 05, 2007 PAGE 3 OF 6

23)	N27°32'25"W hereof;	a	distance	of	40.07	feet	for	an	angle	point
24)	N07°48'06"W hereof;	a	distance	of	36.36	feet	for	an	angle	point
25)	N45°41'57"E hereof;	a	distance	of	45.65	feet	for	an	angle	point
26)	N58°07'17"E hereof;	а	distance	of	36.66	feet	for	an	angle	point
27)	N24°11'50"E hereof;	a	distance	of	42.59	feet	for	an	angle	point
28)	N03°38'15"W hereof;	a	distance	of	90.98	feet	for	an	angle	point
29)	N47°41'53"W hereof;	a	distance	of	52.22	feet	for	an	angle	point
30)	N65°39'25"W hereof;	a	distance	of	94.58	feet	for	an	angle	point
31)	N57°17'36"W hereof;	a	distance	of	31.69	feet	for	an	angle	point
32)	N75°38'51"W hereof;	a	distance	of	93.87	feet	for	an	angle	point
33)	N70°12'38"W hereof;	a	distance	of	44.12	feet	for	an	angle	point
34)	N65°04'29"W hereof;	a	distance	of	58.53	feet	for	an	angle	point
35)	N59°44'19"W hereof;	a	distance	of	95.73	feet	for	an	angle	point
36)	N44°50'19"W hereof;	a	distance	of	106.52	feet	for	an	angle	point
37)	N52°53'07"W hereof;	a	distance	of	50.71	feet	for	an	angle	point
38)	N71°15'32"W hereof;	a	distance	of	52.52	feet	for	an	angle	point
39)	N59°49'11"W hereof;	a	distance	of	38.08	feet	for	an	angle	point

FN 07-335(AJM) JUNE 05, 2007 PAGE 4 OF 6

- 40) N49°26'22"W a distance of 86.16 feet for an angle point hereof;
- 41) N19°26'47"W a distance of 45.20 feet for an angle point hereof;
- 42) N00°42'23"E a distance of 41.66 feet for an angle point hereof;
- 43) N11°09'55"W a distance of 60.93 feet for an angle point hereof;
- 44) N23°17'08"W a distance of 71.86 feet for an angle point hereof;
- 45) N51°19'07"W a distance of 30.29 feet for an angle point hereof;
- 46) N76°08'27"W a distance of 31.66 feet for an angle point hereof;
- 47) S80°08'41"W a distance of 62.24 feet for an angle point hereof;
- 48) N47°56'30"W a distance of 55.71 feet for an angle point hereof;
- 49) N73°48'49"W a distance of 56.12 feet for an angle point hereof;
- 50) N85°31'05"W a distance of 31.09 feet to the southeasterly corner of said 750.533 acre tract, being the westernmost northwesterly corner of said 213.568 acre tract for an angle point hereof, from which a 60d nail approximately 5 feet above natural ground in a 14 inch elm tree bears N27°44′50"E a distance of 152.34 feet;

**THENCE**, continuing along said centerline of Gilleland Creek, being a portion of the westerly line of said 213.568 acre tract, same being a portion of the southerly line of said 750.533 acre tract, the following two (2) courses and distances:

- 1) S89°22'01"W, a distance of 59.68 feet for an angle point hereof;
- 2) N62°45'22"W a distance of 70.09 feet to the northeasterly corner of that certain 137.772 acre tract of land conveyed to Jennifer Scott Riggs by Warranty Deed of record in Document No. 2003117240 of said Official Public Records, for an angle point hereof;

FN 07-335(AJM) JUNE 05, 2007 PAGE 5 OF 6

THENCE, leaving the westerly line of said 213.568 acre tract, continuing along said centerline of Gilleland Creek, being a portion of the southerly line of said 750.533 acre tract, same being a portion of the northerly line of said 137.772 acre tract, for a portion of the southerly line hereof, the following eight (8) courses and distances:

- 1) N73°42'02"W a distance of 72.35 feet for an angle point hereof;
- 2) N29°34'57"W a distance of 49.46 feet for an angle point hereof;
- N00°31'21"E a distance of 69.33 feet for an angle point hereof;
- 4) N30°49'04"W a distance of 70.19 feet for an angle point hereof;
- 5) N05°32'28"E a distance of 139.88 feet for an angle point hereof;
- 6) N40°28'20"W a distance of 59.67 feet for an angle point hereof;
- 7) S40°32'18"W a distance of 163.68 feet for an angle point hereof;
- 8) N60°13'41"W a distance of 119.83 feet to the southwesterly corner hereof;

THENCE, leaving said centerline of Gilliland Creek, being the common line of said 750.533 acre tract and 137.772 acre tract, over and across said 750.533 acre tract for the westerly, northerly and a portion of the easterly lines hereof, the following three (3) courses and distances:

- 1) N27°40'33"E a distance of 2215.19 feet to the northwesterly corner hereof;
- 2) S62°19'27"E a distance of 2060.00 feet to the northeasterly corner hereof;
- 3) S27°40'33"W a distance of 536.82 feet to the northerly line of said 213.568 acre tract, being the southerly line of said 750.533 acre tract and continuing another 844.79 feet over and across said 213.568 acre tract for a total distance of 1381.61 feet to an angle point hereof;

FN 07-335(AJM) JUNE 05, 2007 PAGE 6 OF 6

THENCE, S62°19'27"E, continuing over and across said 213.568 acre tract, a distance of 482.25 feet to the **POINT OF BEGINNING** containing an area of 117.768 acres of land, (5,129,966 square feet) more or less, within these metes and bounds.

BEARING BASIS: TEXAS COORDINATE SYSTEM, NAD 83(93), CENTRAL ZONE, UTILIZING LCRA CONTROL NETWORK.

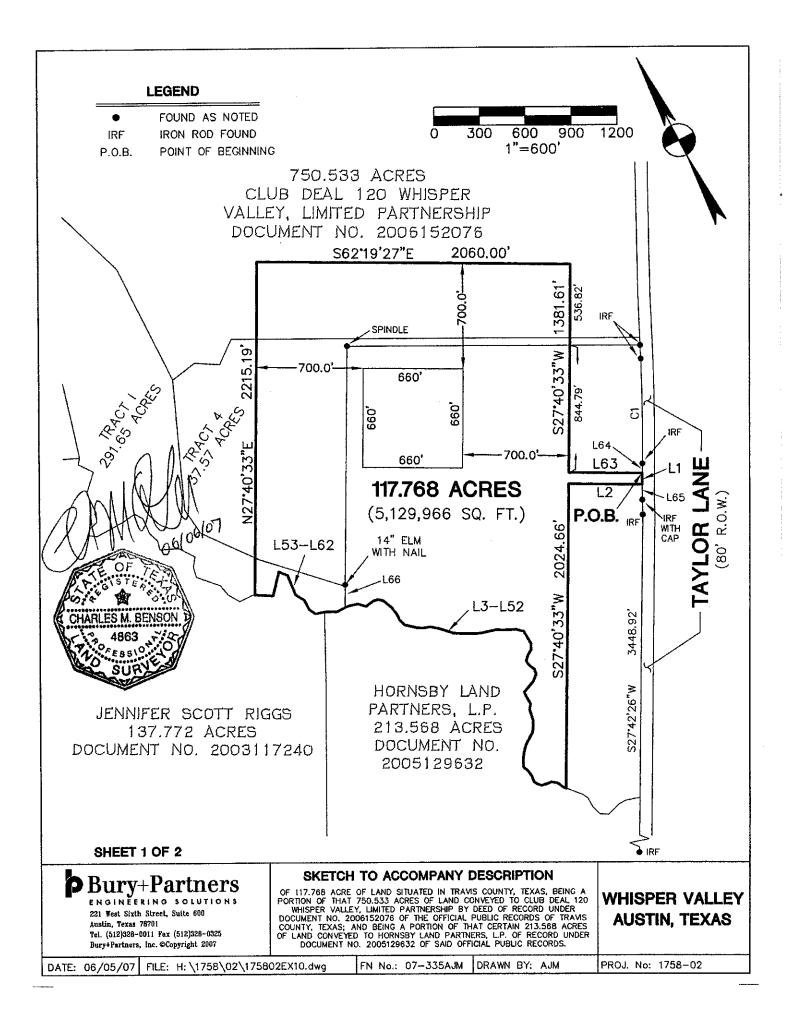
I, CHARLES M. BENSON, A REGISTERED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT THE PROPERTY DESCRIBED HEREIN WAS DETERMINED BY A SURVEY MADE ON THE GROUND UNDER MY DIRECTION AND SUPERVISION.

BURY & PARTNERS, INC. ENGINEERING SOLUTIONS 221 WEST SIXTH STREET, STE 600 AUSTIN, TEXAS 78701

CHARLES M. BENSON R.P.L.S. NO. 4863 STATE OF TEXAS

June 06, 2007

DATE



#### **CURVE TABLE**

NO.	DELTA	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	2'57'05"	13545.14	697.70	697.63	N2613'52"E

#### LINE TABLE

	LINE IABLE	T ( 514 5 7 1 )
LINE	BEARING	LENGTH
L1	S27*42'26"W	75.00
L2	N62'19'27"W	482.21
L3	N42"14'24"W	18.70'
L4	N27'09'11"W	47.76'
L5	N54°26'20"W	39.65
L6	N82"13'30"W	65.65
L7	N46'05'56"W	27.98'
L8	N31'32'22"W	27.94'
L9	N05'20'20"E	48.36'
L10	N10'58'42"W	42.27
L11	N24'46'01"W	31.22'
L12	N23'34'32"E	48.12'
L13	N33'25'36"E	53.14'
L14	N42*34'19"E	50.30'
L15	N54'08'09"E	95.80'
L16	N32'58'03"E	36.48'
L17	N26°02'50"E	41.61'
L18	N09'52'03"E	76.18'
L19	N37*40'51"E	37.41
L20	N04'12'35"W	45.91'
L21	N01*53'25"E	41.93'
L22	N65*36'18"E	94.19'
L23	N49'42'17"E	50.69'
L24	N07*42'17"E	36.84'
L25	N27°32'25"W	40.07
L26	N07*48'06"W	36.36'
L27	N45°41'57"E	45.65
L28	N58'07'17"E	36.66'
L29	N24"11'50"E	42.59'
L30	N03'38'15"W	90.98'
L31	N47'41'53"W	52.22'
L32	N65*39'25"W	94.58'
L33	N5717'36"W	31.69'
L34	N75*38'51"W	93.87'
L35	N7012'38"W	44.12'
		-

#### LINE TABLE

LINE	BEARING	LENGTH
L36	N65°04'29"W	58.53'
L37	N59*44'19"W	95.73'
L38	N44'50'19"W	106.52
L39	N52'53'07"W	50.71'
L40	N71'15'32"W	52.52'
L41	N59'49'11"W	38.08'
L42	N49*26'22"W	86.16'
L43	N19'26'47"W	45.20'
L44	N00°42'23"E	41.66'
L45	N11*09*55"W	60.93'
L46	N23"17'08"W	71.86
L47	N5119'07"W	30.29
L48	N76'08'27"W	31.66'
L49	S80'08'41"W	62.24'
L50	N47'56'30"W	55,71
L51	N73'48'49"W	56.12'
L52	N85°31'05"W	31.09'
L53	S89'22'01"W	59.68'
L54	N62*45'22"W	70.09'
L55	N73'42'02"W	72.35
L56	N29'34'57"W	49.46'
L57	N00'31'21"E	69.33'
L58	N30'49'04"W	70.19'
L59	N05'32'28"E	139.88
L60	N40°28'20"W	59.67'
L61	S40'32'18"W	163.68'
L62	N6013'41"W	119.83'
L63	S62'19'27"E	482,25'
L64	N27'42'26"E	63.19'
L65	S27'42'26"W	102.10'
L66	N27'44'50"E	152.34

#### SHEET 2 OF 2

## Bury+Partners

221 West Sixth Street, Suite 600 Austin, Texas 78701

Tel. (512)328-0011 Fax (512)328-0325 Bury+Partners, Inc. @Copyright 2007

#### SKETCH TO ACCOMPANY DESCRIPTION

OF 117.768 ACRE OF LAND SITUATED IN TRAVIS COUNTY, TEXAS, BEING A PORTION OF THAT 750.533 ACRES OF LAND CONVEYED TO CLUB DEAL 120 WHISPER VALLEY, LIMITED PARTNERSHIP BY DEED OF RECORD UNDER DOCUMENT NO. 2006152076 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS; AND BEING A PORTION OF THAT CERTAIN 213.568 ACRES OF LAND CONVEYED TO HORNSBY LAND PARTNERS, L.P. OF RECORD UNDER DOCUMENT NO. 2005129632 OF SAID OFFICIAL PUBLIC RECORDS.

WHISPER VALLEY **AUSTIN, TEXAS** 

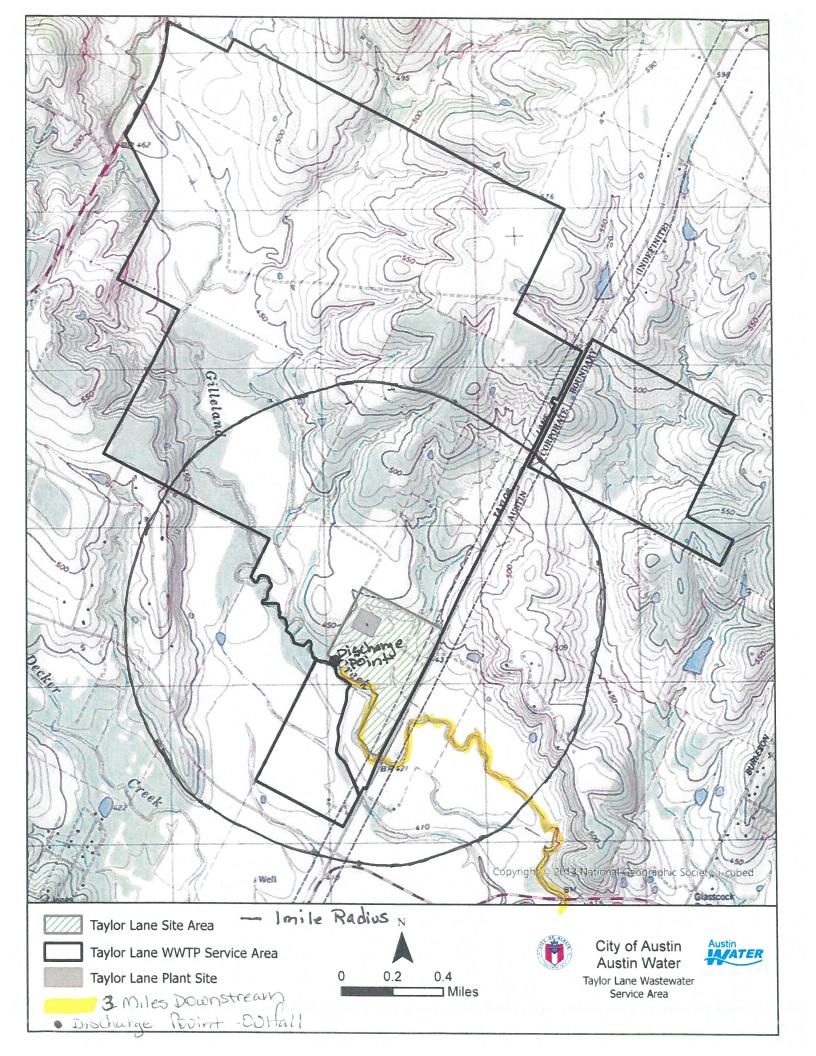
DATE: 06/05/07 | FILE: H:\1758\02\175802EX10.dwg

FN No.: 07-335AJM DRAWN BY: AJM

PROJ. No: 1758-02

# ATTACHMENT 4 USGS TOPO MAP

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP



# ATTACHMENT 5 PLAIN LANGUAGE SUMMARY

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

#### 简明摘要 Taylor Lane废水处理厂 7535 Taylor Lane, Manor, Texas 78725

CN600135198

RN105331755

TX0129950

WQ0010543014

根据《Texas州行政法规》第30篇第39章的规定,Texas州环境质量委员会正在审查水质许可证申请,现提供该待处理申请的以下摘要。本摘要中提供的信息可能会在该申请的技术审查过程中发生变化,这些信息并不属于联邦对许可证申请的强制性陈述。

Austin市 (CN600135198) 运营着Austin市Taylor Lane废水处理厂 (RN105331755), 这是一座传统的活性污泥废水处理厂。该设施的地址是7535 Taylor Lane, City of Manor, Travis County, Texas 78653, 它位于Lower Colorado River流域第1428号区段Lady Bird Lake/Town Lake下方的 Gilleland Creek至Colorado River的排水区。

本申请旨在更新其排放许可,以获准每天通过001号排放口排放经处理的生活废水,日均流量不超过100万加仑。

该设施排出的废水预计含有五日碳质生化需氧量(CBOD5)、总悬浮固体(TSS)、氨氮(NH3-N)、大肠杆菌、余氯和总磷。生活废水由Aeromod活性污泥废水处理厂进行处理。其各个阶段的处理工艺包括筛选、除砂、细泡和粗泡曝气、化学磷沉淀、澄清、过滤、氯消毒和级联曝气。

## Resumen en lenguaje sencillo Planta de tratamiento de aguas residuales de Taylor Lane 7535 Taylor Lane, Manor, Texas 78725

CN600135198 RN105331755 TX0129950 WQ0010543014

El siguiente resumen de esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas se proporciona según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no son declaraciones federales ejecutables de la solicitud de permiso.

La Ciudad de Austin (CN600135198) opera la Planta de tratamiento de aguas residuales de Taylor Lane de la Ciudad de Austin (RN105331755), una planta de tratamiento de aguas residuales convencionales con lodos activados. La instalación está ubicada en 7535 Taylor Lane en la Ciudad de Manor, Condado de Travis, Texas 78653 La planta está en la zona de drenaje del arroyo Gilleland, desde allí va al río Colorado por debajo del lago Lady Bird/lago Town en el segmento número 1428 de la cuenca del río Colorado bajo.

Esta solicitud es para una renovación para descargar con un caudal promedio diario que no supere 0.5 millón de galones por día de agua residual doméstica tratada a través del Desagüe 001.

Se espera que las descargas de la planta tengan demanda bioquímica de oxígeno carbonácea a cinco días (DBOC 5), sólidos suspendidos totales (SST), nitrógeno amoniacal (NH3-N), *Escherichia coli*, cloro residual y fósforo total. El agua residual doméstica se trata en una planta de tratamiento de aguas residuales con lodos activados de Aeromod. Los procesos de la planta para todas las fases incluyen cribado, remoción de arenas, aireación de burbujas finas y gruesas, precipitación química del fósforo, clarificación, filtración, desinfección con cloro y aireación en cascada.

#### Tóm tắt bằng ngôn ngữ đơn giản Nhà Máy Xử Lý Nước Thải Taylor Lane 7535 Taylor Lane, Manor, Texas 78725

CN600135198

RN105331755

TX0129950

WQ0010543014

Bản tóm tắt sau đây được cung cấp cho đơn xin giấy phép chất lượng nước đang chờ xử lý này đang được Ủy ban Chất lượng Môi trường Texas xem xét theo yêu cầu của 30 Bộ luật Hành chánh Texas Chương 39. Thông tin cung cấp trong bản tóm tắt này có thể thay đổi trong quá trình duyệt xét chuyên môn đối với đơn đăng ký và không phải là thông tin đại diện có hiệu lực thi hành của liên bang đối với đơn xin giấy phép.

Thành phố Austin (CN600135198) vận hành Nhà Máy Xử Lý Nước Thải Taylor Lane của Thành Phố Austin (RN105331755), một nhà máy xử lý nước thải bằng bùn hoạt tính thông thường. Cơ sở xử lý được đặt tại 7535 Taylor Lane, trong Thành Phố Manor, Quận Travis, Texas 78653. Cơ sở nằm trong khu vực thoát nước của Gilleland Creek từ đó đến sông Colorado bên dưới Hồ Lady Bird/ Town Lake trong Đoạn số 1428 của Lưu vực hạ lưu sông Colorado.

Đơn xin này nhằm mục đích gia hạn hoạt động xả nước thải sinh hoạt đã qua xử lý với lưu lượng trung bình hàng ngày không vượt quá 0,5 triệu gallon mỗi ngày thông qua Cửa xả 001.

Chất thải từ cơ sở này dự kiến sẽ bao gồm nhu cầu oxy sinh hóa cacbon (CBOD5) trong 5 ngày, tổng chất rắn lơ lửng (TSS), nitơ amoniac (NH3-N), Escherichia coli, clo dư và tổng phốt pho. Nước thải sinh hoạt được xử lý bằng hệ thống xử lý nước thải bùn hoạt tính Aeromod. Quy trình xử lý nước thải trong nhà máy bao gồm các giai đoạn như lọc sơ bộ, tách cát và các hạt sạn, sục khí bọt mịn và bọt thô, kết tủa phốt pho hóa học, loại bỏ phốt pho khỏi nước thải, làm trong, loại bỏ các hạt nhỏ còn sót lại, khử trùng bằng clo, và sục khí bậc thang.

## Plain Language Summary Taylor Lane Wastewater Treatment Plant 7535 Taylor Lane, Manor, Texas 78725

CN600135198 RN105331755 TX0129950 WQ0010543014

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

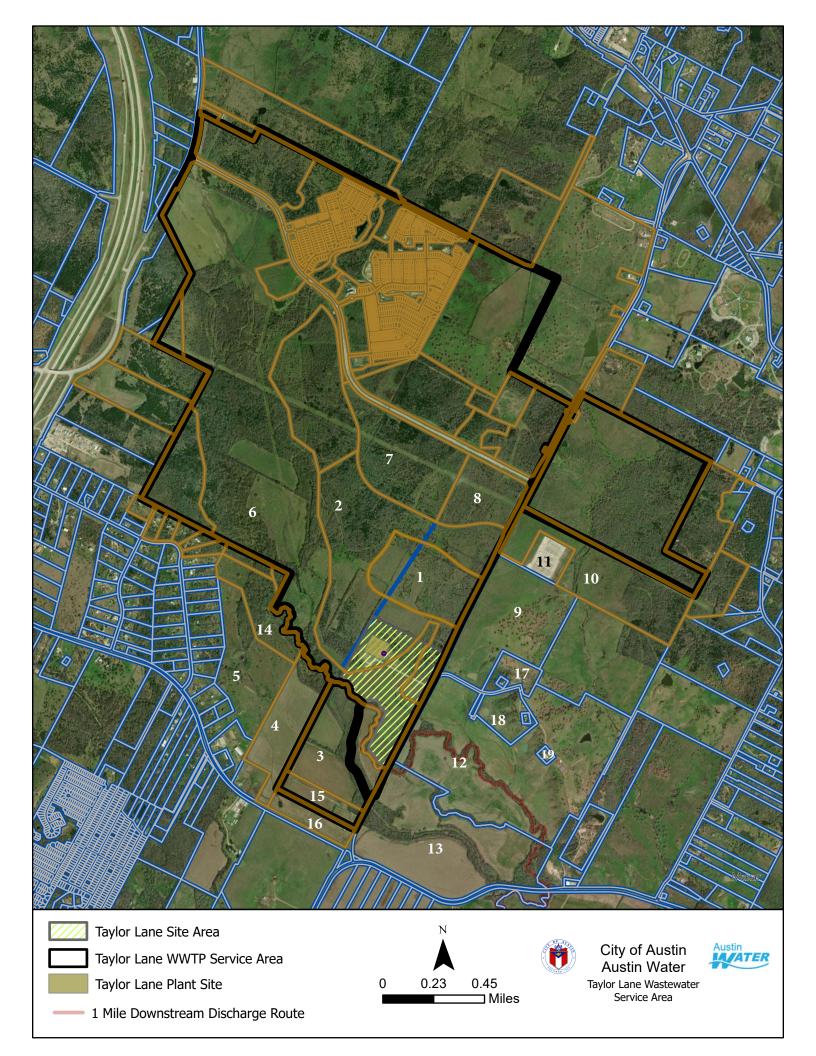
The City of Austin (CN600135198) operates the City of Austin Taylor Lane Wastewater Treatment Plant (RN105331755), a conventional activated sludge wastewater treatment plant. The facility is located at 7535 Taylor Lane, in the City of Manor, Travis County, Texas 78653. The facility is in the drainage area of Gilleland Creek, thence to the Colorado River Below Lady Bird Lake/Town Lake in Segment Number 1428 of the Lower Colorado River Basin.

This application is for a renewal to discharge at a daily average flow not to exceed 0.5 million gallons per day of treated domestic wastewater via Outfall 001.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), Escherichia coli, residual chlorine, and total phosphorus. Domestic wastewater is treated by an Aeromod activated sludge wastewater treatment plant. Plant processes for all phases include screening, grit removal, fine and coarse bubble aeration, chemical phosphorus precipitation, clarification, filtration, chlorine disinfection, and cascade aeration.

# ATTACHMENT 6 LANDOWNER MAP

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP



## ATTACHMENT 7 LANDOWNER LIST & MAILING LABELS

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

## City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014

# Land Owner List

Cross Reference #	Property ID#	Owner Name	Site Address	Mailing Address	City, State, Zip
1	975061	DEL VALLE ISD	TAYLOR LANE TX 78653	5301 ROSS RD STE 103	DEL VALLE TX 78617-3288
2	806432	CLUB DEAL 120 WHISPER VALLEY	TAYLOR LN TX 78653	9285 HUNTINGTON SQ	NORTH RICHLAND HILLS TX 76182-4366
ε	879432	TRAVIS COUNTY	TAYLOR LANE TX 78621	PO BOX 1748	AUSTIN TX 78767-1748
4	838573	TRAVIS COUNTY	DECKER LAKE RD TX 78653	PO BOX 1748	AUSTIN TX 78767-1748
ß	201749	JENNIFER SCOTT RIGGS	15950 DECKER LAKE RD TX 78653	PO BOX 280	AUSTIN TX 78767-0280
9	806424	CLUB DEAL 120 WHISPER VALLEY	N FM RD 973 TX 78653	9285 HUNTINGTON SQ	NORTH RICHLAND HILLS TX 76182-4366
7	965112	CLUB DEAL 120 WHISPER VALLEY	TAYLOR LN TX 78653	9285 HUNTINGTON SQ	NORTH RICHLAND HILLS TX 76182-4366
8	806431	CLUB DEAL 120 WHISPER VALLEY	TAYLOR LN TX 78653	9285 HUNTINGTON SQ	NORTH RICHLAND HILLS TX 76182-4366
6	441911	JANICE KAY MITCHELL	7729 TAYLOR LN TX 78653	10145 OAK KNOLL TER	COLORADO SPRINGS CO 80920-2423
10	441910	SYLVIA MEYER & DON SALYER	TAYLOR LN TX 78653	229 BROWN ST	HUTTO TX 78634-3284
11	816707	CITY OF AUSTIN 13TH FLOOR	TAYLOR LN TX 78653	PO BOX 1088	AUSTIN TX 78767-1088
12	190523	MARY FRANCES WISIAN	17503 GLASS RD TX 78653	4812 DUNLAP RD	AUSTIN TX 78725-2901
13	190521	TRAVIS COUNTY	FM RD 969 TX 78653	13538 CRESCENT CREEK DR	SAN ANTONIO TX 78231-2249
14	920090	TRAVIS COUNTY	DECKER LN TX	PO BOX 280	AUSTIN TX 78760-0280
15	190514	HORNSBY LAND PARTNERS LP	TAYLOR LN TX 78653	4605 POST OAK PLACE DR STE 212	HOUSTON TX 77027-9728
16	544133	MANVILLE WATER SUPPLY	FM RD 969 TX 78653	PO BOX 248	COUPLAND TX 78615-0248
17	201767	RETHANIN GLASS	17500 GLASS RD MANOR TX	17500B GLASS RD	MANOR TX 78653-5049
18	190519	MARK ANTHONY WISIAN	17501 GLASS RD MANOR TX TX 78653	17501 GLASS RD	MANOR TX 78653-5049
19	190523	MARY FRANCES WISIAN	17503 GLASS RD TX 78653	4812 DUNLAP RD	AUSTIN TX 78725-2901

# CITY OF AUSTIN - AUSTIN WATER TAYLOR LANE WWTP TCEQ PERMIT -WQ0010543014

# APPLICATION FOR DOMESTIC WWTP SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

## FOR AGENCIES REVIEWING DOMESTIC TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:	
Application type:RenewalMajor Ar	mendment Minor Amendment New
County:	
Admin Complete Date:	
Agency Receiving SPIF:	_
	U.S. Fish and Wildlife
Texas Historical Commission Texas Parks and Wildlife Department	
rexas raiks and whome Department	0.3. Affily Corps of Engineers
This form applies to TPDES permit application	ns only. (Instructions, Page 53)
The SPIF must be completed as a separate docu each agency as required by the TCEQ agreemen addressed or further information is needed, yo before the permit is issued. Each item must be	It with EPA. If any of the items are not completely u will be contacted to provide the information
be provided with this form separately from the	permit application form. Each attachment must administrative report of the application. The y complete without this form being completed in
The following applies to all applications:	
1. Permittee: <u>City of Austin-Austin Water</u>	
Permit No. WQ00 <u>10543014</u>	EPA ID No. TX <u>0129950</u>
Address of the project (or a location descripand county):	otion that includes street/highway, city/vicinity,
7535 Taylor Lane, Manor, Travis County, T	<u>exas 78653</u>

answer specific questions about the property.
Prefix (Mr., Ms., Miss): <u>Mrs.</u>
First and Last Name: <u>Tammy Y West</u>
Credential (P.E, P.G., Ph.D., etc.):
Title: Wastewater Regulatory Manager
Mailing Address: <u>625 E 10th Street, Ste 315</u>
City, State, Zip Code: <u>Austin, TX 78701</u>
Phone No.: <u>512-972-0143</u> Ext.: Fax No.:
E-mail Address: <u>tammy.yates.west@austintexas.gov</u>
List the county in which the facility is located: <u>Travis</u>
If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.
Club Deal 120 Whisper Valley LP
Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of
discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify
the classified segment number.
From the plant site to Gilleland Creek; then to the Colorado River downstream of Lady Bird
<u>Lake in Segment No. 1428 of the Colorado River Basin</u>
Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries
plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is
required in addition to the map in the administrative report). <b>See Attachment 1</b>
Provide original photographs of any structures 50 years or older on the property.
Does your project involve any of the following? Check all that apply.
☐ Proposed access roads, utility lines, construction easements
☐ Visual effects that could damage or detract from a historic property's integrity
☐ Vibration effects during construction or as a result of project design
□ Additional phases of development that are planned for the future
☐ Sealing caves, fractures, sinkholes, other karst features
☐ Sealing caves, fractures, sinkholes, other karst features

Provide the name, address, phone and fax number of an individual that can be contacted to

2.3.

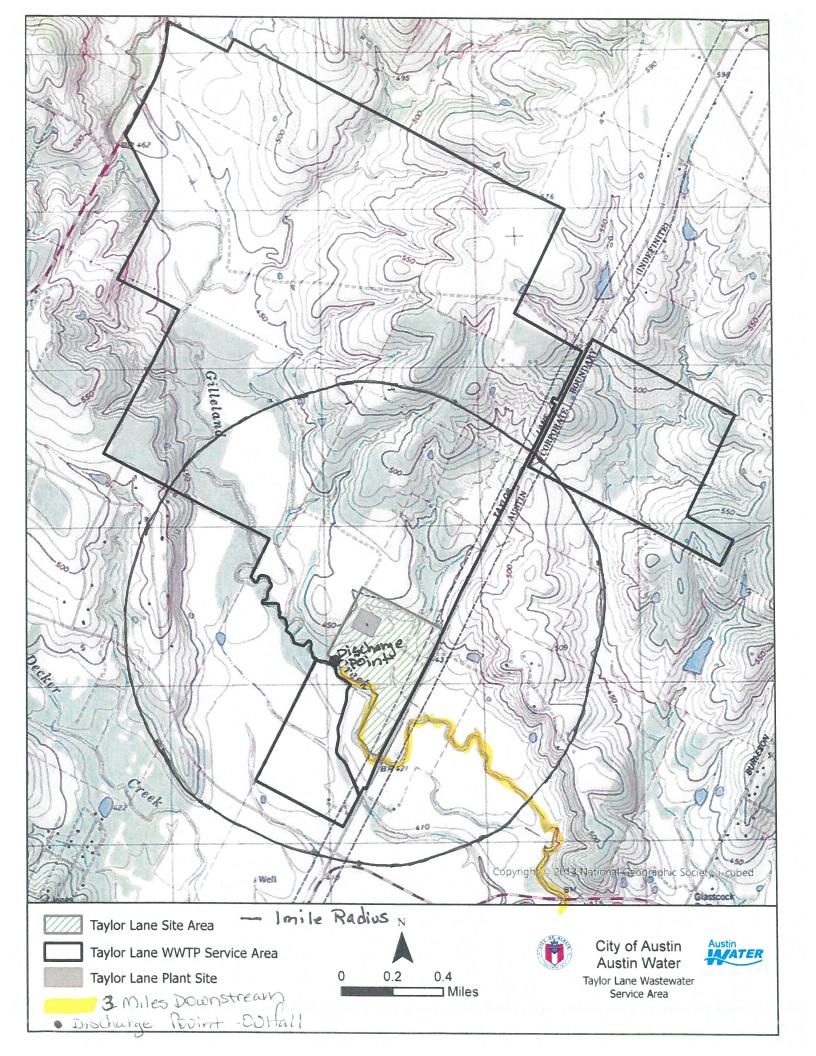
4.

5.

	☐ Disturbance of vegetation or wetlands
6.	List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):  Construction of the Interim Phase III will impact approximately 4 acres at the plant adjacent to the existing treatment units. No caves or karst features were encountered during the Interim I plant construction.  See Attachment 2
7.	Describe existing disturbances, vegetation, and land use:
	Existing disturbances, vegetation and land use are typical for the operation and maintenance of a Wastewater Treatment Plant.
	IE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR MENDMENTS TO TPDES PERMITS
8.	List construction dates of all buildings and structures on the property:
	n/a
9.	Provide a brief history of the property, and name of the architect/builder, if known.
	n/a

# ATTACHMENT 1 USGS TOPO MAP

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP



# ATTACHMENT 2 ENGINEERING REPORT

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

### PRELIMINARY ENGINEERING REPORT

## TAYLOR LANE WASTEWATER TREATMENT PLANT Austin, Texas

Prepared for: City of Austin 625 E 10<sup>th</sup> Street Suite 800 Austin, TX 78701

Prepared by:
Kimley-Horn and Associates, Inc.
801 Cherry Street
Suite 1300, Unit 11
Fort Worth, TX 76102
Texas Registered Engineering Firm F-928

Phone: (817) 339-2288



#### TABLE OF CONTENTS

TABLE OF CONTENTS	1
INTRODUCTION	2
INFLUENT CHARACTERISTICS	3
CALCULATIONS AND SUPPORTING INFORMATION	3
SLUDGE MANAGEMENT PLAN	
SLUDGE IVIAINAGEIVIENT PLAIN	ć
FACILITY SITING INFORMATION	F

#### **APPENDICIES**

Appendix A – Aero-Mod, Inc. Design Report

Appendix B – Facility Maps

Appendix C – Existing Permit

Appendix D – Windrose

This document, together with the concepts and designs presented herein, as an instrument of services is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

#### Introduction

Kimley-Horn and Associates, Inc. (KHA) was contracted by the 706 Development Corporation to design a 0.25 MGD Taylor Lane Wastewater Treatment Plant (RN105331755) expansion for the City of Austin (CN600135198). The proposed facility addition is required to serve the growing Lagos development. The discharge permit (WQ0010543014) was renewed in October 2019 and has a final phase flow of 3.0 MGD. The Wastewater Treatment Plant (WWTP) expansion includes: a ProTechtor® HCP 60 headworks unit and Aero-Mod Sequox® treatment unit.

The proposed 0.25 MGD expansion features the exact same units and manufacturers as the previous 0.25 MGD expansion. The plans and specifications which describe the project identified in this report are in substantial compliance with all the requirements of Texas Administrative Code Chapter 217, and no variances are requested for the proposed improvements.

The treatment plant has been designed to produce an effluent quality in compliance with the existing permitted parameters of:

- Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>) = 5 mg/L
- Total Suspended Solids (TSS) = 5 mg/L
- Ammonia Nitrogen (NH<sub>4</sub>) = 2 mg/L
- Dissolved Oxygen (DO) = 4.0 mg/L
- Total Phosphorus (TP) = 1.0 mg/L

If you have any questions regarding this project, please contact me at (817) 339-2288.

Very Truly Yours,

KIMLEY-HORN AND ASSOCIATES, INC.

Texas Firm No. 928

Sincerely,

Kyle Kubista, P.E. (Texas License No. 121644)



#### **Influent Characteristics**

The average flow coming to the plant is expected to rise from 0.35 MGD to 0.6 MGD due to continued development in the Lagos development. The WWTP is designed for a peaking factor of four, as required by TCEQ, which corresponds to a 2-hour peak flow of 2.4 MGD. The influent characteristics shown in Table 1 below are expected to remain the same as the flow increases.

Table 1.: Influent Flow Characteristics

Average Daily Flow (MGD)	0.6
2-Hour Peak Flow (MGD)	2.4
Biochemical Oxygen Demand (mg/l)	280
Total Suspended Solids (mg/l)	280
Ammonia Nitrogen (mg/l)	50
Phosphorus (mg/l)	6.0

#### Calculations and Supporting Information

The wastewater will be pumped from the existing influent lift station to an existing splitter box. The existing splitter box will separate the flow to the existing headworks units and to the proposed headworks unit. The wastewater will then flow from the proposed headworks to the proposed 0.25 MGD wastwater treatment plant where it will undergo nutrient removal in the aeration basins. The wastewater will then be piped to the secondary clarifiers where the sludge will be sent to the sludge holding tanks, and the effluent will be piped to the existing disk filters. The effluent water from the filters will then be disinfected in the existing chlorine contact basin before being sent to the existing cascade structure. After being aerated in the cascade structure the effluent is discharged into Gilleland Creek. The proposed and rehabilitated units for this expansion are further described in the following paragraphs.

The ProTechtor® Headworks Complete Plant 60, designed by Kusters Water is capable of handling a 2-hour peak flow of 1.0 MGD. Raw flow to the unit passes through a mechanical 6mm fine screen where the screenings are captured, washed, and compacted prior to discharge. The influent flow then passes through an aerated grit chamber where the grit settles and the organic matter is kept in suspension. Grease is collected in an adjacent grease compartment and skimmed off with a scraped before being pumped out of the unit. The settled grit is removed and dewatered with horizontal and inclined grit screws.

The proposed design by Aero-Mod is used to be consistent with the previous expansion phase that was approved by Austin Water. The design report and calculations for the treatment plant facility upgrade were performed by Aero-Mod, Inc. and meet all Texas Administrative Code standards. The report can be found in Appendix A and features design calculations, treatment unit dimensions, and aeration capacities. The proposed treatment plant addition was also modeled in BioWin to verify that the effluent permit values would be met with the proposed tankage. A screen-capture of the BioWin model treatment train can be seen in Figure 1 below. The influent to the treatment unit first reaches the central selector tank before being sent to a series of two aeration basins. The aeration basins were designed with a organic loading of 21 lbs of BOD<sub>5</sub> per 1000 cubic foot of tank per day.

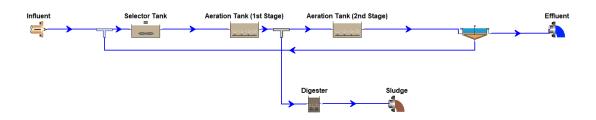


Figure 1. BioWin Treatment Train Model

The two rectangular primary sedimation clarifiers are a propietary design by Aero-Mod, called the ClarAtor. The secondary clarifiers are sized to provide a minimum detention time of 1.8 hours at the 2-hour peak flow. Additionally, the clarifiers have been sized to provide a surface overflow rate less than 1,000 gallons per day per square foot. Return activated sludge (RAS) will be airlifted from the two clarifiers back to the influent selector tank based on a timer control.

Waste activated sludge (WAS) will be air lifted from the aeration basins to the sludge holding tanks where the sludge will be thickened based on a digital timer control. The sludge holding tanks are sized to reduce volatile solids by 30% and have a solids retention time of 30 days. Diffused air will be input to the basin at a minimum of 30 cubic feet per minute per 1,000 cubic feet of holding tank capacity.

One of the two existing Evoqua disk filters will be rehabilitated by increasing the number of disks from three to six. The two disk filters will then be rated for a combined flow rate of 4 MGD at 30 part per million total suspended solids. The max hydraulic loading rate of the disk filters will be 6.5 gpm/ft<sup>2</sup> with one disc out of service in each filter, per the Texas Commission on Environmental Quality.

#### Sludge Management Plan

The sludge will be airlifted from the aeration basins to the sludge holding tanks where it will be held for 30 days before being trucked off by a registered sludge hauler. The design report shows that 4,092 gallons of sludge are wasted from the tanks per day for each of the 0.25 MGD package plant units. This brings the total amount of sludge wasted per day to 8,184 gallons for phase 3 average daily flow of 0.6 MGD. The total sludge storage at 0.6 MGD was calculated by adding the volume of the sludge holding tanks and was found to be 218,287 gallons.

#### Facility Siting Information

The area surrounding the wastewater treatment plant is chacterized by open fields and trees. Prevailing winds occur from the South and a windrose map can be found in Appendix B. There are no water treatment facilities within 3 miles plant outfall location, and there are no nearby schools, industrial areas, surface water uptakes, or parks within 1 mile of the facility. There are 4 water supply wells found within 1-mile of the plant. These can be seen on the USGS map in Appendix B. Further, these maps show comliance with the restrictions specified in Texas Administrative Code §309.13 Unsuitable Site Characteristics.

### Appendix A

Design Report



## Aero-Mod, Inc. TANKAGE DESIGN CALCULATIONS

Project: Engineer: Tank Cons		ace Concrete		Date: Units:	10-Feb-21 English
SELECTO	DTANK				
SELECTO	Anoxic Selector	Volume Requ	uired, gal <b>15,879</b>		
	Number of Tanks	1	Tank Length, ft		21.0
	Tank Wall Height, ft	16.0	Tank Width, ft		5.00
	Tank Water Depth, ft	14.0	Total Volume, gallons		10,996
	Freeboard, ft	2.0	Retention Time (Design -	RAS), min.	25
AERATIO	N TANK	Volume Selec	cted, gal <b>208,333</b>		
Tank Wall	Height, ft	16.0	Number of Trains	2	
Tank Wate	•	14.0	Number of Stages	2	
	Stage 1		Stage 2		
	Number of Tanks	2	Number of Tanks	2	_
	Tank Length, ft	18.50	Tank Length, ft	40.75	
	Tank Width, ft	27.125	Tank Width, ft	12.5	
	Area of Each Tank, sf	502	Area of Each Tank, sf	509	
	Total Volume, gallons	105,100	Total Volume, gallons	106,684	
	Stage	•	Stage 3	,	
	Number of Tanks	0	Number of Tanks	0	-
	Tank Length, ft	0.0	Tank Length, ft	0.0	
	Tank Width, ft	0.0	Tank Width, ft	0.0	
	Area of Each Tank, sf	0	Area of Each Tank, sf	0	
	Total Volume, gallons	0	Total Volume, gallons	0	
		Total volume	provided, gal	211,783	
CLARIFIE	R TANK				
Number of	Tanks	2	Tank Length, ft		24.0
Tank Wall	Height, ft	16.0	Tank Width, ft		21.0
Tank Wate	er Depth, ft	14.0	Total Volume, gallons		105,558
AEROBIC	DIGESTER TANK	Volume Selec	cted, gal <b>88,542</b>		
Number of	Tanks	2	Tank Length, ft		10
Tank Wall	Height, ft	16.0	Tank Width, ft		40.88
Tank Wate	er Depth, ft	14.5	Total Volume, gallons		88,678
OVERALL	TANKAGE DIMENSION	IS			
Total Leng	th. ft	54.50	Wall Thickness, in		15.0
Total Width		85.5	Floor Thickness, in		15.0
Total Area	-	4,660	Total Concrete for Walls,	су	424
Total Wall		572	Total Concrete for Slab,	=	229
	•		Total Grout for Clarifier, of	•	60

#### Aero-Mod, Inc. AERATION DESIGN CALCULATIONS

Date:

26.6

10-Feb-21

Project:

Taylor Lane, Texas

Engineer: Kimley-Horn Units: English Tubular EPDM Fine Bubble Diffuser Type Used: Peak Design Peak Design Q. MGD TKN<sub>o</sub>, mg/l 0.250 N/A 65.0 N/A BOD<sub>o</sub>, mg/l 280 N/A TKN<sub>assimilation</sub>, mg/l 11.9 N/A BOD<sub>rem</sub>, mg/l 280 N/A TKN<sub>rem</sub>, mg/l 65.0 N/A BOD<sub>rem</sub>, Ib/day TKN<sub>rem</sub>, lb/day 584 N/A 135.5 N/A O2 Requirement, lb O2/lb BODrem 1.500 O2 Requirement, Ib O2/Ib TKNrem 4.60 **AERATION REQUIREMENTS - FIRST STAGE** Design Peak Removal in First Stage 75%  $BOD_{oxy}$  - Oxygen Required for BOD [Q \* BOD<sub>rem</sub> \* 8.34 \* O<sub>2</sub> Req. / 24], lbs O<sub>2</sub>/hr N/A TKN<sub>oxv</sub> - Oxygen Required for TKN [Q \* TKN<sub>rem</sub> \* 8.34 \* O<sub>2</sub> Req. / 24], lbs O<sub>2</sub>/hr 19.5 N/A Actual Oxygenation Rate (AOR), lbs O2/hr 46.8 N/A Standard Oxygenation Rate (SOR), lbs O<sub>2</sub>/hr 121.8 N/A SOR = [(AOR \*  $C_{s,20}$ ) / ( $\alpha$  \*  $\Theta$  $^{(T-20)}$  \* (Tau \*  $\Omega$  \*  $\beta$  \*  $C_{s,20}$  -  $C_L$ ) \* F)] Where: C<sub>s.T.H</sub> Actual Value of D.O. Saturation, mg/l 9.08 Residual D.O. Conc., mg/l 2.0 Temperature of Water. °C C<sub>s.20</sub> Steady State Value of D.O. Saturation, mg/l 9.08 Т 20 Tau Oxygen Saturation Value (C<sub>s,T,H</sub>/C<sub>s,20</sub>) 1.000 F Diffuser Fouling Factor 0.90 α Alpha - Oxygen Transfer Correction Factor for Waste 0.60 Θ Theta - Oxygen Transfer Coeff 1.024 Beta - Salinity-Surface Tension Correction Factor 0.95 Site Elevation, FASL 500 Atmospheric Pressure at Site Elevation, psi 14.43 Ω Omega (P<sub>H</sub>/P<sub>s</sub>) 0.982 Air Requirement = [SOR / (Oxygen Density \* TE% \* Diffuser Depth) / 60], scfm 446 N/A Where: Oxygen Density, lbs O2/cf 0.0175 Diffuser Depth Below Water Surface, ft 13.0 Transfer Efficiency per Foot of Submergence, % 2.00% Denitrification Credit = [Air Rqmt \* (TKN<sub>oxy</sub> / AOR) \* 50% \* ((TKN<sub>o</sub> - TN<sub>e</sub>) / TKN<sub>o</sub>)], scfm N/A 87 Where: TN<sub>e</sub> = TKN<sub>o</sub> / 2 (assumed when D.O. control is not used) 359 Total Aeration Required in Aeration Basin, scfm N/A Air Correction  $icfm = scfm / [((T_{std} + 460) / (T_{air} + 460)) * ((P_H - (RH\% * SVP_{Tair})) / (14.7 - (RH\%_{std} * SVP_{std}))) * ((P_A / P_H)]$ Maximum Air Temperature, °F Where: T<sub>std</sub>, °F 68  $T_{air}$ 104 RH%<sub>std</sub> 36% RH% Maximum Relative Humidity, % 90% SVP<sub>std</sub>, psi 0.34 SVP<sub>Tair</sub> Saturated Vapor Pressure of Air @ Tair, psi 1.058  $\mathsf{P}_\mathsf{A}$ Actual Atmospheric Pressure after Blower Inlet, psi 14.23 Minimum Air Required for Mixing in First Stage Aeration Basin, cfm 141 Side Roll Minimum Air Required for Mixing in Second & Third Stage Aeration Basin, cfm 143 Side Roll Minimum Air Required for Operating Full Plant, cfm (mixing requirement for 24 hrs) 470 <u>Design</u> <u>Peak</u> **Design** <u>Peak</u> Aeration Pressure, in. H<sub>2</sub>O 204 204 7.4 7.4 psi. std (does not include blower inlet/outlet) scfm scfm icfm Aeration Basin - Fine Bubble 359 0 420 Aeration Basin - Coarse Bubble 209 0 245 n Aerobic Digester Tank (sequenced aeration) 178 0 178 0 Selector Tank 15 0 15 0 Clarifier RAS Airlift Pumps & Skimmers 54 0 Total Air Required 814 911 Total Air Available 1,089 **POWER REQUIREMENTS** Unit Power Power Operating Power for Aeration Basin, HP Blower 33.9 Operating Power for Digester, HP Blower 9.0 Operating Power for Selector Tank, HP Blower 0.7 Operating Power for Clarifier, HP Blower 2.7 N/A N/A 0.0 Operating Power for Pneumatic System, HP Air Compr. 0.4 Operating Power Required at Full Loading, HP 46.8

Minimum Power Required to Operate Full Plant, HP

## Aero-Mod, Inc. AERATION DESIGN CALCULATIONS

10-Feb-21

Date:

Project:

Taylor Lane, Texas

gineer: fuser Ty		•	Stainless S	Steel Coarse B	ubble					
RATION	I REQU	JIREME	ENTS - SEC	COND & THIR	D STAGE				Design	Peak
							Remova	l in Second Stag	ge 25%	17.5%
ygen Red	quired	for BO	D [Q * BOI	O <sub>rem</sub> * 8.34 * O <sub>2</sub>	Req. / 24], lbs	s O <sub>2</sub> /hr			9.1	N/A
ygen Red	quired	for TKN	I [Q * TKN <sub>r</sub>	<sub>em</sub> * 8.34 * O <sub>2</sub> I	Req. / 24], lbs (	O <sub>2</sub> /hr			6.5	N/A
	Actua	al Oxyg	enation Ra	ate (AOR), Ibs	O <sub>2</sub> /hr				15.6	N/A
	Stand	lard Ox	ygenation	Rate (SOR), I	lbs O₂/hr				29.2	N/A
		SOR =	[(AOR * C	s,20 <b>) / (</b> α * Θ <b>^</b> ( <sup>T</sup>	<sup>Γ-20)</sup> * (Tau * Ω	* β * C <sub>s,20</sub>	- C <sub>L</sub> ) * F)]			
Where:	C <sub>s,T,H</sub>	Actual V	alue of D.O.	Saturation, mg/l		9.08	C <sub>L</sub>	Residual D.C	. Conc, mg/l	:
	C <sub>s,20</sub>	Steady	State Value o	f D.O. Saturation,	, mg/l	9.08	Т	Temperature	of Water, °C	
	Tau	Oxygen	Saturation Va	alue ( $C_{s,T,H}/C_{s,20}$ )		1.000	F	Diffuser Foul	ing Factor	1.
	α			sfer Correction Fa		0.75	Θ	Theta - Oxyg	en Transfer Coeff	i 1.0
	β			e Tension Correct		0.95		Site Elevation	,	5
	P <sub>H</sub>	Atmospl	neric Pressur	e at Site Elevation	n, psi/FASL	14.43	Ω	Omega (P <sub>H</sub> /F	P <sub>s</sub> )	0.9
Require	ement	= [SOR	/ (Oxygen	Density * TE	% * Diffuser D	Depth) / 60	, scfm		243	N/A
Where:	Oxyger	n Density	, lbs O <sub>2</sub> /cf			0.0175	Diffuser [	Depth Below Wa	ter Surface, ft	1:
	Transfe	er Efficier	ncy per Foot	of Submergence,  * (TKN <sub>oxy</sub> / AO	% R) * 50% * ((T	0.85%			ter Surface, ft	N/A
nitrificat	Transfe	er Efficier	Air Rqmt	* (TKN <sub>oxy</sub> / AO	R) * 50% * ((T)	0.85% KN <sub>o</sub> - TN <sub>e</sub> )	/ TKN <sub>o</sub> )],			
<b>nitrificat</b> Where:	Transfe tion Cr	er Efficier	Air Rqmt	* (TKN <sub>oxy</sub> / AO	R) * 50% * ((T	0.85% KN <sub>o</sub> - TN <sub>e</sub> )	/ TKN <sub>o</sub> )],			
where:  Correct icfm =  Where:	tion Cr TN <sub>e</sub> = 1	redit =   TKN <sub>o</sub> / 2   / [((T <sub>std</sub>	Air Rqmt (assumed wh Total A + 460) / (T	* (TKN <sub>oxy</sub> / AO en D.O. control is eration Requi T <sub>air</sub> + 460)) * ((I	R) * 50% * ((Tiles not used)  red in Aeratio  PH - (RH% * S)  Maximum Air T  Maximum Rela	O.85%  KN <sub>o</sub> - TN <sub>e</sub> )  on Basin, s  VP <sub>Tair</sub> )) / (1	/ TKN <sub>o</sub> )], cfm 4.7 - (RH%	scfm /o <sub>std</sub> * SVP <sub>std</sub> )	209 0) * ((P <sub>A</sub> / P <sub>H</sub> )] 104 90%	N/A
where:  Correct icfm =  Where:	tion Cr $TN_e = 1$ tion scfm	redit =   TKN <sub>o</sub> / 2   / [((T <sub>std</sub>	Air Rqmt (assumed wh Total A + 460) / (T	* (TKN <sub>oxy</sub> / AO en D.O. control is eration Requi 	R) * 50% * ((The not used)  red in Aeratio  PH - (RH% * S)  Maximum Air T	O.85%  KN <sub>o</sub> - TN <sub>e</sub> )  on Basin, s  VP <sub>Tair</sub> )) / (1	/ TKN <sub>o</sub> )], cfm 4.7 - (RH%	scfm /o <sub>std</sub> * SVP <sub>std</sub> )	209 0) * ((P <sub>A</sub> / P <sub>H</sub> )] 104	N/A
where:  Correct icfm =  Where:	tion Cr TN <sub>e</sub> = 1	redit =   TKN <sub>o</sub> / 2   / [((T <sub>std</sub>	Air Rqmt (assumed wh Total A + 460) / (T	* (TKN <sub>oxy</sub> / AO en D.O. control is eration Requi T <sub>air</sub> + 460)) * ((I	R) * 50% * ((Tiles not used)  red in Aeratio  PH - (RH% * S)  Maximum Air T  Maximum Rela	0.85%  KN <sub>o</sub> - TN <sub>e</sub> )  on Basin, s  VP <sub>Tair</sub> )) / (1	/ TKN <sub>o</sub> )], cfm 4.7 - (RH% °F , % f Air @ T <sub>air</sub> ,	scfm % <sub>std</sub> * SVP <sub>std</sub> ))	209 0) * ((P <sub>A</sub> / P <sub>H</sub> )] 104 90%	N/A
where:  Correct icfm =  Where:	tion Cr TN <sub>e</sub> = 1	redit =   TKN <sub>o</sub> / 2   / [((T <sub>std</sub>	Air Rqmt (assumed wheel) / (Table Air	* (TKN <sub>oxy</sub> / AO en D.O. control is eration Requi T <sub>air</sub> + 460)) * ((I T <sub>air</sub> RH% SVP <sub>Tair</sub> P <sub>A</sub>	R) * 50% * ((Ti s not used) red in Aeratio P <sub>H</sub> - (RH% * S\ Maximum Air T Maximum Rela Saturated Vapo	0.85%  KN <sub>o</sub> - TN <sub>e</sub> )  on Basin, s  VP <sub>Tair</sub> )) / (1  Temperature, ative Humidity or Pressure of the pressure o	/ TKN <sub>o</sub> )], cfm 4.7 - (RH% °F , % f Air @ T <sub>air</sub> , e after Blow	scfm %std * SVPstd)) psi er Inlet, psi	34 209 1) * ((P <sub>A</sub> / P <sub>H</sub> )] 104 90% 1.058 14.23	N/A
where:  Correct icfm =  Where:	tion Cr TN <sub>e</sub> = 1	redit =   TKN <sub>o</sub> / 2   / [((T <sub>std</sub>	Air Rqmt (assumed wheel) / (Table Air	* (TKN <sub>oxy</sub> / AO en D.O. control is eration Requi  Tair + 460)) * ((I  Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> Required for M	R) * 50% * ((Tiles not used)  red in Aeratio  PH - (RH% * S)  Maximum Air T  Maximum Rela  Saturated Vapo  Actual Atmosph	O.85%  KN <sub>o</sub> - TN <sub>e</sub> )  on Basin, s  VP <sub>Tair</sub> )) / (1)  Temperature, ative Humidity or Pressure of the ric Pressure of the rich P	/ TKN <sub>o</sub> )], cfm 4.7 - (RH% °F , % f Air @ T <sub>air</sub> , e after Blow	scfm %std * SVPstd)) psi er Inlet, psi	34 209 1) * ((P <sub>A</sub> / P <sub>H</sub> )] 104 90% 1.058 14.23	N/A N/A
where:  Correct icfm =  Where:	tion Cr TN <sub>e</sub> = 1	redit =   TKN <sub>o</sub> / 2	Air Rqmt (assumed wheel) / (Table Air	* (TKN <sub>oxy</sub> / AO en D.O. control is eration Requi  Tair + 460)) * ((I  Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> Required for M	R) * 50% * ((Tiles not used)  red in Aeratio  PH - (RH% * S)  Maximum Air T  Maximum Rela  Saturated Vapo  Actual Atmosphixing in Second	0.85%  KN <sub>o</sub> - TN <sub>e</sub> )  on Basin, s  VP <sub>Tair</sub> )) / (1  emperature, ative Humidity or Pressure of the pressure of	/ TKN <sub>o</sub> )], cfm 4.7 - (RH% °F , % f Air @ T <sub>air</sub> , e after Blow tage Aera	scfm %std * SVPstd)) psi er Inlet, psi	209 1) * ((P <sub>A</sub> /P <sub>H</sub> )] 104 90% 1.058 14.23 m 143	N/A N/A Side Roll
where:  Correct icfm =  Where:	tion Cr $TN_e = 1$ $T_{std}$ , °F $RH\%_{st}$ $SVP_{std}$	redit =   TKN <sub>o</sub> / 2   / [((T <sub>std</sub> -	Air Rqmt (assumed wheel) / (Table Air	* (TKN <sub>oxy</sub> / AO en D.O. control is eration Requi  Tair + 460)) * ((I  Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> Required for M  Aeration Pr psi, std	R) * 50% * ((The not used)  red in Aeratio  PH - (RH% * S)  Maximum Air T  Maximum Rela  Saturated Vapo  Actual Atmosphixing in Second	0.85%  KN <sub>o</sub> - TN <sub>e</sub> )  on Basin, s  VP <sub>Tair</sub> )) / (1  emperature, ative Humidity or Pressure of the pressure of	/ TKN <sub>o</sub> )], cfm 4.7 - (RH% °F , % f Air @ T <sub>air</sub> , e after Blow tage Aera	scfm  /o <sub>std</sub> * SVP <sub>std</sub> )  psi er Inlet, psi tion Basin, cfr	34 209 1) * ((P <sub>A</sub> /P <sub>H</sub> )] 104 90% 1.058 14.23 m 143 189	N/A N/A Side Roll 189 6.8 Peak icfm

## Aero-Mod, Inc. CLARIFIER DESIGN CALCULATIONS

Project:Taylor Lane, TexasDate:10-Feb-21Engineer:Kimley-HornUnits:English

Clarifier Type Used: Split-ClarAtor

#### **FLOW CONDITIONS**

Design Flow, MGD	0.250	
Peaking Factor, hourly	4.00	1.000 MGD
Duration, min	120	
Peaking Factor, sustained	2.00	0.500 MGD
Aeration Tank Volume, Mgal	0.208	
MLSS, mg/l	3,434	
Avg. RAS Recycle Rate. %	150%	

#### **EQUIPMENT SIZING & SELECTION**

Number of Clarifiers	2	Surface Area per Clarifier, sf	504
Clarifier Unit Model	24504	Total Surface Area, sf	1,008
Bridge Length, ft	24	Total Weir Length, ft	90
Clarifier Unit Width, ft	21	Tank Wall Depth, ft	16.0
Number of Units per Clarifier	1	Tank Water Depth, ft	14.0

#### SURFACE OVERFLOW RATE

	Design
Design Flow, gpd/sf	248
Peak Day Flow, gpd/sf	496
Peak Hour Flow, gpd/sf	992
Max. Flow Allowed Through Clarifier Orifice, gpd/sf	1,000 * Max orifice control

#### **WEIR OVERFLOW RATE**

Design Flow, gpd/lin. ft	2,778
Peak Flow, gpd/lin, ft	11.111

#### SOLIDS LOADING RATE

Design Flow, lbs/day/sf	17.8
Peak Flow, lbs/day/sf	39.1

#### **RETENTION TIME - including RAS**

Design Flow, hr	4.1
Peak Flow, hr	1.8

## Aero-Mod, Inc. ACTIVATED SLUDGE DESIGN CALCULATIONS

Project:Taylor Lane, TexasDate:10-Feb-21Engineer:Kimley-HornUnits:English

Act. Sludge Process: SEQUOX BNR

**DESIGN CONDITIONS & PARAMETERS** 

Population Equivalent 2919

@0.2lbsBod/cap

220.01. 00.121110110 a.i			©0:2:00204;04p	
		Filtered		
	Influent	Effluent		
Flow (Q), MGD	0.250		Aeration Basin	
BOD <sub>5</sub> , mg/l	280	5.0	Retention Time, hours	20.0
BOD <sub>5</sub> , lbs/day	584	10.4	Aeration Tank Volume, Mgal	0.208
BOD <sub>L</sub> , mg/l	409		MCRT, days	15.0
TSS, mg/l	280	5.0	Wastewater Temperature, °C	20
TSS, lbs/day	584	10.4	Aerobic Digester	
Ammonia-N, mg/l	50.0	1.0	Volume, % of Aeration Tank	42.5
Ammonia-N, lbs/day	104.3	2.1	Maximum MLSS, mg/l	12,000
TIN, mg/l		4.0	Maximum MLSS, %	1.20%
TIN, lbs/day		8.3	Digester Temperature, °C	20
Phosphorus-P, mg/l	6.0	1.0	Sludge Holding Tank	
Phosphorus-P, lbs/day	12.5	N/A	Volume, % of Aeration Tank	0.0
Net Alkalinity Loss, mg/l as	CaCO₃	(247)	Maximum MLSS, mg/l	25,000
			Maximum MLSS, %	2.50%

#### PROJECTED OPERATING CONDITIONS - AERATION BASIN

Mixed Liquor Suspended Solids, mg/l	3,434
Excess MLSS due to Phos-P Uptake/Removal, mg/l 0	
Mixed Liquor Volatile Suspended Solids, %	71%
F/M Ratio, lbs BOD <sub>5</sub> /lb MLVSS	0.14
F/M Ratio, lbs BOD <sub>5</sub> /lb MLSS	0.10
Organic Loading, lbs BOD <sub>5</sub> /1000 cf of tank/day	21.0
Oxygen Requirements (Carbonaceous), mg/l/hr	13.36
Oxygen Requirements (Nitrogenous), mg/l/hr	11.27
Solids Production, lbs/day	533
WAS - Solids Wasted per Day, lbs/day	522
WAS - Solids Wasted per Day, gal/day @ 0.34%	18,408

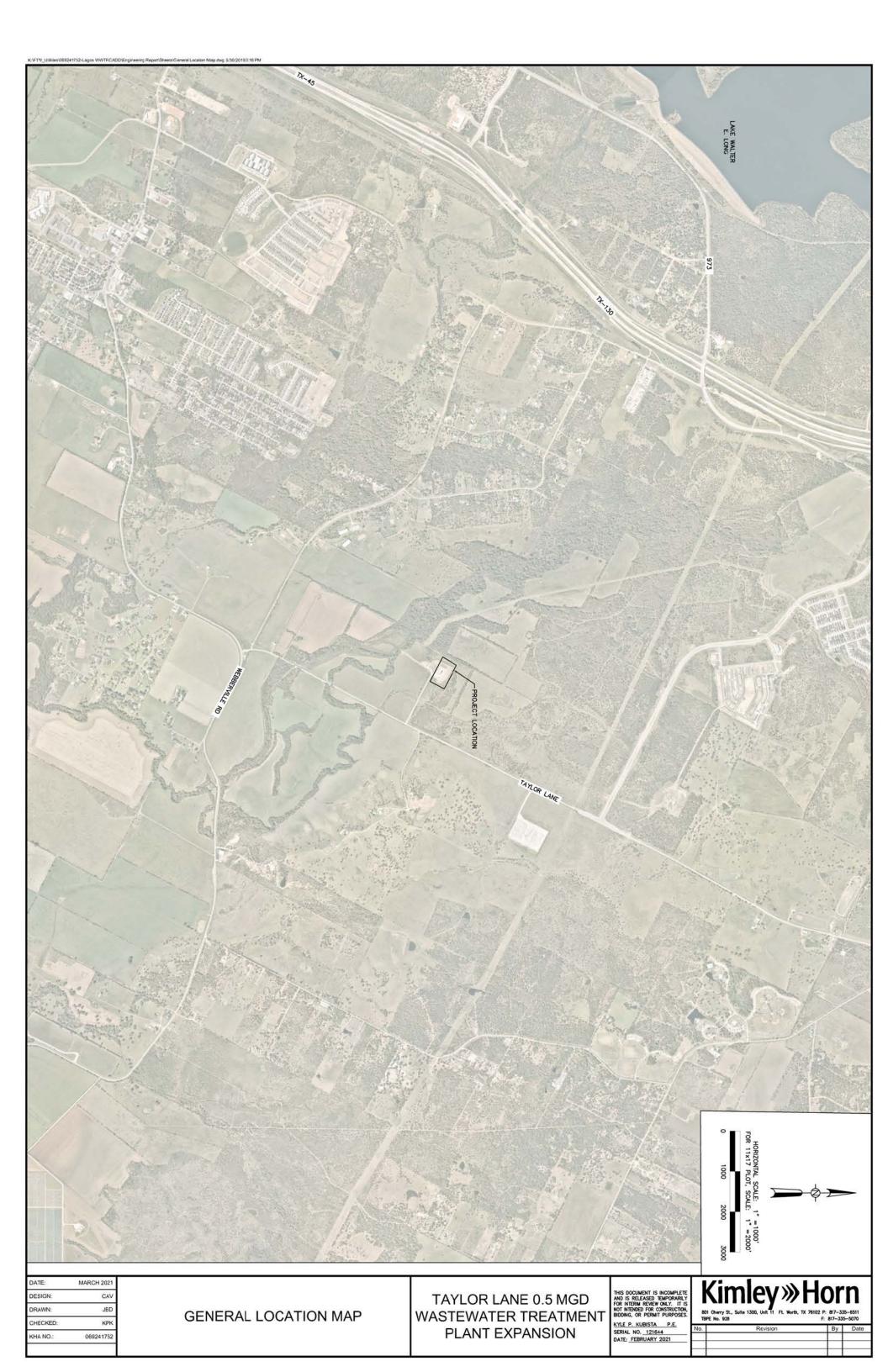
#### PROJECTED OPERATING CONDITIONS - AEROBIC DIGESTER

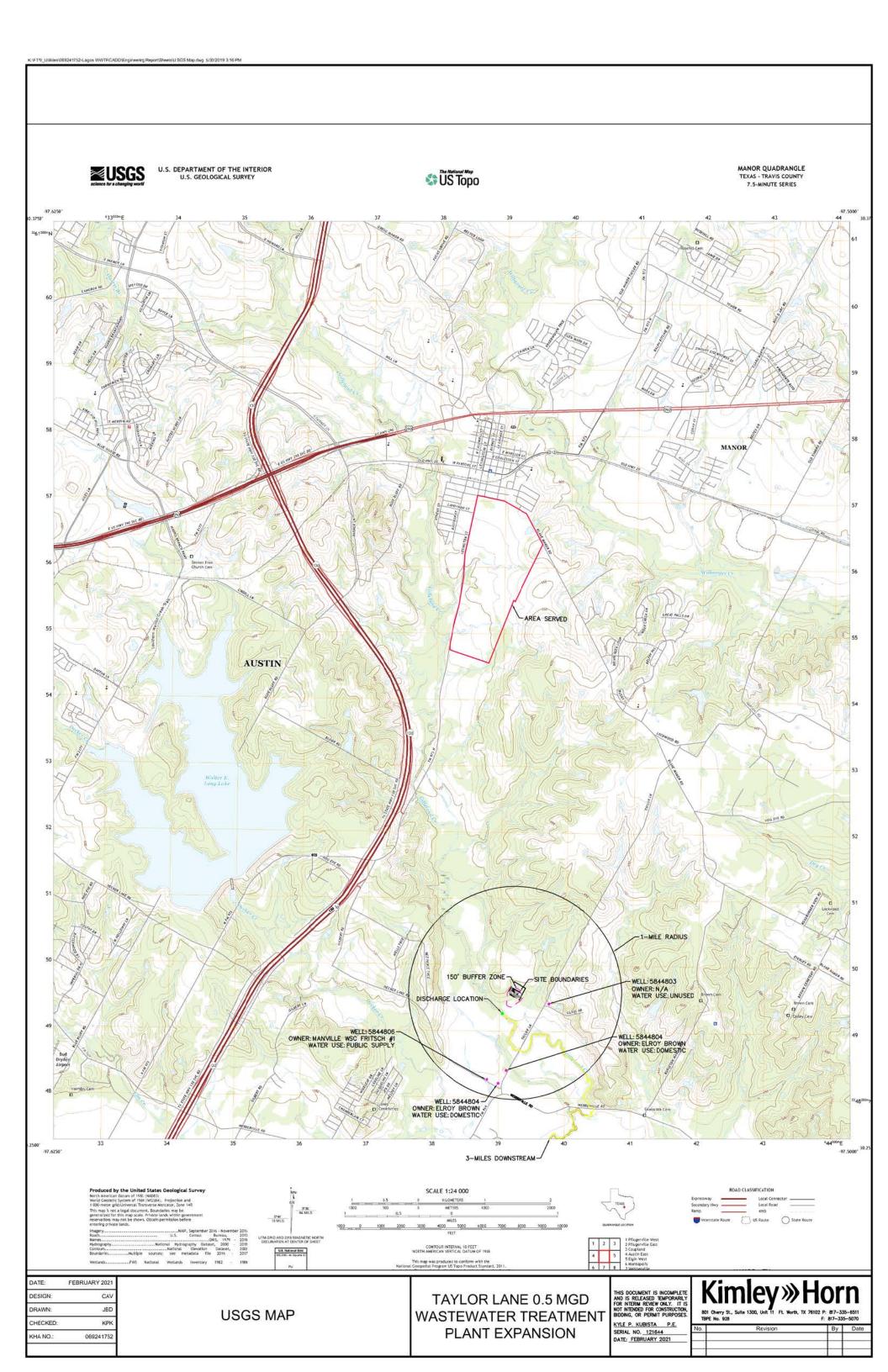
Volatile Solids Loading in Digester, lbs VSS/1,000 cf of tank/day	23
Volatile Solids Reduction in Digester, %	30%
Solids Wasted from Digester, lbs/day	410
Mass Solids Yield in Process & Digester per Mass Influent BOD <sub>5</sub> , %	54%
Volume Wasted from Digester, gallons/day	4,092
Digester Sludge Age, days	30
Air Required for Stabilization, scfm	141
Air Required for Mixing @ 30 cfm/1000 cf	355

### Appendix B

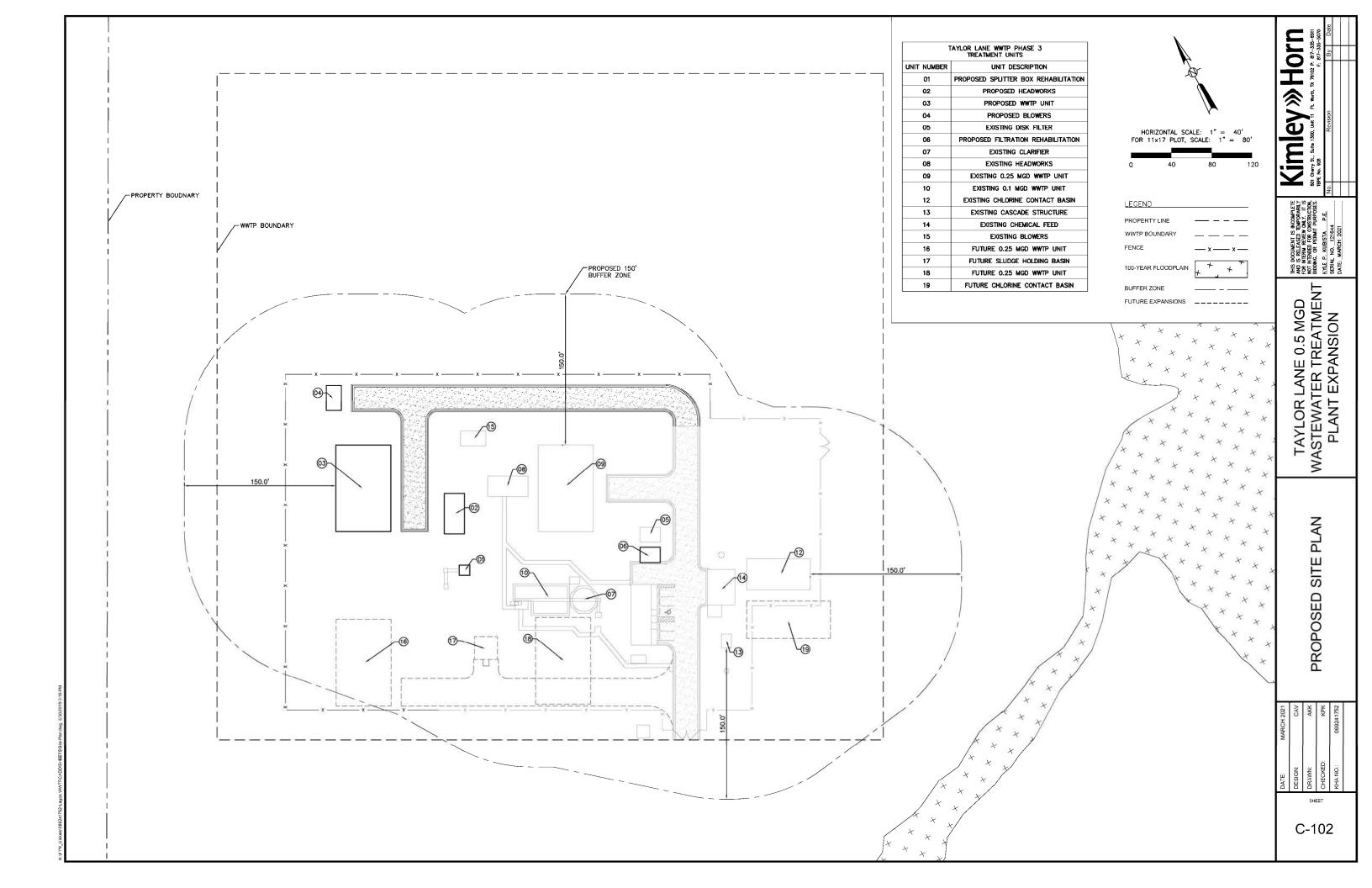
Facility Maps











### Appendix C

Existing Permit





TPDES PERMIT NO. WQ0010543014 [For TCEQ office use only - EPA I.D. No. TX0129950]

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

This is a renewal that replaces TPDES Permit No. WQ0010543014 issued on January 30, 2017.

### PERMIT TO DISCHARGE WASTES

under provisions of Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code

City of Austin

whose mailing address is

625 East 10th Street, Suite 800 Austin, Texas 78701

is authorized to treat and discharge wastes from the Taylor Lane Wastewater Treatment Plant, SIC Code 4952

located at 7535 Taylor Lane, in the City of Austin, Travis County, Texas 78653

to Gilleland Creek, thence to Colorado River Below Lady Bird Lake/Town Lake in Segment No. 1428 of the Colorado 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, five years from the date of issuance

ISSUED DATE: October 07, 2019

For the Commission

## INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

### Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 0.35 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.10 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 278 gallons per minute (gpm)

Discharge Limitations Min. Self-Monitoring Requirements	x Single Grab	mg/l (lbs/day) mg/l mg/l mg/l mg/l ms/l Measurement Sample Type	Report N/A Report N/A Continuous Totalizing Meter		5 (4.2) 10 20 30 One/week Grab	2 (1.7) 5 10 15 One/week Grab	1 (0.8) 2 4 6 One/week Grab	VIV VIV
				5 (4.2)	5 (4.2)	2 (1.7)	1 (0.8)	001
Effluent Characteristic			Flow, MGD	Carbonaceous Biochemical Oxygen Demand (5-day)	Total Suspended Solids	Ammonia Nitrogen	Total Phosphorus	F coli CEII or MPN ner 100 ml

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

## INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of completion of expansion to the 0.35 million gallons per day (MGD) facility and lasting through the completion of expansion to the 3.0 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations: The daily average flow of effluent shall not exceed 0.35 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 972 gallons per minute (gpm).

Effluent Characteristic		Discharge Limitations	mitations		Min. Self-Monitor	Min. Self-Monitoring Requirements
	Daily Avg	7-day Avg	7-day Avg Daily Max	Single Grab	Report Daily Avg. 8	Report Daily Avg. & Max. Single Grab
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (15)	10	20	30	One/week	Grab
Total Suspended Solids	5 (15)	10	20	30	One/week	Grab
Ammonia Nitrogen	2 (5.8)	2	10	15	One/week	Grab
Total Phosphorus	1 (2.9)	2	4	9	One/week	Grab
E. coli, CFU or MPN per 100 ml	120	N/A	N/A	379	One/month	Grab

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

# FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the completion of expansion to the 3.0 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations: The annual average flow of effluent shall not exceed 3.0 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 6,250 gpm.

Effluent Characteristic		Discharge Limitations	mitations		Min. Self-Monitor	Min. Self-Monitoring Requirements
	Daily Avg	7-day Avg	7-day Avg Daily Max	Single Grab	Report Daily Av	Report Daily Avg. & Daily Max.
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	5 (125)	10	20	30	Two/week	Composite
Total Suspended Solids	5 (125)	10	20	30	Two/week	Composite
Ammonia Nitrogen	2 (50)	2	10	15	Two/week	Composite
Total Phosphorus	1 (25)	7	4	9	Two/week	Composite
$E.\ coli,$ CFU or MPN per 100 ml	120	N/A	379	N/A	One/week	Grab

- shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be The effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and substituted only with prior approval of the Executive Director.
- 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.
- 4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
  - 5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
- 6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored twice per week by grab sample.
- 7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

### **DEFINITIONS AND STANDARD PERMIT CONDITIONS**

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

### 1. Flow Measurements

- a. Annual average flow the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.
- b. Daily average flow the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) the highest 2-hour peak flow for any 24-hour period in a calendar month.

### 2. Concentration Measurements

- a. Daily average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
  - i. For domestic wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

- ii. For all other wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.
  - The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.
- e. Bacteria concentration (*E. coli* or Enterococci) Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the 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 substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
- f. Daily average loading (lbs/day) the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
- g. Daily maximum loading (lbs/day) the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

### 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

### 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, effluent monitoring data shall be submitted each month, to the Compliance Monitoring Team of the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

### 2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

### 3. Records of Results

- 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 Compliance Monitoring Team of the Enforcement Division (MC 224).

### 7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
  - i. Unauthorized discharges as defined in Permit Condition 2(g).
  - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
  - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
- c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Compliance Monitoring Team of 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 Compliance Monitoring Team of the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, non-compliances 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 Compliance Monitoring Team of the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i. One hundred micrograms per liter (100  $\mu$ g/L);
  - ii. Two hundred micrograms per liter (200  $\mu$ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu$ g/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i. Five hundred micrograms per liter (500  $\mu$ g/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 POTWs must provide adequate notice to the Executive Director of the following:
  - a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;
  - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
  - c. For the purpose of this paragraph, adequate notice shall include information on:
    - i. The quality and quantity of effluent introduced into the POTW; and
    - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

### PERMIT CONDITIONS

### 1. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
  - i. Violation of any terms or conditions of this permit;
  - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

### 2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 7.075 (relating to Administrative Penalties), 7.101 7.111 (relating to Civil Penalties), and 7.141 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

### 3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

### 4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
  - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or
  - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or
  - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or

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

### 5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

### 6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

### 7. Relationship to Water Rights

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

### 8. Property Rights

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

### 9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

### 10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

### 11. Notice of Bankruptcy

- a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
  - i. the permittee;
  - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or

- iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.
- b. This notification must indicate:
  - i. the name of the permittee and the permit number(s);
  - ii. the bankruptcy court in which the petition for bankruptcy was filed; and
  - iv. the date of filing of the petition.

### **OPERATIONAL REQUIREMENTS**

- 1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
- 2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 319.29 concerning the discharge of certain hazardous metals.
- 3. Domestic wastewater treatment facilities shall comply with the following provisions:
  - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
  - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
- 4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
- 5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).

### 7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

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

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) 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.
- 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 221) 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 Registration 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 § 335 and must include the following, as it pertains to wastewater treatment and discharge:
  - i. Volume of waste and date(s) generated from treatment process;
  - ii. Volume of waste disposed of on-site or shipped off-site;
  - iii. Date(s) of disposal;
  - iv. Identity of hauler or transporter;
  - v. Location of disposal site; and
  - vi. Method of final disposal.

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

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

TCEQ Revision 08/2008

### **SLUDGE PROVISIONS**

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

### SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

### A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
- 2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
- 3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

### **B.** Testing Requirements

1. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 11) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30<sup>th</sup> of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

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

TABLE 1

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

<sup>\*</sup> Dry weight basis

### 3. Pathogen Control

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

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

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

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

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

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

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

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

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

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

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

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

### Alternative 1

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

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

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

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

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

- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and
- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1-3, the following site restrictions must be met if Class B sludge is land applied:

- Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.
- v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
- vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.

- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
- ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

### 4. Vector Attraction Reduction Requirements

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

- Alternative 1 The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- Alternative 2 If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.
- Alternative 3 If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.
- Alternative 4 The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.
- Alternative 5 Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.
- Alternative 6 The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- Alternative 7 The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

### Alternative 8 -

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

### Alternative 9 -

- i. Sewage sludge shall be injected below the surface of the land.
- ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
- iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

### Alternative 10-

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

### C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure - annually (TCLP) Test
PCBs - annually

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

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

(\*) The amount of bulk sewage sludge applied to the land (dry wt. basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC  $\S$  312.7

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and de-gritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a mono-fill) and whether the material is ultimately conveyed off-site in bulk or in bags.

### SECTION II.

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

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

### A. Pollutant Limits

### Table 2

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

### Table 3

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

### **B.** Pathogen Control

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

### C. Management Practices

- Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
- 2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.
- 3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.
- 4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:
  - a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
  - b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.
  - c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

### **D. Notification Requirements**

- 1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:
  - a. The location, by street address, and specific latitude and longitude, of each land application site.
  - b. The approximate time period bulk sewage sludge will be applied to the site.
  - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.
- 2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

### E. Record keeping Requirements

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

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

- 1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
- 2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B sludge, if applicable).
- 3. A description of how the vector attraction reduction requirements are met.
- 4. A description of how the management practices listed above in Section II.C are being met.
- 5. The following certification statement:
  - "I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."
- 6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:
  - a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
  - b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
  - c. The number of acres in each site on which bulk sludge is applied.
  - d. The date and time sludge is applied to each site.

- e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
- f. The total amount of sludge applied to each site in dry tons.

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

### F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30<sup>th</sup> of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

- 1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and de-gritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a mono-fill) and whether the material is ultimately conveyed off-site in bulk or in bags.
- 3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
- 4. The frequency of monitoring listed in Section I.C. that applies to the permittee.
- Toxicity Characteristic Leaching Procedure (TCLP) results.
- 6. PCB concentration in sludge in mg/kg.
- 7. Identity of hauler(s) and TCEQ transporter number.
- 8. Date(s) of transport.
- 9. Texas Commission on Environmental Quality registration number, if applicable.
- 10. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
- 11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
- 12. Level of pathogen reduction achieved (Class A, Class AB or Class B).
- 13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.

- 14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.
- 15. Vector attraction reduction alternative used as listed in Section I.B.4.
- 16. Amount of sludge transported in dry tons/year.
- 17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.
- 18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
  - a. The location, by street address, and specific latitude and longitude.
  - b. The number of acres in each site on which bulk sewage sludge is applied.
  - c. The date and time bulk sewage sludge is applied to each site.
  - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.
  - e. The amount of sewage sludge (i.e., dry tons) applied to each site.

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

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

- A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.
- D. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

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

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

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

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

- The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
- 2. The description (including procedures followed and results) of all TCLP tests performed.

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

## G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30<sup>th</sup> of each year the following information. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

- 1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and de-gritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- 2. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 3. Annual sludge production in dry tons/year.
- 4. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.
- 5. Amount of sludge transported interstate in dry tons/year.
- 6. A certification that the sewage sludge meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- 7. Identity of hauler(s) and transporter registration number.
- 8. Owner of disposal site(s).
- Location of disposal site(s).
- 10. Date(s) of disposal.

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

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

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

## A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
- 2. Sludge may only be transported using a registered transporter or using an approved pipeline.

## **B.** Record Keeping Requirements

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

## C. Reporting Requirements

The permittee shall report the following information annually to the TCEQ Regional Office (MC Region 11) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30<sup>th</sup> of each year. Effective September 1, 2020, the permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

- 1. Identify in the following categories (as applicable) the sewage sludge treatment process or processes at the facility: preliminary operations (e.g., sludge grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.
- the annual sludge production;
- 3. the amount of sludge transported;
- the owner of each receiving facility;
- 5. the location of each receiving facility; and
- 6. the date(s) of disposal at each receiving facility.

TCEQ Revision 01/2016

## OTHER REQUIREMENTS

- The permittee shall employ or contract with one or more licensed wastewater treatment
  facility operators or wastewater system operations companies holding a valid license or
  registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and
  Registrations, and, in particular, 30 TAC Chapter 30, Subchapter J, Wastewater Operators
  and Operations Companies.
  - This Category C in the Interim I and II phases and B in the Final phase facility must be operated by a chief operator or an operator holding a Category C license or higher in the Interim I and II phases and B in the Final phase. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.
- 2. The facility is not located in the Coastal Management Program boundary.
- 3. Chronic toxic criteria apply at the edge of the mixing zone. The mixing zone is defined as 300 feet downstream and 100 feet upstream from the point of discharge.
- The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
- 5. The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).
- 6. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, one/month may be reduced to one/quarter in the Interim I phase and in the Interim II phase, and one/week may be reduced to two/month in the Final phase. A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148). The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.
- 7. Prior to construction of each phase of the treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in

accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the effluent limitations required on Pages 2, 2a, and 2b of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

- 8. Within 120 days from when the facility ends the start-up mode and commences discharging, the permittee shall complete Attachment A with the analytical results for Outfall 001. The completed tables with the results of these analysis and laboratory reports shall be submitted to the Municipal Permits Team, Wastewater Permitting Section MC 148, TCEQ Water Quality Division. Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations and/or monitoring requirements. Test methods utilized to complete the tables shall be according to the test procedures specified in the Definitions and Standard Permit Conditions section of this permit and sensitive enough to detect the parameters listed in Attachment A at the minimum analytical level (MAL).
- 9. Monitoring and reporting requirements according to 30 TAC §§ 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until the facility ends the start-up mode and commences discharging from the facility described by this permit, whichever occurs first. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 11) 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, and prior to completion of each additional phase on Notification of Completion Form 20007.

## CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

- 1. The following pollutants may not be introduced into the treatment facility:
  - a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed-cup flash point of less than 140° Fahrenheit (60° Celsius) using the test methods specified in 40 CFR § 261.21;
  - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with a pH lower than 5.0 standard units, unless the works are specifically designed to accommodate such discharges;
  - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;
  - d. Any pollutant, including oxygen-demanding pollutants (e.g., biochemical oxygen demand), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
  - e. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104° Fahrenheit (40° Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;
  - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
  - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
  - h. Any trucked or hauled pollutants except at discharge points designated by the POTW.
- 2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403 [rev. Federal Register/ Vol. 70/No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].
- 3. The permittee shall provide adequate notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of either of the following:
  - Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and
  - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Any notice shall include information on the quality and quantity of effluent to be introduced into the treatment works and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Revised July 2007

### BIOMONITORING REQUIREMENTS

#### CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

- 1. Scope, Frequency, and Methodology
  - a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organisms.
  - b. Within 90 days of initial discharge of the 3.0 MGD facility, the permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this part of this permit and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," fourth edition (EPA-821-R-02-013) or its most recent update:
    - 1) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*) (Method 1002.0). This test should be terminated when 60% of the surviving adults in the control produce three broods or at the end of eight days, whichever occurs first. This test shall be conducted once per quarter.
    - 2) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*) (Method 1000.0). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 15%, 20%, 27%, 36%, and 48% effluent. The critical dilution, defined as 36% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.
- d. This permit may be amended to require a WET limit, a chemical-specific effluent limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.
- e. Testing Frequency Reduction
  - 1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information in writing

- and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.
- 2) If one or more of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee shall continue quarterly testing for that species until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the permittee shall resume a quarterly testing frequency for that species until this permit is reissued.

## 2. Required Toxicity Testing Conditions

- a. Test Acceptance The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fail to meet the following criteria:
  - a control mean survival of 80% or greater;
  - a control mean number of water flea neonates per surviving adult of 15 or greater;
  - a control mean dry weight of surviving fathead minnow larvae of 0.25 mg or greater;
  - a control coefficient of variation percent (CV%) of 40 or less in between replicates for the young of surviving females in the water flea test; and the growth and survival endpoints in the fathead minnow test;
  - a critical dilution CV% of 40 or less for the young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow test. However, if statistically significant lethal or nonlethal effects are exhibited at the critical dilution, a CV% greater than 40 shall not invalidate the test;
  - 6) a percent minimum significant difference of 47 or less for water flea reproduction; and
  - 7) a percent minimum significant difference of 30 or less for fathead minnow growth.

#### b. Statistical Interpretation

- 1) For the water flea survival test, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be the Fisher's exact test as described in the manual referenced in Part 1.b.
- 2) For the water flea reproduction test and the fathead minnow larval survival and growth tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with the manual referenced in Part 1.b.

- The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.
- 4) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the survival in the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 80% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.
- 5) The NOEC is defined as the greatest effluent dilution at which no significant effect is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which a significant effect is demonstrated. A significant effect is defined as a statistically significant difference between the survival, reproduction, or growth of the test organism in a specified effluent dilution when compared to the survival, reproduction, or growth of the test organism in the control.
- The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 3.
- 7) Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The guidance manual referenced in Item 3 will be used when making a determination of test acceptability.
- 8) TCEQ staff will review test results for consistency with rules, procedures, and permit requirements.

#### c. Dilution Water

- Dilution water used in the toxicity tests must be the receiving water collected at a point upstream of the discharge point as close as possible to the discharge point but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall:
  - a) substitute a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial water unaffected by the discharge; or

- b) use the closest downstream perennial water unaffected by the discharge.
- Where the receiving water proves unsatisfactory as a result of pre-existing instream toxicity (i.e. fails to fulfill the test acceptance criteria of Part 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
  - a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of Part 2.a;
  - b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days); and
  - c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.
- 3) The synthetic dilution water shall consist of standard, moderately hard, reconstituted water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

## d. Samples and Composites

- 1) The permittee shall collect a minimum of three composite samples from Outfall 001. The second and third composite samples will be used for the renewal of the dilution concentrations for each toxicity test.
- 2) The permittee shall collect the composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.
- The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first composite sample. The holding time for any subsequent composite sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
- 4) If Outfall 001 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

5) The effluent samples shall not be dechlorinated after sample collection.

## 3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.
  - 1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.
  - Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.
  - Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.
  - Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.
- c. Enter the following codes for the appropriate parameters for valid tests only:
  - 1) For the water flea, Parameter TLP3B, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For the water flea, Parameter TOP3B, report the NOEC for survival.
  - 3) For the water flea, Parameter TXP3B, report the LOEC for survival.
  - 4) For the water flea, Parameter TWP3B, enter a "1" if the NOEC for reproduction is less than the critical dilution; otherwise, enter a "o."
  - 5) For the water flea, Parameter TPP3B, report the NOEC for reproduction.
  - 6) For the water flea, Parameter TYP3B, report the LOEC for reproduction.
  - 7) For the fathead minnow, Parameter TLP6C, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 8) For the fathead minnow, Parameter TOP6C, report the NOEC for survival.
  - For the fathead minnow, Parameter TXP6C, report the LOEC for survival.

- For the fathead minnow, Parameter TWP6C, enter a "1" if the NOEC for growth is less than the critical dilution; otherwise, enter a "0."
- 11) For the fathead minnow, Parameter TPP6C, report the NOEC for growth.
- 12) For the fathead minnow, Parameter TYP6C, report the LOEC for growth.
- d. Enter the following codes for retests only:
  - 1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

## 4. <u>Persistent Toxicity</u>

The requirements of this Part apply only when a test demonstrates a significant effect at the critical dilution. Significant lethality and significant effect were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth/reproduction at the critical dilution when compared to the growth/reproduction in the control.

- a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.
- b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE action plan and schedule defined in Part 5.

If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.

- c. If the two retests are performed due to a demonstration of significant sublethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 4.a.
- d. If the two retests are performed due to a demonstration of significant sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.
- e. Regardless of whether retesting for lethal or sublethal effects, or a combination of the two, no more than one retest per month is required for a species.

## 5. <u>Toxicity Reduction Evaluation</u>

- a. Within 45 days of the retest that demonstrates significant lethality, or within 45 days of being so instructed due to multiple toxic events, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, or within 90 days of being so instructed due to multiple toxic events, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:
  - 1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA/600/6-91/005F) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;
  - Sampling Plan The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;
  - Quality Assurance Plan The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in

- the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and
- 4) Project Organization The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.
- d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
  - 1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;
  - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
  - any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;
  - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
  - 5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and
  - 6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.
- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved

housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

- g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism.
- h. Based on the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.
- i. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

Date

Time

## TABLE 1 (SHEET 1 OF 4) BIOMONITORING REPORTING

Date

#### CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

Time

Dates and Times	No. 1	FROM:		TO: _				
Composites Collected	No. 2	FROM:	: TO:					
	No. 3	FROM:	Alexandria.	TO: _				
Test initiated: _			am/ <u>]</u>	om		date		
Dilution	water used	·	Receiving wate	er	Synthetic D	ilution water		
	NUMBER	OF YOUNG	PRODUCED F	PER ADULT A	T END OF TE	EST		
			Percent	effluent				
REP	0%	15%	20%	27%	36%	48%		
A						,		
В								
C				¥.				
D								
E								
F								
G				rig	1			
Н				= 0.00				
I								
J				۸				
Survival Mean								
Total Mean		9						
CV%*				299				

**PMSD** 

<sup>\*</sup>Coefficient of Variation = standard deviation x 100/mean (calculation based on young of the surviving adults)

Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

## TABLE 1 (SHEET 2 OF 4)

## CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

1. Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:

Is the mean number of young produced per adult significantly less than the number of young per adult in the control for the % effluent corresponding to significant nonlethal effects?

CRITICAL DILUTION	(36%):	YES	NO

#### PERCENT SURVIVAL

_			Percent	effluent		
Time of Reading	0%	15%	20%	27%	36%	48%
24h			*			
48h						
End of Test						

2. Fisher's Exact Test:

Is the mean survival at test end significantly less than the control survival for the % effluent corresponding to lethality?

CRITICAL DILUTION	(36%):	YES	NO

- 3. Enter percent effluent corresponding to each NOEC\LOEC below:
  - a.) NOEC survival = \_\_\_\_ % effluent
  - b.) LOEC survival = \_\_\_\_\_\_ % effluent
  - c.) NOEC reproduction = \_\_\_\_\_\_% effluent
  - d.) LOEC reproduction = \_\_\_\_\_\_% effluent

## TABLE 1 (SHEET 3 OF 4)

## BIOMONITORING REPORTING

## FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

No. 1 FRO					Гіте
No. 2 FR	OM:		_ TO:		
		am/pm _			date
r used:	Receiv	ing water _		_ Synthetic	dilution water
1	FATHEAD MI	NOW GROW	TH DATA	A	
Averag	ge Dry Weight	in replicate ch	ambers	Mean Dry	CV%*
A	В	C D	Ė	Weight	
		1			
				-	
		,			
cedure or S justment) o ry weight (g he % effluer	teel's Many-Or or t-test (with B growth) at 7 day nt correspondir	e Rank Test o onferroni adju s significantly g to significar	ustment) : v less than nt nonleth	as appropr the contro al effects?	iate: ol's dry weight
	No. 2 FRONO. 3 FRONO.	No. 1 FROM:	No. 1 FROM:  No. 2 FROM:  No. 3 FROM:	No. 1 FROM:	No. 1 FROM:

## TABLE 1 (SHEET 4 OF 4)

## BIOMONITORING REPORTING

## FATHEAD MINNOW GROWTH AND SURVIVAL TEST

## FATHEAD MINNOW SURVIVAL DATA

Effluent Concentration	Percent Survival in replicate chambers				Mean percent survival			CX70/*	
	A	В	С	D	E	24h	48h	7 day	CV%*
0%									
15%	,								
20%		,							
27%									
36%									
48%									

<sup>\*</sup> Coef

ficient	of Variation = standard deviation x 100/mean					
2.	Dunnett's Procedure or Steel's Many-One Rank Test or Wilcoxon Rank Sum Test (with Bonferroni adjustment) or t-test (with Bonferroni adjustment) as appropriate:					
	Is the mean survival at 7 days significantly less than the control survival for the % effluent corresponding to lethality?					
	CRITICAL DILUTION (36%): YES NO					
3.	Enter percent effluent corresponding to each NOEC\LOEC below:					
	a.) NOEC survival =% effluent					
	b.) LOEC survival =% effluent					
	c.) NOEC growth =% effluent					
	d.) LOEC growth =% effluent					

#### 24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 001 for whole effluent toxicity (WET) testing.

## 1. Scope, Frequency, and Methodology

- a. The permittee shall test the effluent for lethality in accordance with the provisions in this section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.
- b. Within 90 days of initial discharge of the 3.0 MGD facility, the toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:
  - 1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.
  - 2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

A valid test result must be submitted for each reporting period. The permittee must report, and then repeat, an invalid test during the same reporting period. The repeat test shall include the control and the 100% effluent dilution and use the appropriate number of organisms and replicates, as specified above. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.
- d. This permit may be amended to require a WET limit, a best management practice, a chemical-specific limit, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

## 2. <u>Required Toxicity Testing Conditions</u>

- a. Test Acceptance The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Dilution Water In accordance with Part 1.c., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

## c. Samples and Composites

- 1) The permittee shall collect one composite sample from Outfall 001.
- 2) The permittee shall collect the composite sample such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The sample shall be maintained at a temperature of o-6 degrees Centigrade during collection, shipping, and storage.
- 4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.
- 5) The effluent sample shall not be dechlorinated after sample collection.

## 3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

- a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.
- b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.
  - Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.
  - 2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, and October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.
- c. Enter the following codes for the appropriate parameters for valid tests only:
  - 1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
  - 2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

- d. Enter the following codes for retests only:
  - 1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
  - 2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

## 4. Persistent Mortality

The requirements of this part apply when a toxicity test demonstrates significant lethality, which is defined as a mean mortality of 50% or greater of organisms exposed to the 100% effluent concentration for 24 hours.

- a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour.
- b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.

## 5. Toxicity Reduction Evaluation

- a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:
  - 1) Specific Activities The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document

entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

- Sampling Plan The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;
- Quality Assurance Plan The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and
- 4) Project Organization The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.
- d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
  - 1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;
  - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
  - any data and substantiating documentation that identifies the pollutant and source of effluent toxicity;
  - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

- 5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and
- any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.
- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

- g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in Part 5.h. The report shall also specify a corrective action schedule for implementing the selected control mechanism.
- h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must

prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. Following the exemption, this permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

- i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.
- j. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

## TABLE 2 (SHEET 1 OF 2)

## WATER FLEA SURVIVAL

## **GENERAL INFORMATION**

	Time	Date
Composite Sample Collected		
Test Initiated		

## PERCENT SURVIVAL

Time R	Pop		t effluent				
	Rep	0%	6%	13%	25%	50%	100%
24h	A						
	В	8					
	C						
	D						
	E						
	MEAN		1201 1001				

Enter percent effluent corresponding to the LC50 b	elow:
--	-------

24 hour LC50 = \_\_\_\_\_% effluent

## TABLE 2 (SHEET 2 OF 2)

## FATHEAD MINNOW SURVIVAL

## GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

## PERCENT SURVIVAL

Time	Pop			Percent effluent			
	Rep	0%	6%	13%	25%	50%	100%
24h	A						
	В						
	С						
	D						
	E						
	MEAN						

Enter	percent	effluent	correspond	ling to	the LC50	below:
-------	---------	----------	------------	---------	----------	--------

24 hour LC50 = \_\_\_\_\_% effluent

# ATTACHMENT A DOMESTIC WORKSHEET 4.0 POLLUTANT ANALYSES REQUIREMENTS\*

## Section 1. Toxic Pollutants

For pollutants identified in	Table 4.0(1), indicate type of sample.
Grab □	Composite □

Date and time sample(s) collected:

Table 4.0(1) - Toxics Analysis

Pollutant	Able 4.0(1) – Toxics  AVG  Effluent  Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Acrylonitrile				50
Aldrin				0.01
Aluminum				2.5
Anthracene				10
Antimony				5
Arsenic				0.5
Barium				3
Benzene				10
Benzidine				50
Benzo(a)anthracene				5
Benzo(a)pyrene				5
Bis(2-chloroethyl)ether				10
Bis(2-ethylhexyl)phthalate				10
Bromodichloromethane				10
Bromoform				10
Cadmium				1
Carbon Tetrachloride				2
Carbaryl				5
Chlordane*				0.2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroform				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Chlorpyrifos	(F8/2)	σολίοι (μ8/1)		0.05
Chromium (Total)				3
Chromium (Tri) (*1)				N/A
Chromium (Hex)				3
Copper				2
Chrysene				5
p-Chloro-m-Cresol		3		10
4,6-Dinitro-o-Cresol		4		50
p-Cresol				10
Cyanide (*2)				10
4,4'- DDD				0.1
4,4'- DDE				0.1
4,4'- DDT				0.02
2,4-D				0.7
Demeton (O and S)				0.20
Diazinon				0.5/0.1
1,2-Dibromoethane				10
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
1,3-Dichloropropene		2		10
Dicofol				1
Dieldrin				0.02
2,4-Dimethylphenol				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Di-n-Butyl Phthalate	(   8/ 2)	σολον (μ8/1)		10
Diuron				0.09
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Ethylbenzene		γ.		10
Fluoride			<	500
Guthion				0.1
Heptachlor			6	0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene		×		5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane			,	0.05
(Lindane)			•	
Hexachlorocyclopentadiene			P	10
Hexachloroethane				20
Hexachlorophene				10
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Mirex				0.02
Nickel			,	2
Nitrate-Nitrogen				100
Nitrobenzene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
N-Nitrosodiethylamine	10/2	(18)		20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333
Parathion (ethyl)	li li			0.1
Pentachlorobenzene		a a		20
Pentachlorophenol				5
Phenanthrene				10
Polychlorinated Biphenyls (PCB's) (*3)				0.2
Pyridine				20
Selenium				5
Silver				0.5
1,2,4,5-Tetrachlorobenzene				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Thallium				0.5
Toluene				10
Toxaphene	П			0.3
2,4,5-TP (Silvex)				0.3
Tributyltin (see instructions for explanation)			9	0.01
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane			-	10
Trichloroethylene				10
2,4,5-Trichlorophenol				50
TTHM (Total Trihalomethanes)				10
Vinyl Chloride				10
Zinc				5

<sup>(\*1)</sup> Determined by subtracting hexavalent Cr from total Cr. (\*2) Cyanide, amenable to chlorination or weak-acid dissociable. (\*3) The sum of seven PCB congeners 1242, 1254, 1221, 1232, 1248, 1260, and 1016.

## Section 2. Priority Pollutants

For poll	lutants	identified i	n Ta	ables 4.0(2)A-E,	indicate type of sample
		Grab □		Composite □	a =2, · · · · · · · · · · · · · · · · · · ·

Date and time sample(s) collected:

## Table 4.0(2)A - Metals, Cyanide, Phenols

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Antimony			4	5
Arsenic				0.5
Beryllium				0.5
Cadmium				1
Chromium (Total)				3
Chromium (Hex)				3
Chromium (Tri) (*1)		12		N/A
Copper				2
Lead			2"	0.5
Mercury				0.005
Nickel				2
Selenium				5
Silver				0.5
Thallium				0.5
Zinc				5
Cyanide (*2)				10
Phenols, Total				10

<sup>(\*1)</sup> Determined by subtracting hexavalent Cr from total Cr.

<sup>(\*2)</sup> Cyanide, amenable to chlorination or weak-acid dissociable

## Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Acrolein				50
Acrylonitrile	*			50
Benzene				10
Bromoform			¥	10
Carbon Tetrachloride				2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroethane				50
2-Chloroethylvinyl Ether				10
Chloroform				10
Dichlorobromomethane				10
1,1-Dichloroethane				10
1,2-Dichloroethane		P.		10
1,1-Dichloroethylene				10
1,2-Dichloropropane				10
1,3-Dichloropropylene [1,3-Dichloropropene]				10
1,2-Trans-Dichloroethylene	•			10
Ethylbenzene	_			10
Methyl Bromide				50
Methyl Chloride				50
Methylene Chloride				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10
Toluene				10
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene			h l	10
Vinyl Chloride				10

## Table 4.0(2)C - Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
2-Chlorophenol				10
2,4-Dichlorophenol				
2,4-Dimethylphenol				10
4,6-Dinitro-o-Cresol				10
2,4-Dinitrophenol				50
2-Nitrophenol				50
4-Nitrophenol				20
P-Chloro-m-Cresol				50
Pentalchlorophenol				10
Phenol				5
2,4,6-Trichlorophenol				10
				10

## Table 4.0(2)D – Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Acenaphthene				10
Acenaphthylene				10
Anthracene				10
Benzidine				50
Benzo(a)Anthracene				5
Benzo(a)Pyrene				5
3,4-Benzofluoranthene				10
Benzo(ghi)Perylene				20
Benzo(k)Fluoranthene	*			5
Bis(2-Chloroethoxy)Methane				10
Bis(2-Chloroethyl)Ether				10
Bis(2-Chloroisopropyl)Ether				10
Bis(2-Ethylhexyl)Phthalate			,	10
4-Bromophenyl Phenyl Ether				10
Butyl benzyl Phthalate				10
2-Chloronaphthalene				10
4-Chlorophenyl phenyl ether				10
Chrysene				5
Dibenzo(a,h)Anthracene	i.			<u>5</u>
1,2-(o)Dichlorobenzene				10
1,3-(m)Dichlorobenzene				10
1,4-(p)Dichlorobenzene				10
3,3-Dichlorobenzidine				5
Diethyl Phthalate				10
Dimethyl Phthalate				10
Di-n-Butyl Phthalate				10
2,4-Dinitrotoluene				10
2,6-Dinitrotoluene				10
Di-n-Octyl Phthalate				10
1,2-Diphenylhydrazine (as Azobenzene)				20
Fluoranthene				10
Fluorene				10
Hexachlorobenzene				5
Hexachlorobutadiene			10	
Hexachlorocyclo-pentadiene			10	
Hexachloroethane			20	
Indeno(1,2,3-cd)pyrene				5
Isophorone				10

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Naphthalene				10
Nitrobenzene				10
N-Nitrosodimethylamine				50
N-Nitrosodi-n-Propylamine				20
N-Nitrosodiphenylamine				20
Phenanthrene		"		10
Pyrene				10
1,2,4-Trichlorobenzene	_			10

## Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Aldrin				0.01
alpha-BHC (Hexachlorocyclohexane)				0.05
beta-BHC (Hexachlorocyclohexane)		T.		0.05
gamma-BHC (Hexachlorocyclohexane)				0.05
delta-BHC (Hexachlorocyclohexane)		(*	٠	0.05
Chlordane				0.2
4,4-DDT				0.02
4,4-DDE				0.1
4,4,-DDD		9		0.1
Dieldrin				0.02
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate		i i		0.1
Endrin				0.02
Endrin Aldehyde				0.1
Heptachlor			-	0.01
Heptachlor Epoxide				0.01
PCB-1242				0.2
PCB-1254			15	0.2
PCB-1221				0.2
PCB-1232			1	0.2
PCB-1248				0.2
PCB-1260				0.2
PCB-1016				0.2
Toxaphene				0.3

## Section 3. Dioxin/Furan Compounds

		part of the collection system for the facility that you have reason to believe are present in the at to the WWTP?
	If <b>yes</b> ,	Yes $\square$ No $\square$ identify which compound(s) are potentially sent to the facility.
		2,4,5-trichlorophenoxy acetic acid Common Name 2,4,5-T, CASRN 93-76-5
		2-(2,4,5-trichlorophenoxy) propanoic acid Common Name Silvex or 2,4,5-TP, CASRN 93-72-1
		2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate Common Name Erbon, CASRN 136-25-4
		o,o-dimethyl o-(2,4,5-trichlorophenyl) phosphorothioate Common Name Ronnel, CASRN 299-84-3
		2,4,5-trichlorophenol Common Name TCP, CASRN 95-95-4
		hexachlorophene Common Name HCP, CASRN 70-30-4
	For each	ch compound identified, provide a brief description of the conditions of its/their presence at the z.
		×
В.		know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or any ners of TCDD may be present in your effluent?
	Yes	s □ No □
	If yes,	provide a brief description of the conditions for its presence.
	(25)	
	If you	responded <b>yes</b> to either Subsection A <b>or</b> B, complete Table 4.0(2)F.
	For po	llutants identified in Table 4.0(2)F, indicate type of sample.
		Grab $\square$ Composite $\square$
	Date an	nd time sample(s) collected:

A. Are any of the following compounds used by a contributing industrial user or significant industrial user

## TABLE 4.0(2)F - DIOXIN/FURAN COMPOUNDS

Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalent s (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1		5 ii			50
2,3,4,7,8 HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5
PCB 126	0.1	2				0.5
PCB 169	0.03				*	0.5
Total						

## Appendix D

Windrose







**Privacy Policy** 

 $\equiv$ 

Data Selector

See Data Values

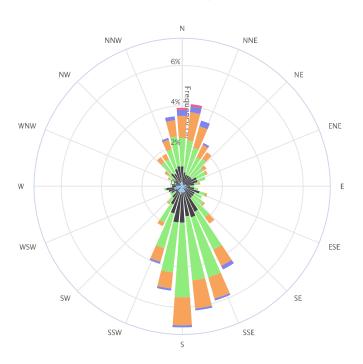
Data CSV Version

Product Description

Send Feedback

#### AUSTIN BERGSTROM AP (TX) Wind Rose

Jan. 1, 2020 - Feb. 10, 2021 Sub-Interval: Jan. 1 - Dec. 31, 0 - 23



Wind Speed (mph)

1.3 - 4

4 - 8

8 - 13

13 - 19

19 - 25

25 - 32 32 - 39 39 - 47

Click and drag to zoom

#### AUSTIN BERGSTROM AP (TX) - Wind Frequency Table (percentage)

9768

(Greater than or equal to initial interval value and Less than ending interval value.)

Range 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 2 (mph)  $0.2 \quad 0.2 \quad 0.1 \quad 0.1 \ 0.1 \ 0.1 \ 0.2 \ 0.2 \ 0.2 \ 0.1 \quad 0.2 \ 0.3 \quad 0.1 \quad 0.2 \ 0.3 \quad 0.4 \quad 0.3 \quad 0.3 \quad 0.4 \quad 0.3 \quad 0.4 \quad 0.4$ 1.3 - 44 - 8 0.8 0.5 0.5 0.5 0.5 0.5 0.6 0.6 0.4 0.3 0.4 0.6 0.6 0.5 0.6 1.1 1.3 1.2 1.5 1.4 1.1 0.7 0.4 0.3 0.3 0.3 0.4 0.2 8 - 13 1.0 1.1 0.7 0.5 0.4 0.2 0.2 0.2 0.3 0.4 0.6 1.2 2.1 3.1 3.2 3.7 2.5 1.8 1.0 0.3 0.3 0.1 0.0 0.1 0.0 1.4 1.6 1.4 13 - 19 1.1 1.4 1.1 0.7 0.4 0.2 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.4 0.9 1.1 1.4 1.4 0.8 0.7 0.2 0.1 0.0 0.0 0.0 0.0 0.0 19 - 25  $0.3 \quad 0.3 \quad 0.3 \quad 0.1 \quad 0.0 \quad 0.1 \quad 0.1 \quad 0.1 \quad 0.1 \quad 0.1 \quad 0.0 \quad 0.0$  $0.1 \quad 0.1 \quad 0.0 \quad 0.0$ 25 - 32 32 - 39  $0.0 \quad 0.0 \quad 0.0$ 0.0 0.0 39 - 47 47 - $0.0 \quad 0.0 \quad 0.0$ Total(%) 3.9 4.1 3.4 2.5 2.1 1.6 1.4 1.2 0.8 0.6 0.8 1.3 1.2 1.5 2.4 4.5 5.9 6.2 7.1 5.2 4.1 2.3 1.1 0.7 0.6 0.7 0.9 0.6 Calm (<1.3)

Ave Speed 11.9 12.5 11.8 11.2 9.6 8.7 7.5 7.0 7.0 6.6 6.5 6.5 7.0 8.3 9.5 10.1 10.0 10.3 10.2 9.5 9.6 8.4 7.3 6.5 5.6 4.6 4.9 Midwestern Regional Climate Center cli-MATE: MRCC Application Tools Environment Generated at: 2/10/2021 2:36:21 PM CST

Copyright © 2000-2021 Midwestern Regional Climate Center. All rights reserved

## City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014

Application for Domestic WWTP
TCEQ Form 10054
Technical Report



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

### DOMESTIC WASTEWATER PERMIT APPLICATION

### DOMESTIC TECHNICAL REPORT 1.0

The Following Is Required For All Applications
Renewal, New, And Amendment

## Section 1. Permitted or Proposed Flows (Instructions Page 51)

### A. Existing/Interim I Phase

Design Flow (MGD): 0.10 See Attachment 1

2-Hr Peak Flow (MGD): <u>0.40</u>

Estimated construction start date: <u>03/23/2016</u> Estimated waste disposal start date: <u>11/01/2018</u>

### **B.** Interim II Phase

Design Flow (MGD): <u>0.25</u>

2-Hr Peak Flow (MGD): <u>TBD</u>

Estimated construction start date: <u>09/21/2021</u> Estimated waste disposal start date: <u>04/03/2023</u>

#### C. Final Phase

Design Flow (MGD): <u>0.50</u>

2-Hr Peak Flow (MGD): <u>TBD</u>

Estimated construction start date: <u>TBD</u>
Estimated waste disposal start date: <u>TBD</u>

**D. Current operating phase:** 0.35 MGD Current Permitted Interim II

Provide the startup date of the facility: <u>04/03/2023</u>

## **Section 2. Treatment Process (Instructions Page 51)**

### A. Treatment process description

Provide a detailed description of the treatment process. Include the type of

**treatment plant, mode of operation, and all treatment units.** Start with the plant's head works and finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed in the permit, a description of** *each phase* **must be provided**. Process description:

Domestic wastewater is treated by an Aeromod activated sludge wastewater treatment plant. Plant processes for all phases include screening, grit removal, fine and coarse bubble aeration, biological or chemical phosphorus removal, clarification, denitrification, filtration, chlorine disinfection, and cascade aeration. Waste sludge is stored in a sludge holding tank and transported to Walnut Creek WWTP (TCEQ Permit No. WQ0010543011) then piped to Hornsby Bend Biosolids Management Plant, WQ0003823000, for further processing.

Port or pipe diameter at the discharge point, in inches: <u>24</u>

### **B.** Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) of each treatment unit, accounting for *all* phases of operation.

Treatment Unit Type Number of Units

See Attachment 2

Dimensions (L x W x D)

Table 1.0(1) - Treatment Units

### C. Process flow diagrams

Provide flow diagrams for the existing facilities and **each** proposed phase of construction.

Attachment: Attachment 3

## Section 3. Site Drawing (Instructions Page 52)

Provide a site drawing for the facility that shows the following:

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

Attachment: Attachment 4

Provide the name and a description of the area served by the treatment facility.

The service area is a 2,178-acre mixed use development located east of F.M. 973, west of Burleson-Manor Road, north of the Colorado River and south of Blake-Manor Road.

## Section 4. Unbuilt Phases (Instructions Page 52)

Is the application	for a renewal of a permit that contains an unbuilt phase or
phases?	
Yes 🖂	No □
* *	xisting permit contain a phase that has not been constructed of being authorized by the TCEQ? No $\Box$

**If yes**, provide a detailed discussion regarding the continued need for the unbuilt phase. Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases.

Executive Director recommending demai of the unbunt phase of phases.
See Attachment 5

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years? Yes $\square$ No $\boxtimes$
If yes, was a closure plan submitted to the TCEQ?
Yes □ No □
<b>If yes</b> , provide a brief description of the closure and the date of plan approval.
Section 6. Permit Specific Requirements (Instructions Page 53)
For applicants with an existing permit, check the <i>Other Requirements</i> or <i>Special Provisions</i> of the permit.
A. Summary transmittal
Have plans and specifications been approved for the existing facilities and each proposed phase? Yes $\boxtimes$ No $\square$
If yes, provide the date(s) of approval for each phase: Interim Phase I-
06/28/2016, Interim Phase II-08/02/2021
Provide information, including dates, on any actions taken to meet a requirement or provision pertaining to the submission of a summary transmittal letter. Provide a copy of an approval letter from the TCEQ, if applicable.
See Attachment 6
B. Buffer zones
Have the buffer zone requirements been met?  Yes ☑ No □
Provide information below including dates on any actions taken to meet the

conditions of the buffer zone. If available, provide any new documentation

relevant to maintaining the buffer zones.

Buffer zones shall be maintained by ownership of the land surrounding the treatment plant site.

### C. Other actions required by the current permit

Does the *Other Requirements* or *Special Provisions* section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.

Yes ⊠ No □

**If yes**, provide information below on the status of any actions taken to meet the conditions of an *Other Requirement* or *Special Provision*.

Other Requirements #9. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 11) 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, and prior to completion of each additional phase on Notification of Completion Form 20007.

### D. Grit and grease treatment

### 1. Acceptance of grit and grease waste

Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

Yes □ No ⊠

If No, stop here and continue with Subsection E. Stormwater Management.

### 2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

NI / A
$\frac{N/A}{}$
3. Grit disposal
Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal? Yes $\square$ No $\square$ N/A
<b>If No</b> , contact the TCEQ Municipal Solid Waste team at 512-239-0000. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.
Describe the method of grit disposal.
$\frac{N/A}{}$
4. Grease and decanted liquid disposal
Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-0000.
Describe how the decant and grease are treated and disposed of after grit separation.
N/A
E. Stormwater management
1. Applicability
Does the facility have a design flow of 1.0 MGD or greater in any phase?
Yes □ No ⊠
Does the facility have an approved pretreatment program, under 40 CFR Part
403?

Yes 🗵	No □
<b>If no to both</b> or Received.	of the above, then skip to Subsection F, Other Wastes
2. MSGP cov	verage
	nter runoff from the WWTP and dedicated lands for sewage ntly permitted under the TPDES Multi-Sector General Permit 0000?  No 🗵
Other Wastes I	provide MSGP Authorization Number and skip to Subsection F, Received: or TXRNE $\underline{\text{N/A}}$
If no, do you i	ntend to seek coverage under TXR050000?
Yes 🗆	No $\boxtimes$ (Not until we add a 1.0 MGD phase and the flow
reaches 1.0	MGD as required by the MSGP TXR50000)
Alternatively, opermitting bas	do you intend to apply for a conditional exclusion from led TXR050000 (Multi Sector General Permit) Part II B.2 or fulti Sector General Permit) Part V, Sector T 3(b)?
Yes □	No 🗵
_	explain below then proceed to Subsection F, Other Wastes
Received:	
N/A	
4. Existing c	overage in individual permit
Is your stormw TPDES or TLAI Yes □	vater discharge currently permitted through this individual permit?  No 🗵
, , ,	a description of stormwater runoff management practices at re authorized in the wastewater permit then skip to Subsection s Received.

<u>n/a</u>
5. Zero stormwater discharge
Do you intend to have no discharge of stormwater via use of evaporation or other means?
Yes □ No ⊠
If yes, explain below then skip to Subsection F. Other Wastes Received.
n/a

Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

## 6. Request for coverage in individual permit

Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?

Yes □ No ⊠

If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

<u>n/a</u>
Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.
F. Discharges to the Lake Houston Watershed
Does the facility discharge in the Lake Houston watershed? Yes $\square$ No $\boxtimes$
If yes, a Sewage Sludge Solids Management Plan is required. See Example 5 in the instructions.
G. Other wastes received including sludge from other WWTPs and septic waste
1. Acceptance of sludge from other WWTPs
Does the facility accept or will it accept sludge from other treatment plants at the facility site? Yes $\square$ No $\boxtimes$
If yes, attach sewage sludge solids management plan. See Example 5 of the instructions.
In addition, provide the date that the plant started accepting sludge or is anticipated to start accepting sludge, an estimate of monthly sludge
acceptance (gallons or millions of gallons), an estimate of the BOD <sub>5</sub>
concentration of the sludge, and the design BOD <sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.
n/a

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

2. Acceptan	ce of septic waste
Is the facility	accepting or will it accept septic waste?
Yes □	No 🗵
<b>If yes</b> , does th	ne facility have a Type V processing unit?
Yes □	No ⊠
<b>If yes</b> , does th	ne unit have a Municipal Solid Waste permit?
Yes □	No 🗵
accepting sep estimate of m an estimate o BOD <sub>5</sub> concent	of the above, provide a the date that the plant started tic waste, or is anticipated to start accepting septic waste, an onthly septic waste acceptance (gallons or millions of gallons), f the BOD₅ concentration of the septic waste, and the design ration of the influent from the collection system. Also note if on has or has not changed since the last permit action.
	that accept sludge from other wastewater treatment plants red to have influent flow and organic loading monitoring.
-	ce of other wastes (not including septic, grease, grit, CERCLA or as discharged by IUs listed in

Worksheet 6)
Is the facility accepting or will it accept wastes that are not domestic in nature excluding the categories listed above?

Yes □ No ⊠

If yes, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

<u>n/a</u>			

# Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 58)

Is the facility in operation?

Yes ☑ No ☐ See Attachment 7 for Laboratory Analysis

**If no**, this section is not applicable. Proceed to Section 8.

**If yes**, provide effluent analysis data for the listed pollutants. *Wastewater treatment facilities* complete Table 1.0(2). *Water treatment facilities* discharging filter backwash water, complete Table 1.0(3).

Note: The sample date must be within 1 year of application submission.

Table 1.0(2) - Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average	Max	No. of	Sample	Sample
ronutant	Conc.	Conc.	Samples	Туре	Date/Time
CBOD <sub>5</sub> , mg/l	2.21	3.7	38	Grab	04/03/2023-
					12/19/2023
Total Suspended Solids, mg/l	1.25	5.9	38	Grab	04/03/2023-
					12/19/2023
Ammonia Nitrogen, mg/l	0.58	4.54	38	Grab	04/03/2023-
					12/19/2023
Nitrate Nitrogen, mg/l	29.19	42.8	12	Grab	06/01/2023-
					11/20/2023
Total Kjeldahl Nitrogen, mg/l	1.80	5.22	12	Grab	06/01/2023-
					11/20/2023
Sulfate, mg/l	121	140	2	Grab	11/06/2023
					&
					11/20/2023
Chloride, mg/l	192.5	218	2	Grab	11/06/2023
					&
					11/20/2023

Pollutant	Average	Max	No. of	Sample	Sample	
Pollutalit	Conc.	Conc.	Samples	Type	Date/Time	
Total Phosphorus, mg/l	0.61	1.32	38	Grab	04/03/2023-	
					12/19/2023	
pH, standard units	7.5	8.3	38	Grab	03/01/2023-	
					12/27/2023	
Dissolved Oxygen*, mg/l	7.8	9.4	299	Grab	03/01/2023-	
					12/27/2023	
Chlorine Residual, mg/l	2.2	4.0	299	Grab	03/01/2023-	
					12/27/2023	
<i>E.coli</i> (CFU/100ml) freshwater	1.0	1.0	5	Grab	04/03/2023-	
					10/23/2023	
Entercocci (CFU/100ml)	N/A	N/A	N/A	N/A	N/A	
saltwater						
Total Dissolved Solids, mg/l	718	758	2	Grab	11/13/2023	
					&	
					11/20/2023	
Electrical Conductivity,	N/A	N/A	N/A	N/A	N/A	
μmohs/cm, †						
Oil & Grease, mg/l	N/A	N/A	N/A	N/A	N/A	
Alkalinity (CaCO <sub>3</sub> )*, mg/l	73.09	142	39	Grab	04/03/2023-	
					12/19/2023	

\*TPDES permits only

†TLAP permits only

Table 1.0(3) - Pollutant Analysis for Water Treatment Facilities

Pollutant	Average	Max	No. of	Sample	Sample
Pollulant	Conc.	Conc.	Samples	Type	Date/Time
Total Suspended Solids, mg/l	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	N/A	N/A	N/A	N/A	N/A

Pollutant	Average	Max	No. of	Sample	Sample
Ponutant	Conc.	Conc.	Samples	Type	Date/Time
Fluoride, mg/l	N/A	N/A	N/A	N/A	N/A
Aluminum, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity (CaCO <sub>3</sub> ), mg/l	N/A	N/A	N/A	N/A	N/A

## Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: City of Austin, Austin Water-Darrell Devooght

Facility Operator's License Classification and Level: <u>Category C Interim I & II,</u> <u>Category B in Final Phase- (Operated by: Darrell Devooght Class A WW License)</u>

Facility Operator's License Number: WW0062004 See Attachment 8 -Operator List

# Section 9. Sewage Sludge Management and Disposal (Instructions Page 60)

### A. Sludge disposal method

Identify the current or anticipated sludge disposal method or methods from the following list. Check all that apply.

	Permitted landfill
	Permitted or Registered land application site for beneficial use
	Land application for beneficial use authorized in the wastewater permit
	Permitted sludge processing facility
	Marketing and distribution as authorized in the wastewater permit
	Composting as authorized in the wastewater permit
	Permitted surface disposal site (sludge monofill)
	Surface disposal site (sludge monofill) authorized in the wastewater
	permit
$\square$	Transported to another permitted wastewater treatment plant or

treatment plant or permitted sludge processing facility accepting the sludge must be included with this application. Other: See Attachment 9 Sludge Statement B. Sludge disposal site Disposal site name: Walnut Creek WWTP TCEQ permit or registration number: <u>WQ0010543011</u> County where disposal site is located: Travis C. Sludge transportation method Method of transportation (truck, train, pipe, other): Trucked Name of the hauler: City of Austin See Attachment 10 Sludge Hauling Registration Hauler registration number: 22083 Sludge is transported as a: Liquid ⊠ semi-liquid □ semi-solid □ solid □ Permit Authorization for Sewage Sludge Disposal Section 10. (Instructions Page 60) A. Beneficial use authorization Does the existing permit include authorization for land application of sewage sludge for beneficial use? Yes □ No ⊠ If yes, are you requesting to continue this authorization to land apply sewage sludge for beneficial use? Yes □ No ⊠ If yes, is the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451) attached to this permit application (see the instructions for details)? Yes □ No ⊠ B. Sludge processing authorization

Does the existing permit include authorization for any of the following sludge

permitted sludge processing facility. If you selected this method, a written statement or contractual agreement from the wastewater

processing, storage or disposal options?

Slu	adge Composting	Yes □	No 🗵
Ma	arketing and Distribution of sludge	Yes □	No ⊠
Slı	adge Surface Disposal or Sludge Monofill	Yes □	No ⊠
Te	emporary storage in sludge lagoons	Yes □	No ⊠
contin <b>Applic</b> attach Ye	to any of the above sludge options and the acue this authorization, is the completed <b>Dom</b> cation: Sewage Sludge Technical Report (TO ed to this permit application? s \(\Boxed{\sigma}\) No \(\Boxed{\sigma}\) N/A	nestic Wast CEQ Form N	ewater Permit No. 10056)
	on 11. Sewage Sludge Lagoons (Ir		ıs Page 61)
Do	oes this facility include sewage sludge lagoor	ıs?	
Ye	s □ No ⊠		
If y	yes, complete the remainder of this section.	If no, proce	eed to Section 12.
<b>A.</b> 3	Location information		
each n	ollowing maps are required to be submitted a nap, provide the Attachment Number. Original General Highway (County) Map:	as part of tl	ne application. For
	Attachment: <u>N/A</u>		
•	USDA Natural Resources Conservation Servi	ce Soil Map	:
	Attachment: <u>N/A</u>		
•	Federal Emergency Management Map:		
	Attachment: <u>N/A</u>		
•	Site map:		
	Attachment: <u>N/A</u>		
Discus	ss in a description if any of the following exi	st within th	ie lagoon area.
Check	all that apply.		
	Overlap a designated 100-year frequency f	lood plain	
	Soils with flooding classification	<b>T</b>	
	Overlap an unstable area		
	Wetlands		
_	11 CHAINO		

	Located less than 60 meters from a fault
	None of the above
Attacl	hment: <u>N/A</u>
plain,	ortion of the lagoon(s) is located within the 100-year frequency flood provide the protective measures to be utilized including type and size of ctive structures:
В.	Temporary storage information
are in	le the results for the pollutant screening of sludge lagoons. These results addition to pollutant results in Section 7 of Technical Report 1.0. trate Nitrogen, mg/kg:
To	otal Kjeldahl Nitrogen, mg/kg:
To	otal Nitrogen (=nitrate nitrogen + TKN), mg/kg:
Ph	osphorus, mg/kg:
Po	tassium, mg/kg: Work here to enter text
рŀ	H, standard units:
Ar	nmonia Nitrogen mg/kg:
Ar	rsenic: Click here to enter text
Ca	admium: Click here to enter text.
Ch	nromium: Click here to enter text
Co	opper: Click here to enter text
Le	ad: Click here to enter text
Me	ercury: Click here to enter text
Mo	olybdenum:
Ni	ckel: Click here to enter text
Se	lenium: Click here to enter text
Zi	nc: Click here to enter text.
To	otal PCBs:

Provide the following information:  Volume and frequency of sludge to the lagoon(s):
Total dry tons stored in the lagoons(s) per 365-day period:
Total dry tons stored in the lagoons(s) over the life of the unit:
C. Liner information
Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec? Yes $\square$ No $\square$
If yes, describe the liner below. Please note that a liner is required.
D. Site development plan  Provide a detailed description of the methods used to deposit sludge in the lagoon(s):
Attach the following documents to the application.
<ul> <li>Plan view and cross-section of the sludge lagoon(s)</li> </ul>
Attachment:
• Copy of the closure plan
Attachment:
<ul> <li>Copy of deed recordation for the site</li> </ul>
Attachment: Wick have to enter text
<ul> <li>Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons</li> </ul>
Attachment:

<ul> <li>Description of the method of controlling infiltration of groundwater and surface water from entering the site</li> </ul>
Attachment: Thek here to enter text
<ul> <li>Procedures to prevent the occurrence of nuisance conditions</li> </ul>
Attachment:
E. Groundwater monitoring
Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?  Yes $\square$ No $\square$
If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.
Attachment: Click here to enter text
Section 12. Authorizations/Compliance/Enforcement (Instructions Page 63)
A. Additional authorizations
Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?  Yes  No
<b>If yes</b> , provide the TCEQ authorization number and description of the authorization:
n/a
B. Permittee enforcement status
Is the permittee currently under enforcement for this facility?  Yes □ No ☑
Is the permittee required to meet an implementation schedule for compliance or enforcement?  Yes □ No ☒

implementation schedule, and the current status:
$\underline{n/a}$
Section 13. RCRA/CERCLA Wastes (Instructions Page 63)
A. RCRA hazardous wastes
Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?  Yes □ No ⊠
B. Remediation activity wastewater
Has the facility received in the past three years, does it currently receive, or will it receive CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater?  Yes  No
C. Details about wastes received
If yes to either Subsection A or B above, provide detailed information concerning these wastes with the application.
Attachment: Click here to enter text

### Section 14. Laboratory Accreditation (Instructions Page 64)

All laboratory tests performed must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
  - o periodically inspected by the TCEQ; or
  - located in another state and is accredited or inspected by that state; or
  - o performing work for another company with a unit located in the same site; or
  - o performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review 30 TAC Chapter 25 for specific requirements.

The following certification statement shall be signed and submitted with every application. See the *Signature Page* section in the Instructions, for a list of designated representatives who may sign the certification.

#### **CERTIFICATION:**

I certify that all laboratory tests submitted with this application meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

Printed Name: Shay Ralls Roalson, P.E.

Title: Director, Austin Water

Signature:

Date:

### **DOMESTIC TECHNICAL REPORT 1.1**

The following is required for new and amendment applications

## Section 1. Justification for Permit (Instructions Page 66)

Α.	Justification	of	permit	need
----	---------------	----	--------	------

A. Justification of permit need
Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.
See Attachment 5
B. Regionalization of facilities
Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:
1. Municipally incorporated areas
If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.
Is any portion of the proposed service area located in an incorporated city?
Yes □ No □ Not Applicable □
If yes, within the city limits of:
If yes, attach correspondence from the city.
Attachment: Wick here to enter text
If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.
Attachment: Wick here to enter text

## 2. Utility CCN areas

Is any portion of the proposed service area located inside another utility's CCN area?  Yes □ No ☑	
<b>If yes</b> , attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.	
Attachment: <u>N/A</u>	
3. Nearby WWTPs or collection systems	
Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?  Yes  No	
<b>If yes</b> , attach a list of these facilities that includes the permittee's name and permit number, and an area map showing the location of these facilities.	
Attachment: <u>N/A</u>	
<b>If yes</b> , attach copies of your certified letters to these facilities <b>and</b> their response letters concerning connection with their system.	
Attachment: <u>N/A</u>	
Does a permitted domestic wastewater treatment facility or a collection system located within three (3) miles of the proposed facility currently have the capacity to accept or is willing to expand to accept the volume of wastewater proposed in this application?  Yes  No	
If yes, attach an analysis of expenditures required to connect to a permitted wastewater treatment facility or collection system located within 3 miles versus the cost of the proposed facility or expansion.	
Attachment: <u>N/A</u>	
ction 2. Organic Loading (Instructions Page 67)	
Is this facility in operation?	
Yes ⊠ No □	
If no, proceed to Item B, Proposed Organic Loading.	

**If yes**, provide organic loading information in Item A, Current Organic Loading

### A. Current organic loading

Facility Design Flow (flow being requested in application): <u>0.10 MGD</u>

Average Influent Organic Strength or BOD<sub>5</sub> Concentration in mg/l: <u>104.1</u>

Average Influent Loading (lbs/day = total average flow X average BOD<sub>5</sub> conc. X 8.34):  $0.049 \times 104.1 \times 8.34 = 42$  lbs/day

Provide the source of the average organic strength or BOD<sub>5</sub> concentration.

Samples collected and analyzed at Austin Water's Environmental Analytical Services-See Attachment 11

### B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)		
Municipality				
Subdivision				
Trailer park - transient				
Mobile home park				
School with cafeteria and showers				
School with cafeteria, no showers				
Recreational park,				

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)		
overnight use				
Recreational park, day				
use				
Office building or				
factory				
Motel				
Restaurant				
Hospital				
Nursing home				
Other				
TOTAL FLOW from all				
sources				
AVERAGE BOD₅ from all				
sources				

# Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 68)

## A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l:  $\underline{\text{CBOD=2.3}}$ 

Total Suspended Solids, mg/l:  $\underline{1.25}$ 

Ammonia Nitrogen, mg/l: 0.58

Total Phosphorus, mg/l: <u>0.61</u>

Dissolved Oxygen, mg/l: 7.8

Other:

## B. Interim II Phase Design Effluent Quality Biochemical Oxygen Demand (5-day), mg/l: 5 Total Suspended Solids, mg/l: 5 Ammonia Nitrogen, mg/l: 2 Total Phosphorus, mg/l: 1 Dissolved Oxygen, mg/l: 4 Other: C. Final Phase Design Effluent Quality Biochemical Oxygen Demand (5-day), mg/l: 5 Total Suspended Solids, mg/l: 5 Ammonia Nitrogen, mg/l: 2 Total Phosphorus, mg/l: 1 Dissolved Oxygen, mg/l: 4.0 Other: D. Disinfection Method Identify the proposed method of disinfection. Chlorine: 1.0 mg/l after 20 minutes detention time at peak flow Dechlorination process: Ultraviolet Light: seconds contact time at peak flow Other:

## Section 4. Design Calculations (Instructions Page 68)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

**Attachment: Attachment 12** 

### Section 5. Facility Site (Instructions Page 68)

### A. 100-year floodplain

Will the p	roposed	facilities	be locate	ed <u>above</u>	_the 1	00-year	frequency	flood
level?								

Yes ⊠ No □

**If no**, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

N/A

Provide the source(s) used to determine 100-year frequency flood plain.

## FEMA Map See Attachment 13

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

Yes □ No □ N/A

**If yes**, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

Yes □ No □ N/A

If yes, provide the permit number: N/A

**If no,** provide the approximate date you anticipate submitting your application to the Corps: N/A

#### B. Wind rose

Attach a wind rose. Attachment: 14

# Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 69)

#### A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

Yes □ No ⊠

**If yes**, attach the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)

Attachment: N/A

### B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

- ☐ Sludge Composting
- ☐ Marketing and Distribution of sludge
- □ Sludge Surface Disposal or Sludge Monofill

**If any of the above** sludge options are selected, attach a completed DOMESTIC WASTEWATER PERMIT APPLICATION: SEWAGE SLUDGE TECHNICAL REPORT (TCEO Form No. 10056).

Attachment: N/A

# Section 7. Sewage Sludge Solids Management Plan (Instructions Page 69)

Attach a solids management plan to the application.

Attachment: See Attachment 9

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities
- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

## **DOMESTIC TECHNICAL REPORT WORKSHEET 2.0**

### **RECEIVING WATERS**

The following is required for all TPDES permit applications

## Section 1. Domestic Drinking Water Supply (Instructions Page 73)

C. Se	ea grasses
Are	there any sea grasses within the vicinity of the point of discharge?
	Yes □ No ⊠
If yo	es, provide the distance and direction from the outfall(s).
<u>N/</u>	<u>A</u>
Section	n 3. Classified Segments (Instructions Page 73)
Is the d	ischarge directly into (or within 300 feet of) a classified segment?
	Yes □ No ⊠
If yes, t	his Worksheet is complete.
If no, co	omplete Sections 4 and 5 of this Worksheet.
	n 4. Description of Immediate Receiving Waters Instructions Page 75)
	ne of the immediate receiving waters: <u>Gilleland Creek</u>
11011	or the miniculate receiving wateror of the order
A. R	eceiving water type
Ider	itify the appropriate description of the receiving waters.
$\boxtimes$	Stream
	Freshwater Swamp or Marsh
	Lake or Pond
	Surface area, in acres:
	Average depth of the entire water body, in feet:
	Average depth of water body within a 500-foot radius of discharge point, in feet:
	Man-made Channel or Ditch

	Open Bay
	Tidal Stream, Bayou, or Marsh
	Other, specify:
<b>B. F</b> ]	low characteristics
followir characte	am, man-made channel or ditch was checked above, provide the ag. For existing discharges, check one of the following that best erizes the area <i>upstream</i> of the discharge. For new discharges, erize the area <i>downstream</i> of the discharge (check one).  Intermittent - dry for at least one week during most years
	Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses Perennial - normally flowing
	he method used to characterize the area upstream (or downstream for chargers). USGS flow records
	Historical observation by adjacent landowners
	Personal observation
	Other, specify: <u>City of Austin Watershed Protection Department</u>
C. D	ownstream perennial confluences
List the	names of all perennial streams that join the receiving water within iles downstream of the discharge point.
<u>Dec</u>	cker Creek, Elm Creek, Colorado River
D. D	ownstream characteristics
	receiving water characteristics change within three miles downstream of harge (e.g., natural or man-made dams, ponds, reservoirs, etc.)? Yes $\boxtimes$ No $\square$
If yes, d	liscuss how.

Confluence with segment 1428 of the Colorado River					
E. N	Normal dry weather charac	cteristi	ics		
Provide conditi	•	ie wate	er body during normal dry weather		
	ne of observation, Gilleland y wooded riparian zone.	creek	was clear with steep muddy banks in a		
ilcavii	y wooded riparian zone.				
Date ar	nd time of observation: <u>11/</u>	22/202	<u>23</u>		
Was the	e water body influenced by	storm	water runoff during observations?		
	Yes □ No ⊠				
	on 5. General Character Page 74)	istics	of the Waterbody (Instructions		
	Jpstream influences	matra	em of the discharge or proposed		
	9	-	m of the discharge or proposed ollowing? Check all that apply.		
	Oil field activities	$\boxtimes$	Urban runoff		
$\boxtimes$	Upstream discharges	$\boxtimes$	Agricultural runoff		
$\boxtimes$	Septic tanks		Other(s), specify		
tex					
B. Waterbody uses					
Observed or evidences of the following uses. Check all that apply.					
$\boxtimes$	Livestock watering		Contact recreation		
	Irrigation withdrawal		Non-contact recreation		
$\boxtimes$	Fishing		Navigation		

	Domestic water supply		Industrial water supply
	Park activities		Other(s), specify
tex			
C. <b>V</b>	Waterbody aesthetics		
	eck one of the following that eiving water and the surroun		describes the aesthetics of the area.
	Wilderness: outstanding na area; water clarity exception		beauty; usually wooded or unpastured
			re vegetation; some development dwellings); water clarity discolored
$\boxtimes$	Common Setting: not offer be colored or turbid	ısive;	developed but uncluttered; water may
	Offensive: stream does not developed; dumping areas		ance aesthetics; cluttered; highly er discolored

## **DOMESTIC WORKSHEET 6.0**

### INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works (POTWs)

# Section 1. All POTWs (Instructions Page 99)

### A. Industrial users

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs - non-categorical, and Other IUs

and Other 103.	
If there are no users, enter 0 (zero).	
Categorical IUs:	
Number of IUs: <u>0</u>	See Attachment 15 for Summary of Pretreatment
Average Daily Flows, in MGD: $\underline{0}$	Program
Significant IUs - non-categorical:	
Number of IUs: <u>0</u>	
Average Daily Flows, in MGD: $\underline{0}$	
Other IUs:	
Number of IUs: <u>1</u>	
Average Daily Flows, in MGD: <u>0.0041</u>	_
B. Treatment plant interference	
In the past three years, has your POTW expinterference (see instructions)?	perienced treatment plant
Yes □ No ⊠	
If yes, identify the dates, duration, descrip cause(s) and possible source(s) of each interthe IUs that may have caused the interferent	erference event. Include the names of
n/a	

C. Treatment plant pass through
In the past three years, has your POTW experienced pass through (see instructions)?
Yes □ No ⊠
If yes, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through. $n/a$

## D. Pretreatment program

Does your POTW have an approved pretreatment program?

Yes ⊠ No □

**If yes**, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

Yes 🗆 No ⊠

**If yes**, complete Section 2.c. and 2.d. only, and skip Section 3.

**If no to either question above**, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

# Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 100)

### A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to 40 CFR §403.18?

> Yes □ No ⊠

If yes, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

of

Click here to enter text.	
B. Non-substantial modifications	
Have there been any <b>non-substantial modifications</b> to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?	
Yes □ No ⊠	
If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.	
Click here to enter text.	

## C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) - Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions			
Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?			
Yes □ No ⊠			
<b>If yes</b> , identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.			
Click here to enter text.			
Section 3. Significant Industrial User (SIU) Information and			
Categorical Industrial User (CIU) (Instructions Page 100)			
A. General information			
Company Name: <u>n/a</u>			
SIC Code: n/a			
Telephone number: <u>n/a</u> <u>Fax n</u> um <u>ber:</u>			
Contact name: <u>n/a</u>			
Address: <u>n/a</u>			
City, State, and Zip Code: <u>n/a</u>			
B. Process information			
Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).			
n/a			

## C. Product and service information

Provide a description of the principal product(s) or services performed.

n/a
D. Flow rate information
ee the Instructions for definitions of "process" and "non-process wastewater."
rocess Wastewater:
Discharge, in gallons/day: <u>n/a</u>
Discharge Type: □ Continuous □ Batch □ Intermittent
on-Process Wastewater:
Discharge, in gallons/day: <u>n/a</u>
Discharge Type: □ Continuous □ Batch □ Intermittent
E. Pretreatment standards
s the SIU or CIU subject to technically based local limits as defined in the astructions?
Yes □ No □ N/A
s the SIU or CIU subject to categorical pretreatment standards found in $40\ CFB$ carts $405\text{-}471$ ?
Yes □ No □ N/A
subject to categorical pretreatment standards, indicate the applicable ategory and subcategory for each categorical process.
ategory: Subcategories:
ategory: Subcategories:
ategory: Subcategories:
ategory: Subcategories:
ategory: Subcategories:

# F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years? Yes □ No □ N/A

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

n/a		

# ATTACHMENT 1 PERMITTED/PROPOSED FLOW

# Permitted/Proposed Interim Phases for Taylor Lane

The table below indicates the permitted interims issued on October 7, 2019. These phases no longer coincide with Austin Water's (AW) construction schedule for the build out at Taylor Lane WWTP. AW is proposing different interim phases than the current permitted interim phases. These proposed phases will match up with Austin Water's construction schedule.

## **Taylor Lane WWTP**

Interim #	Permit Interims	Proposed Interims	Date Built		
IIItellill #	memis	interiiis			
I	0.10 MGD	0.10 MGD	9/13/2018		
П	0.35 MGD	0.25 MGD	3/3/2023	Current	
III	3.0 MGD	0.50 MGD	In Progress		
			Not requested		
			in this permit		
Final		1.0 MGD	cycle		

The table on the next page shows the monthly daily average effluent flow from 2019 to 2023. The monthly daily average effluent flow from 2019 to 2023 is 0.031 MGD. The daily average effluent flow has not exceeded 0.10 MGD. Therefore, Austin Water is requesting that Taylor Lane WWTP be placed in the Proposed Interim I phase, not to exceed 0.10 MGD, based on the average daily effluent flow which is appropriate for the current flow.

## City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014

	EFFLUENT FLOW
	Monitoring Period Range: 1/2019 to
	12/31/2023
	Monthly (MGD)
	DAILY AV
Month/Year	Taylor Lane WWTP
01/31/2019	No Discharge
02/28/2019	No Discharge
03/31/2019	No Discharge
04/30/2019	No Discharge
05/31/2019	0.058
06/30/2019	0.009
07/31/2019	0.008
08/31/2019	0.009
09/30/2019	0.010
10/31/2019	0.020
11/30/2019	0.011
12/31/2019	0.013
01/31/2020	0.017
02/29/2020	0.022
03/31/2020	0.021
04/30/2020	0.020
05/31/2020	0.023
06/30/2020	0.018
07/31/2020	0.017
08/31/2020	0.019
09/30/2020	0.021
10/31/2020	0.018
11/30/2020	0.020
12/31/2020	0.020
01/31/2021	0.028
02/28/2021	0.038
03/31/2021	0.030
04/30/2021	0.030
05/31/2021	0.040
06/30/2021	0.030

	<b>EFFLUENT FLOW</b>
	Monitoring Period Range:
	1/2019 to 12/31/2023
	Monthly (MGD)
	DAILY AV
Month/Year	Taylor Lane WWTP
07/31/2021	0.030
08/31/2021	0.030
09/30/2021	0.030
10/31/2021	0.030
11/30/2021	0.030
12/31/2021	0.033
01/31/2022	0.039
02/28/2022	0.053
03/31/2022	0.038
04/30/2022	0.041
05/31/2022	0.049
06/30/2022	0.044
07/31/2022	0.040
08/31/2022	0.041
09/30/2022	0.042
10/31/2022	0.043
11/30/2022	0.050
12/31/2022	0.046
01/31/2023	0.052
02/28/2023	0.059
03/31/2023	0.052
04/30/2023	0.049
05/31/2023	No Discharge
06/30/2023	No Discharge
07/31/2023	No Discharge
08/31/2023	No Discharge
09/30/2023	No Discharge
10/31/2023	No Discharge
11/30/2023	No Discharge
12/31/2023	No Discharge

Daily Average Effluent 2019-2023= 0.031 MGD

# ATTACHMENT 2 TREATMENT UNITS

## **TREATMENT UNITS**

### **INTERIM I - 0.1 MGD**

TREATMENT UNIT TYPE	# UNITS	DIMENSIONS (L X W X D)
Mechanical Bar Screen	2	1 ft W x 3 ft D
		69 ft x 12 ft x 13.2 ft & 17ft x
Aeration Basin	2	12ft x 13.2 ft
Secondary Clarifier	1	23ft Diameter x 10.4 ft
Cloth Disk Filters	1	Peak Flow 0.4 MGD
Chlorine Contact Basin	2	29 ft x 31 ft x 7.5 ft
Sludge Holding Tank/Aerobic Digester	1	17ft x 12ft x 13.2 ft

### Interim II - 0.25 MGD

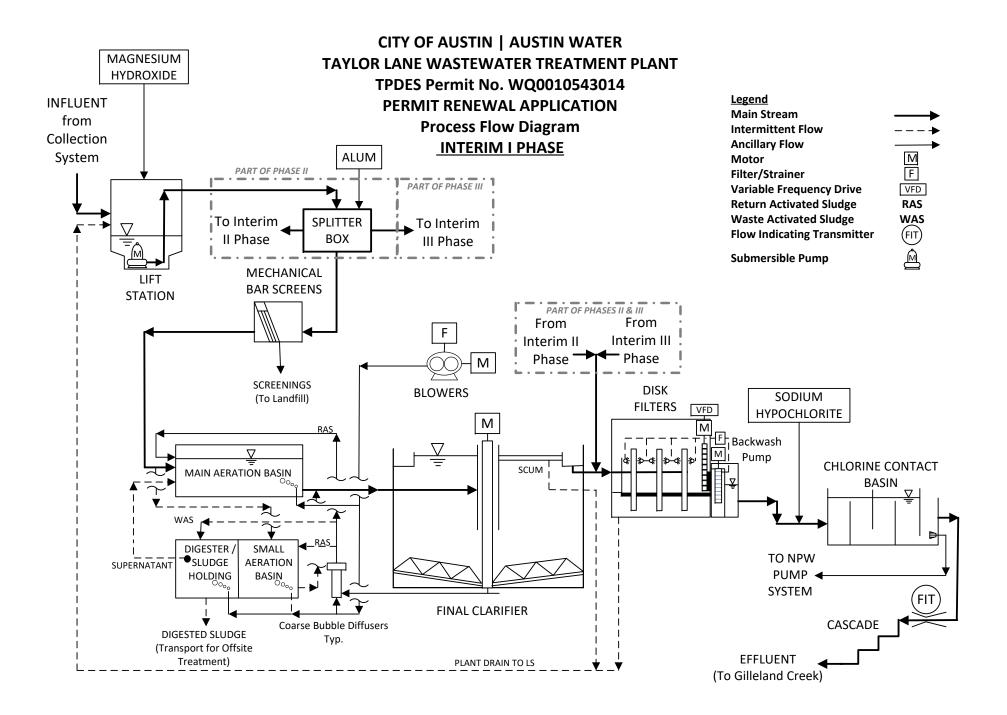
TREATMENT UNIT TYPE	# UNITS	DIMENSIONS (L X W X D)
Mechanical Screen/Grit		
removal/Washer Compact	1	20.08ft x 4.83ft x 9.5ft
Selector	1	21 ft x 5 ft 14 ft
Aeration Basin (1st Stage)	2	27 ft x 18.5 ft x 14 ft
Aeration Basin (2nd Stage)	2	40.75 ft x 12.5 ft x 14 ft
Secondary Clarifier	2	24 ft x 21 ft x 14 ft
Cloth Disk Filters	2	Peak Flow 1.0 MGD
Chlorine Contact Basin	2	29 ft x 31.5 ft x 7.5 ft
Sludge Holding Tank/Aerobic Digester	2	40.88 ft x 10 ft 14.5 ft

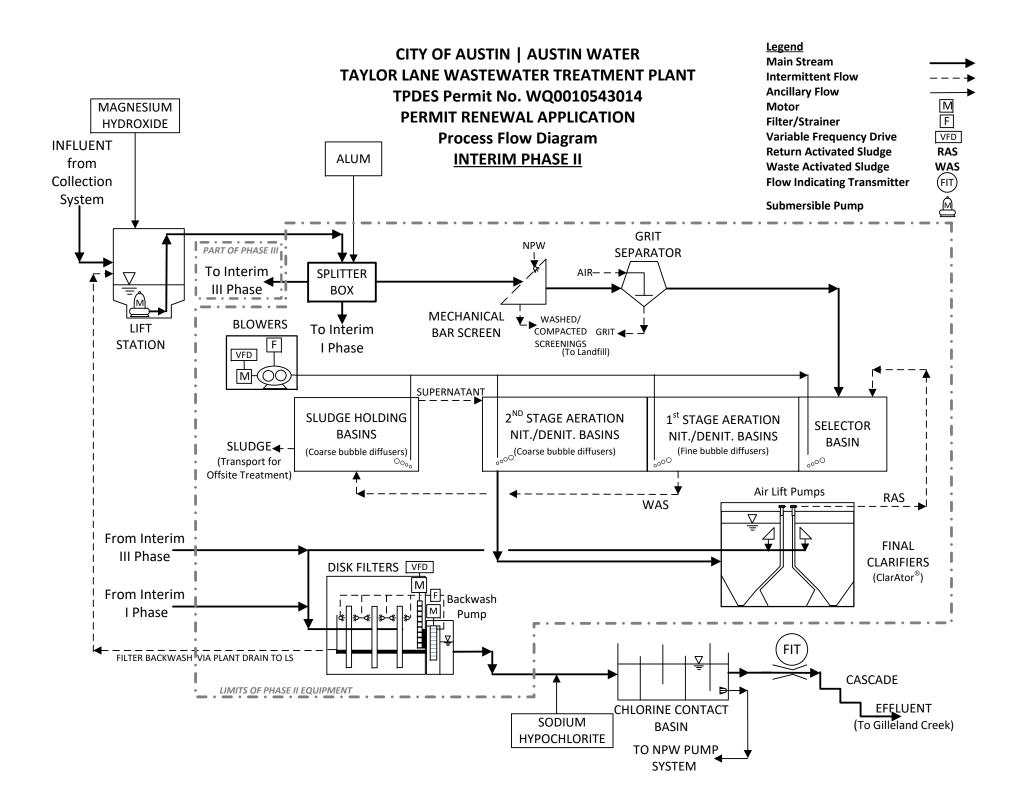
### Interim III - 0.50 MGD

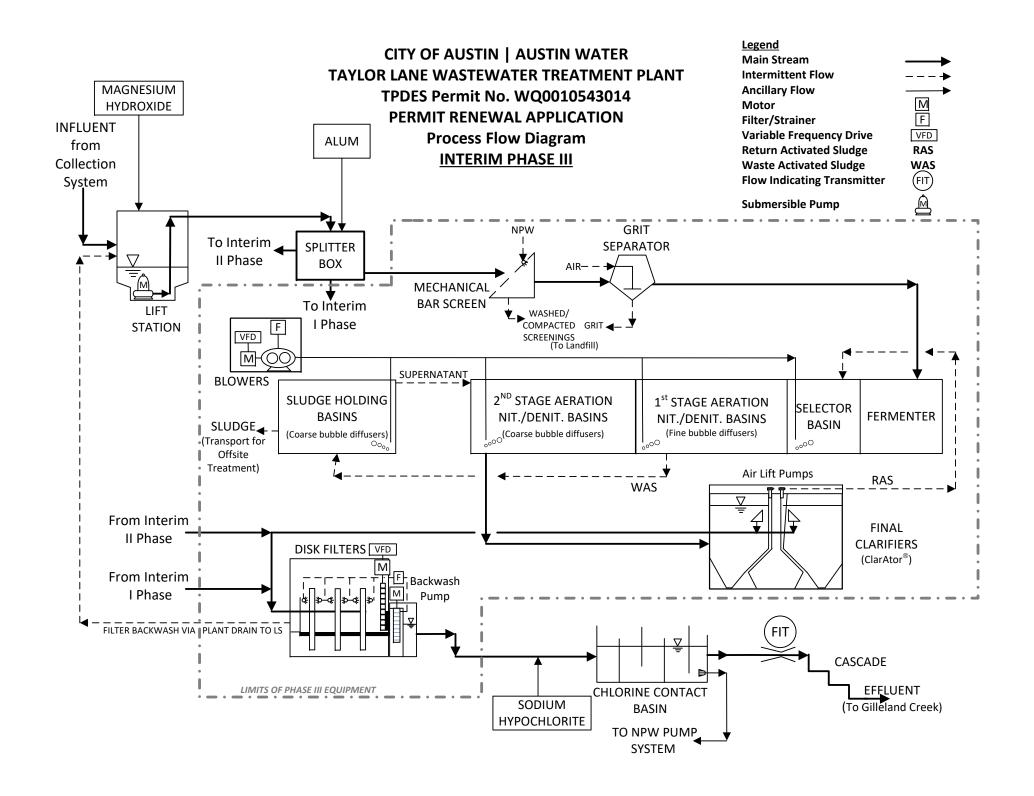
TREATMENT UNIT TYPE	# UNITS	DIMENSIONS (L X W X D)
Mechanical Screen/Grit		
removal/Washer Compact	1	20.08ft x 4.83ft x 9.5ft
Fermenter	1	17 ft x 8 ft x 14 ft
Selector	1	25 ft x 8 ft x 14 ft
Aeration Basin (1st Stage)	2	24 ft x 21 ft x 14 ft
Aeration Basin (2nd Stage)	2	43.25 ft x 11.5 ft x 14 ft
Secondary Clarifier	2	24 ft x 21 ft x 14 ft
Cloth Disk Filters	3	Peak Flow 1.0 MGD
Chlorine Contact Basin	2	29 ft x 31 ft x 7.5 ft
Sludge Holding Tank/Aerobic Digester	2	41.4 ft x 10 ft x 14.5 ft

Treatment units, except filters and chlorine contact basins, are independent. Each unit can operate independently or in conjunction to provide total capacity of 0.50 MGD.

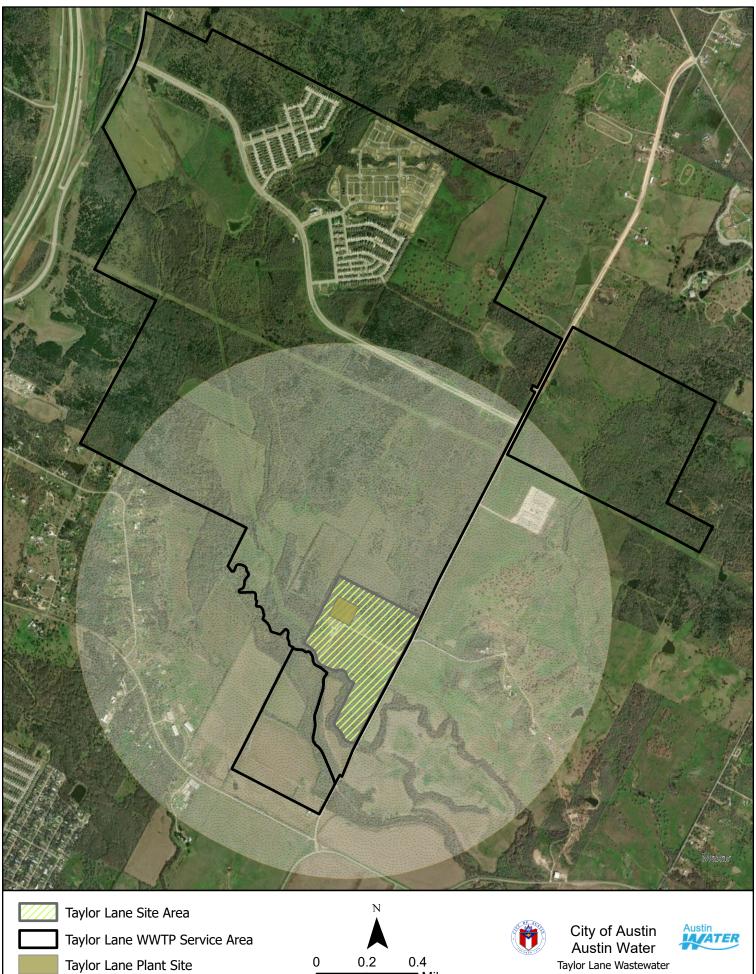
# ATTACHMENT 3 PROCESS FLOW DIAGRAM







# ATTACHMENT 4 SITE DIAGRAM



0.4 □ Miles

Taylor Lane Wastewater Service Area One Mile Buffer of Plant Site

# ATTACHMENT 5 UNBUILT PHASES

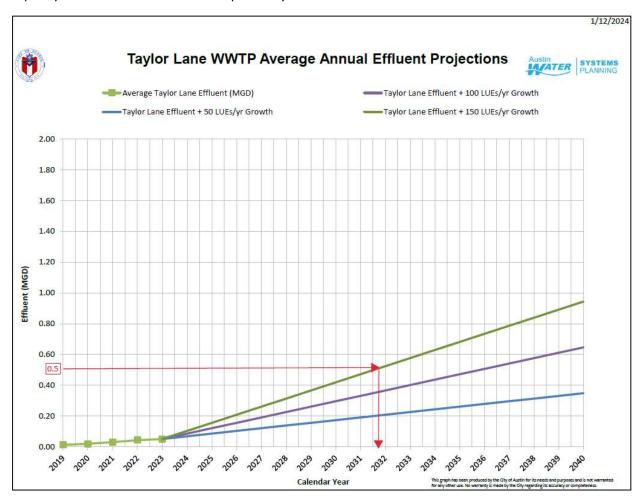
### City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

#### **UNBUILT PHASES**

Developers of the Whisper Valley community paid for the design and construction of a 0.25 MGD treatment unit completed in 2023 and another developer of the community paid for the design and construction of a second 0.25 MGD treatment unit that is about to start construction. Once complete in late 2025 per the construction schedule, the second unit will be able to operate with or without the first 0.25 MGD unit.

Build out to the planned 3.0 MGD capacity during the 2019-2024 permit cycle did not occur. The Covid pandemic, high construction costs and slower than expected growth in the plant's Service Area caused a pause and a re-evaluation of the build out phasing.

The latest growth projections indicate that even at the high estimated growth rate, the Taylor Lane WWTP Service Area would not reach 0.50 MGD ADF until after 2029, see graph below by Austin Water's Systems Planning Division. Because this is past the next permit cycle, Austin Water (AW) is requesting to build out to 0.50 MGD as the final phase for the 2024-2029 permit cycle. If the actual growth rate in the next 5 years is above the 150 Living Unit Equivalents (LUEs)/year rate, AW will request to a higher capacity build out for the 2029-2034 permit cycle.



# ATTACHMENT 6 SUMMARY TRANSMITTAL LETTERS



Susan Turrieta, PE

Julian D. Centeno Jr., PE

President

TCEQ Municipal Permits Team

Smith Turrieta Engineering TBPE No. F-16076

PO Box 5902 Austin, TX 78763 512.569.9022 susan@smithturrieta.com Wastewater Permitting Section, MC148 12100 Park 35 Circle Austin, TX 78753 512.239.4608

#### March 11, 2016

Regarding: City of Austin – TPDES Permit No. WQ0010543014

EPA ID No. TX0129950 (CN600135198; RN105331755)

**Summary Transmittal Letter** 

Design Firm: Smith Turrieta Engineering

TBPE No. F-16076 PO Box 5902 Austin, TX 78763

Engineer: Susan Turrieta, PE 86839

512.569.9022

susan@smithturrieta.com

Project Name: Taylor Lane Wastewater Treatment Facility

Project Location: 7537 ½ Taylor Lane

Austin, TX 78653 Travis County

Owner: City of Austin

625 E. 10<sup>th</sup> Street, Suite 800

Austin, TX 78701



Dear Mr. Centeno,

This engineering summary letter is to certify that the plans and specifications are in compliance with the requirements of the Texas Administrative Code. The project meets the following parameters:

- Plans and Specifications are in compliance with 30 TAC 217 Design Criteria for Domestic
   Wastewater Systems and will not threaten public health or the environment
- There are no variance requests included in this project
- The project scope includes the new construction of an activated sludge treatment facility with the following components designed to meet the 5:5:2:1 permit requirements:
  - Submersible lift station
  - Headworks
  - o 0.1 MGD average and 0.4 MGD peak steel package wastewater treatment facility
  - o Alum and NaCl chemical feed systems
  - Cloth Disk filters
  - Chlorine contact basin
  - Non-potable water supply system
  - o Cascade drop structure with v-notch weir and flow meter
  - o 24 inch effluent line and outfall structure
- The package plant will include the following components:
  - o Preliminary Treatment: Mechanical bar screen and flow equalization basin
  - o Aeration Basin with minimum freeboard of 24 inches at the peak flow.
  - Mechanical Clarifier
  - Sludge Holding Tank
  - o Disinfection
- A master site plan of the treatment facility site and a site plan to the wastewater treatment plant are included herein.
- This project has been reviewed and approved by Austin water Utility and has been permitted through the City's site plan/development permit requirements.

If you have any questions or require an additional information please do not hesitate to contact me at 512.569.9022 or susan@smithturrieta.com.

Sincerely,

Susan Turrieta, PE

President



Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 24, 2016

SUSAN TURRIETA, P.E. SMITH TURRIETA ENGINEERING PO BOX 5902 AUSTIN, TX 78763

Re:

CITY OF AUSTIN
TAYLOR LANE WWTF
Permit No. WQ0010543-014
WWPR Log No. 0316/090
CN600135198, RN105331755
TRAVIS County

#### Dear MS. TURRIETA:

We received the project summary transmittal letter dated March 22, 2016, and the subsequent submittal of the plans and specifications, dated April 25, 2016.

The rules which regulate the design, installation and testing of domestic wastewater projects are found in 30 TAC, Chapter 217, of the Texas Commission on Environmental Quality (TCEQ) rules titled, <u>Design Criteria for Wastewater Systems</u>.

### The CITY OF AUSTIN TAYLOR LANE WWTF includes the following:

- A new wastewater treatment facility with Interim I effluent limitations at an average daily flow of 0.10 mgd and a 2-hour peak flow of 278 gallons per minute. The Interim I effluent limitations are 5 mg/l CBOD, 5 mg/l TSS, 2 mg/l Ammonia Nitrogen, and 1.0 mg/l Phosphorus.
- The project includes the construction of headworks, an aeration basin, chemical feed system, cloth disk filters, chlorine contact basin, cascade aerator, and an effluent discharge line.

Our review indicated that the documents provided are in general compliance with applicable minimum standards as set forth in chapter 217, Design Criteria for Domestic Wastewater Systems. On the basis of general compliance with the applicable standards set forth in Chapter 217 and understanding that the permittee will comply with all permit requirements, the project is conditionally approved.

SUSAN TURRIETA, P.E. Page 2 May 23, 2016

You must keep certain materials on file for the life of the project and provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with Chapter 217. All plans and specifications must conform to any waste discharge requirements authorized in a permit by the TCEQ. Certain specific items which shall be addressed in the engineering report are discussed in §217.6(d). Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 217. The items which shall be included in the summary transmittal letter are addressed in §217.6(d).

Within 60 days of the completion of construction, an appointed engineer shall notify both the Wastewater Permits Section of the TCEQ and the appropriate Region Office of the date of completion. The engineer shall also provide written certification that all construction, materials, and equipment were substantially in accordance with the approved project, the rules of the TCEQ, and any change orders filed with the TCEQ. All notifications, certifications, and change orders must include the signed and dated seal of a Professional Engineer licensed in the State of Texas.

Please note that this conditional approval does not relieve the applicant of any responsibilities to obtain all other necessary permits or authorizations, such as wastewater treatment permit or other authorization as required by Chapter 26 of the Texas Water Code.

Please be reminded of 30 TAC §217.7(a) of the rules which states, "Approval given by the executive director or other authorized review authority does not relieve an owner of any liability or responsibility with respect to designing, constructing, or operating a collection system or treatment facility in accordance with applicable commission rules and the associated wastewater permit."

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4924.

Sincerely

Mark D. Hall, P.E.

Wastewater Permits Section (MC 148)

Water Quality Division

Texas Commission on Environmental Quality

MDH/rb

cc: TCEQ, Region 11 Office



Susan Turrieta, PE

President

Smith Turrieta Engineering TBPE No. F-16076

PO Box 5902 Austin, TX 78763 512.569.9022 susan@smithturrieta.com Mr. Louis C. Herrin III, PE

**TCEQ Municipal Permits** 

TCEQ - MC 148 P. O. Box 13087

Austin, Texas 78711-3087

512.239.4552

Iherrin@tceq.state.tx.us

**September 17, 2018** 

**Regarding:** Chapter 217.14 Completion Notice

**Permittee:** City of Austin

**Permit Number:** TPDES Permit No. WQ0010543014

EPA ID No. TX0129950 (CN600135198; RN105331755)

**Project Name:** Taylor Lane Wastewater Treatment Facility

Interim I, Phase I 0.1 MGD Avg daily flow

**County:** Travis

Dear Mr. Herrin:

The purpose of this letter is to provide the Texas Commission on Environmental Quality (TCEQ) with the information necessary to comply with the requirements of §217.14 of the TCEQ's rules entitled, "COMPLETION NOTICE." The Necessary information includes:

**Design Firm:** Smith Turrieta Engineering

TBPE No. F-16076 PO Box 5902 Austin, TX 78763

**Engineer:** Susan Turrieta, PE 86839

512.569.9022

susan@smithturrieta.com

**Project Location:** 7537 ½ Taylor Lane

Austin, TX 78653

Owner/Operator: City of Austin

625 E. 10<sup>th</sup> Street, Suite 800

Austin, TX 78701



#### **Certification Statement:**

Plans and Specifications were prepared in compliance with the requirements of 30 TAC Chapter 217 – "Design Criteria for Domestic Wastewater Systems". The completed work complies with the plans and specifications and with the requirements of 30 TAC Chapter 217. All construction materials and equipment are in conformance of the approved plans and specifications and are in compliance with the requirements of 30 TAC Chapter 217.

#### **Project Description:**

The project included the new construction of an activated sludge treatment facility with the following components designed to meet 5:5:2:1 permit requirements. The facility includes:

- Submersible lift station
- Headworks
- 0.1 MGD average and 0.4 MGD peak steel package wastewater treatment facility
- Alum and NaCl chemical feed systems
- Cloth Disk filters
- Chlorine contact basin
- Non-potable water supply system
- Cascade drop structure with v-notch weir and flow meter
- 24 inch effluent line and outfall structure

The package plant includes the following components:

- Preliminary Treatment: Mechanical bar screen and flow equalization basin
- Aeration Basin with minimum freeboard of 24 inches at the peak flow.
- Mechanical Clarifier
- Sludge Holding Tank, sludge/solids will be processed offsite at Walnut Creek WWTP (WQ0010543011)
- Disinfection

**Variances:** There are no requests for variances on this project

**Nonconforming Technologies:** There are no requests for innovative or nonconforming technologies on

this project. All components of this facility have been used in the

industry for over a decade

Operation and Maintenance Manual: Operation and Maintenance Manuals for the plant have been

prepared in compliance with the requirements of 30 TAC Chapter 217.16, Wastewater Treatment Facility Operation and Maintenance Manual. Operations Manuals are located at the plant, additional hard copies and an electronic copy are also secured by Austin Water Utility.



Deviation from Approved Plans and Specifications: There were no deviations from the approved plans and Specifications. Change orders did not impact the wastewater treatment facility configuration or equipment. Change orders included the addition of electrical conduits, a culvert, a hot water heater for the building, and heat tracing on exposed piping. All Change Orders were approved by the Engineer of Record.

This project has been reviewed and approved by Austin Water and has been permitted through the City's site plan/development permit requirements.

If you have any questions or require an additional information please do not hesitate to contact me at 512.569.9022 or susan@smithturrieta.com.

Sincerely,

Susan Turrieta, PE

President

cc: Lisa Boatmen, PE, Austin Water, Environmental & Regulatory Services
 Charles Celauro, PE, Austin Water, Facility Engineering
 Colin Kirk, PE, Austin Water, Utility Development Services



09-17-2018





# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY NOTIFICATION OF COMPLETION/PHASE OF WASTEWATER TREATMENT FACILITY

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

## **Current Permit Information**

What is the TCEQ	Water Quality	Permit Number?	WQ0010543014
------------------	---------------	----------------	--------------

What is the EPA I.D. Number? TX TX0129950

Current Name on Permit: City of Austin

X	Interim	<b>Phase</b>	I	Flow

- ☐ Interim Phase II Flow
- Interim Phase III Flow
- Final Phase Flow

Indicate the date that the operation began or will begin operating under the selected phase: Month/Day/Year: 11/1/2018

~				
Co	m	m	en	ts

### **Certification and Signature**

Responsible Official Name (Print or Type): Greg Meszaros

Responsible Official Title: <u>Director</u>, <u>Austin Water</u>

Responsible Official Email: <u>Greg.Meszaros@austintexas.gov</u>

I certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink):

Date:

Email completed form to:

WQ-ARPTeam@tceq.texas.gov

or

**Fax completed form to:** or mail completed form to:

512-239-0884

Texas Commission on Environmental Quality

Applications Review and Processing Team (MC-148)

P.O. Box 13087

Austin TX 78711-3087

# Instructions for Notification of Completion/Phase Of Wastewater Treatment Facility

### **Current Permit Information**

Provide your Permit Number. This number will start with WQ followed by 10 digits. The number can be found on the top right-hand corner of your issued permit.

For Texas Pollutant Discharge Elimination Permits (TPDES), provide the EPA ID number. This number will start with TX followed by 7 digits. The number can be found on the top right-hand corner of your issued permit.

Provide the current name that is on your permit. This information can be found on the first page of your permit.

Indicate the phase of operation you will be operating under. Provide the date the facility will begin operating in that phase. Date should be provided as month/day/year.

### Signature Requirements

In accordance with 30 Texas Administrative Code §305.44 relating to Signatories to Applications, all applications shall be signed as follows:

For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or v ice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or themanager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).



August 23, 2022

Mr. Louis C. Herrin III, PE TCEQ Municipal Permits TCEQ MC 148 P. O. Box 13087

Austin, Texas 78711-3087

Regarding: Chapter 217.6 Summary Transmittal Letter

Permittee: City of Austin

Permit Number: TPDES Permit No. WQ0010543014

EPA ID No. TX0129950 (CN600135198; RN105331755)
Project Name: Taylor Lane Wastewater Treatment Facility

Interim II, 0.35 MGD Avg daily flow, 972 gpm 2 hour peak

County: Travis

WPM PROJECT: C022100500

Dear Mr. Herrin:

The purpose of this letter is to provide the Texas Commission on Environmental Quality (TCEQ) with the information necessary to comply with the requirements of §217.6(c) of the TCEQ's rules entitled, "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS." The Necessary information includes:

Design Firm: Smith Turrieta Engineering

TBPE No. F-16076 PO Box 5902 Austin, TX 78763

Engineer: Susan Turrieta, PE 86839

512.569.9022

sturrieta@walterpmoore.com

Project Location: 7535 Taylor Lane

Austin, TX 78653

Owner/Operator: City of Austin

625 E. 10th Street, Suite 800

Austin, TX 78701

**Certification Statement:** Plans and Specifications were prepared in substantial

compliance with the requirements of 30 TAC Chapter 217 – "Design Criteria for Domestic Wastewater Systems". Specific requested variances are noted herein. These variances will not threaten public health or the environment, based on the best professional judgment of the engineer who prepared the project engineering design report, plans, and specifications.

August 23, 2022 TCEQ Summary Transmittal Letter C022100500 Page 2 of 2

#### **Project Description:**

The project scope includes the expansion of the wastewater treatment facility with new construction of an activated sludge treatment facility with the following components designed to meet 5:5:2:1 permit requirements. Facility will include:

- Splitter box
- Headworks
- Existing 0.1 MGD and new 0.25 MGD concrete package wastewater treatment facility
- Alum and NaOCl chemical feed system extension
- Two Cloth Disk filters
- Contact basin

The proposed package plant will include the following components:

- Preliminary Treatment: Complete headworks system with mechanical screen, aerated grit chamber, grit conveyors in a self-contained unit.
- First and second stage aeration basins with minimum freeboard of 24 inches at the peak flow.
- Two Secondary Clarifiers
- Sludge Holding Tank, sludge/solids will be processed offsite at Walnut Creek WWTP (WQ0010543011)

**Variances:** There are no requests for variances on this project

**Nonconforming Technologies:** 

There are no requests for innovative or nonconforming technologies on this project. All components of this facility have been used in the industry for over a decade

A master site plan of the treatment facility site and a site plan to the wastewater treatment plant are included herein.

This project has been reviewed and approved by Austin water Utility and has been permitted through the City's site plan/development permit requirements.

If you have any questions or require an additional information, please do not hesitate to contact me at 512.569.9022 or sturrieta@walterpmoore.com.

Sincerely,

Walter P. Moore and Associates, Inc.

Susan Turrieta, P.E.

Susan Turreta

Principal, Managing Director Civil Engineering

**Enclosure** 

cc: Tammy Y. West, Austin Water Utility Wastewater Regulatory Manager Process Engineering



October 24, 2022

Mr. Paul Brochi, PE TCEQ Municipal Permits TCEQ MC 148 P. O. Box 13087

Austin, Texas 78711-3087

Regarding: Chapter 217.6 Summary Transmittal Letter

Permittee: City of Austin

Permit Number: TPDES Permit No. WQ0010543014

EPA ID No. TX0129950 (CN600135198; RN105331755)
Project Name: Taylor Lane Wastewater Treatment Facility

Interim II, 0.35 MGD Avg daily flow, 972 gpm 2 hour peak

County: Travis

WPM PROJECT: C022100500

Dear Mr. Brochi:

The purpose of this letter is to provide the Texas Commission on Environmental Quality (TCEQ) with the information necessary to comply with the requirements of §217.6(c) of the TCEQ's rules entitled, "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS." The Necessary information includes:

Design Firm: Smith Turrieta Engineering

TBPE No. F-16076 PO Box 5902 Austin, TX 78763

Engineer: Susan Turrieta, PE 86839

512.569.9022

sturrieta@walterpmoore.com

Project Location: 7535 Taylor Lane

Austin, TX 78653

Owner/Operator: City of Austin

625 E. 10th Street, Suite 800

Austin, TX 78701

**Certification Statement:** Plans and Specifications were prepared in substantial

compliance with the requirements of 30 TAC Chapter 217 – "Design Criteria for Domestic Wastewater Systems". Specific requested variances are noted herein. These variances will not threaten public health or the environment, based on the best professional judgment of the engineer who prepared the project engineering design report, plans, and specifications.

October 24, 2022 TCEQ Summary Transmittal Letter C022100500 Page 2 of 3

#### **Project Description:**

The project scope includes the expansion of the wastewater treatment facility with new construction of an activated sludge treatment facility with the following components designed to meet 5:5:2:1 permit requirements. Facility will include:

- Splitter box
- Headworks
- Existing 0.1 MGD and new 0.25 MGD concrete package wastewater treatment facility
- Alum and NaOCl chemical feed system extension
- Three Cloth Disk filters
- Contact basin (constructed in previous phase)

The proposed package plant will include the following components:

- Preliminary Treatment: Complete headworks system with mechanical screen, aerated grit chamber, grit conveyors in a self-contained unit.
- First and second stage aeration basins with minimum freeboard of 24 inches at the peak flow.
- Two Secondary Clarifiers
- Sludge Holding Tank, sludge/solids will be processed offsite at Walnut Creek WWTP (WQ0010543011)

**Variances:** There are no requests for variances on this project

**Nonconforming Technologies:** 

There are no requests for innovative or nonconforming technologies on this project. All components of this facility have been used in the industry for over a decade

A master site plan of the treatment facility site and a site plan to the wastewater treatment plant are included herein.

This project has been reviewed and approved by Austin water Utility and has been permitted through the City's site plan/development permit requirements.

If you have any questions or require an additional information, please do not hesitate to contact me at 512.569.9022 or sturrieta@walterpmoore.com.

Sincerely,

Walter P. Moore and Associates, Inc.

Susan Turrieta, P.E.

Principal, Managing Director Civil Engineering

#### Enclosure

- Equipment List
- Plans

cc: Tammy Y. West, Austin Water Utility Wastewater Regulatory Manager Process Engineering



October 24, 2022 TCEQ Summary Transmittal Letter C022100500 Page 3 of 3

#### **Equipment List**

Headworks Kusters Water ProTechtor complete plant HCP-60

- Maximum Flow(mgd): 1.0
- Overall Tank Width: 4' -10"
- Overall Tank Length: 20′ −1″
- Overall Tank Height: 9' -6"
- Influent Port Size: 10"
- Effluent Port Size: 10"
- Screen Opening(mm): 6.0
- Screen Discharge Height(ft): 7' -1"
- Grit Discharge Height(ft): 7′ −1″
- Minimum Screen Motor Horsepower: 1.5
- Minimum Horizontal GritScrew Motor Horsepower: 1.0
- Minimum Inclined GritScrew Motor Horsepower: 1.5
- Minimum BlowerMotor Horsepower:

WWTP one unit two trains. Max Water Level 14'-3"

- Clarifier (2 Tanks) 25' x 21'
- Aeration First Stage (2 tanks) 27' x 18'
- Aeration Second Stage (2 tanks) 12' x 40'
- Digester (2 tanks) 40' x 10'

Filter Hydrotech Diskfilter Unit, Model HSF2208/3-1F

- Number of possible disks/slots 8
- Unit is populated with 3
- Total Filter Area for 3 Discs = 180.75 ft2,
- Total Area when the unit is populated with 8 Discs = 482 ft2;
- Effective Submerged Area for 3 Discs = 117.6 ft2.
- Effective Submerged Area when the unit is populated with 8 Discs = 313. ft2;
- For the Veolia Hydrotech Discfilter System the question regarding channels is not applicable.

Chlorine contact basin – Constructed in previous phases Interim I (see plans)

Jon Niermann, *Chairman*Emily Lindley, *Commissioner*Bobby Janecka, *Commissioner*Erin Chancellor, *Interim Executive Director* 



#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

February 21, 2023

Protecting Texas by Reducing and Preventing Pollution

Susan Turrieta, P.E. Smith Turrieta Engineering PO Box 5902 Austin, Texas 78763

Re:

City of Austin

Taylor Lane Wastewater Treatment Facilty - Expansion to 0.35 MGD

Permit No. WQ0010543-014 WWPR Log No. 1122/009 CN600135198, RN105331755

**Travis County** 

#### Dear Ms. Turrieta:

On October 28, 2022, TCEQ received the project summary transmittal letter dated October 24, 2022, and plan set for an expansion of the City of Austin Tylor Lane wastewater treatment plant in Travis County, Texas. This expansion project will bring the plant to a treatable average daily flow (ADF) equivalent to the current permitted interim II flow phase of 0.35 MGD with a 4Q peak daily flow (PDF) of 1.40 MGD. The plant is regulated by Water Quality permit WQ0010543014 which contains effluent concentration limits the plant must meet of 5 mg/l for CBOD<sub>5</sub>, 5 mg/l for TSS, 2 mg/l for NH<sub>3</sub>-N, 1 mg/l for total phosphorus, and 120 cfu/100 ml for E. coli while maintaining a minimum dissolved oxygen concentration of 4.0 mg/l. The details of this project's scope of work to construct the 0.35 MGD treatment system are listed below.

The rules which regulate the design, installation and testing of domestic wastewater projects are found in 30 TAC, Chapter 217, of the Texas Commission on Environmental Quality (TCEQ) rules titled, <u>Design Criteria for Wastewater Systems</u>.

The scope of work items for creating the 0.350 MGD treatment plant are as follows:

- Use of the existing 0.10 MGD activated sludge treatment system consisting of
  - Aeration basin

secondary clarifier

o aerobic digester

Chlorine Contact basin

- Placement of a 0.25 MGD package plant; consisting of
  - Splitter box
  - o Headworks, Kusters Water ProTechtor HCP-60, self-contained unit
    - Mechanical screen
    - Aerated grit chamber
    - Grit conveyors
    - 4'10" x 20'1" x 9.5' height
  - o Secondary clarifiers (2 tanks), 25 ft. x 21 ft., active surface area 960 ft²
  - o Sludge Holding (2 tanks), 40 ft. x 10 ft., active volume 88,650 gallons

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • tceq.texas.gov

Susan Turrieta, P.E. Page 2 February 21, 2023

- o Aeration basins, 2 trains 14.25 ft. SWD, Total basin volume of 208,000 gallons
  - Each aeration train has first stage (2) and second stage tanks (2)
  - First stage aeration tanks 27 ft. x 18 ft., total first stage volume 13,851 ft<sup>3</sup>
  - Second stage aeration tanks 12 ft. x 40 ft., total second stage volume 13,680 ft<sup>3</sup>
  - Fine bubble aeration in first stage aeration basins
  - Coarse bubble aeration in second stage aeration basins
- o Secondary clarifiers (2 tanks), 25 ft. x 21 ft., active surface area 960 ft<sup>2</sup>
- o Sludge Holding (2 tanks), 40 ft. x 10 ft., active volume 88,650 gallons
- Tertiary filtration
  - Hydrotech Diskfilter Model HSF2208/3-1F
  - Possible disk slots 8
  - o Filled disk slot 3 (for 0.35 MGD phase)
  - o Total filter area (3 disks) 180.57 ft<sup>2</sup>
  - Submerged area (3 disks) − 117.6 ft²
- o Chlorine Contact Basin
  - o Built as part of Phase 1, 0.10 MGD plant
  - o Approximately 3,816 ft3
  - o Providing 29 mins of detention time at 1.40 MGD PDF

The TCEQ review of the submitted project information seems to indicate that the design of the 0.35 MGD plant meets at least the minimum requirements of 30 TAC Chapter 217: <u>Design Criteria for wastewater Systems</u>. The result of the TCEQ review allows TCEQ to conditionally approve the plant expansion project for completion.

You must keep certain materials on file for the life of the project and provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with Chapter 217. All plans and specifications must conform to any waste discharge requirements authorized in a permit by the TCEQ. Certain specific items which shall be addressed in the engineering report are discussed in §217.10. Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 217.

No variances of any 30 TAC Chapter 217 requirements were requested or granted as part of this project review. If in the future, any variances from the Chapter 217 requirements are desired for the project, each variance must be requested in writing by the design engineer. Then, the TCEQ will consider granting a written approval to the variance from the rules for the specific project and the specific circumstances.

Within 60 days of the completion of construction, an appointed engineer shall notify both the Wastewater Permits Section of the TCEQ and the appropriate Region Office of the date of completion. The engineer shall also provide written certification that all construction, materials, and equipment were substantially in accordance with the approved project, the rules of the

Susan Turrieta, P.E. Page 3 February 21, 2023

TCEQ, and any change orders filed with the TCEQ. All notifications, certifications, and change orders must include the signed and dated seal of a Professional Engineer licensed in the State of Texas.

The TCEQ will provide a notification of intent to review whenever a project is to undergo a complete plans and specifications review. Please be reminded of 30 TAC §217.7(a) of the rules which states, "Approval given by the executive director or other authorized review authority does not relieve an owner of any liability or responsibility with respect to designing, constructing, or operating a collection system or treatment facility in accordance with applicable commission rules and the associated wastewater permit".

If you have any questions, or if we can be of any further assistance, please call me at (512) 239-1372.

Sindrely Could Street

Paul A. Brochi, P.E. Wastewater Permits Section (MC 148) Water Quality Division Texas Commission on Environmental Quality

cc: Tammy West, Wastewater Regulatory Manager, Austin Water

PAB/tc



#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY NOTIFICATION OF COMPLETION/PHASE OF WASTEWATER TREATMENT FACILITY

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

#### **Current Permit Information**

What is the T	CEQ Water	Quality Permit Number?	WQ0010543014
---------------	-----------	------------------------	--------------

What is the EPA I.D. Number? TX TX0129950

Current Name on Permit: Taylor Lane WWTP

<b>*</b> T		- •	~		- •		
N	O	T	n	ca	Ť٦	0	m
7.4	V	-		-u	AT.	v	4.5

Indicate the phase the facility will be operating.

- Interim Phase I Flow
- X Interim Phase II Flow
- Interim Phase III Flow
- Final Phase Flow

Indicate the date that the operation began or will begin operating under the selected phase: Month/Day/Year: April 3, 2023

Comments: Discharge may or may not start on April 3, 2023. The earliest date of discharge would be April 3, 2023.

#### **Certification and Signature**

Responsible Official Name (Print or Type): Shay Roalson

Responsible Official Title: Director of Austin Water

Responsible Official Email: Shay.Roalson@austintexas.gov

I certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink): Skely Ralls Rober

Email completed form to:

WQ-ARPTeam@tceq.texas.gov

or

Fax completed form to: or mail completed form to:

512-239-0884

Texas Commission on Environmental Quality

Applications Review and Processing Team (MC-148)

P.O. Box 13087

Austin TX 78711-3087

## ATTACHMENT 7 LABORATORY ANALYSIS

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

#### City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014

#### **Application for Domestic WWTP**

#### **Pollutant Analysis of Treated Effluent**

All samples were analyzed by an Austin Water in-house laboratory, **Environmental Analytical Service Laboratory** located at 7113 FM 969, Austin, Texas 78724.

All sampling and laboratory testing methods were performed according to 30 TAC Chapter 319, General Regulations Incorporated into Permits, and 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification. All testing confirmed to EPA approved methodologies for sample collection, preservation, analysis, and detection levels. In addition, this data complies with the QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard and suggested methods for analytes not addressed by 40 CFR Part 136.

## Austin Water Laboratory-Environmental Analytical Services 7113 FM 9696 Austin, TX 78724 Pollutant Analysis of Treated Effluent CBOD SM 5210 B

Horizon Sample Nbr.	Collect Date	Analyte (Abbrev.)	Final Result	Units
46399801	04/03/2023	CBOD	<2	mg/L
46540101	04/10/2023	CBOD	<2	mg/L
46678501	04/18/2023	CBOD	<2	mg/L
46772301	04/24/2023	CBOD	<2	mg/L
46867601	05/01/2023	CBOD	<2	mg/L
46982901	05/08/2023	CBOD	<2	mg/L
47103801	05/16/2023	CBOD	<2	mg/L
47204201	05/22/2023	CBOD	2.7	mg/L
47352401	06/01/2023	CBOD	2.6	mg/L
47420601	06/06/2023	CBOD	<2	mg/L
47544601	06/13/2023	CBOD	<2	mg/L
47662201	06/20/2023	CBOD	<2	mg/L
47759301	06/26/2023	CBOD	<2	mg/L
47885501	07/03/2023	CBOD	<2	mg/L
47992901	07/10/2023	CBOD	<2	mg/L
48103501	07/17/2023	CBOD	<2	mg/L
48197801	07/24/2023	CBOD	<2	mg/L
48327601	08/01/2023	CBOD	<2	mg/L
48492101	08/11/2023	CBOD	<2	mg/L
48569701	08/16/2023	CBOD	<2	mg/L
48639701	08/21/2023	CBOD	<2	mg/L
48753401	08/29/2023	CBOD	<2	mg/L
48878001	09/06/2023	CBOD	<2	mg/L
48952801	09/11/2023	CBOD	<2	mg/L
49062101	09/18/2023	CBOD	<2	mg/L
49176801	09/25/2023	CBOD	<2	mg/L
49280201	10/02/2023	CBOD	2.1	mg/L
49510801	10/14/2023	CBOD	<2	mg/L
49537301	10/16/2023	CBOD	<2	mg/L
49657501	10/23/2023	CBOD	<2	mg/L
49813601	11/01/2023	CBOD	<2	mg/L
49890501	11/06/2023	CBOD	<2	mg/L
49999601	11/13/2023	CBOD	2.2	mg/L
50114901	11/20/2023	CBOD	3	mg/L
50266301	12/01/2023	CBOD	3.7	mg/L
50327601	12/05/2023	CBOD	3.1	mg/L
50435601	12/12/2023	CBOD	3.3	mg/L
50551201	12/19/2023	CBOD	3.2	mg/L

**Average Concentration= 2.21** 

Maximum= 3.7

# of samples= 38

# Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Total Suspended Soilds SM 2540 D

Horizon				
Sample		Analyte	Final	
Nbr.	<b>Collect Date</b>	(Abbrev.)	Result	Units
46399801	04/03/2023	TSS	2.3	mg/L
46540101	04/10/2023	TSS	<0.50	mg/L
46678501	04/18/2023	TSS	< 0.50	mg/L
46772301	04/24/2023	TSS	< 0.50	mg/L
46867601	05/01/2023	TSS	0.5	mg/L
46982901	05/08/2023	TSS	< 0.50	mg/L
47103801	05/16/2023	TSS	0.7	mg/L
47204201	05/22/2023	TSS	0.6	mg/L
47352401	06/01/2023	TSS	< 0.50	mg/L
47420601	06/06/2023	TSS	0.6	mg/L
47544601	06/13/2023	TSS	0.6	mg/L
47662201	06/20/2023	TSS	0.7	mg/L
47759301	06/26/2023	TSS	1	mg/L
47885501	07/03/2023	TSS	<0.50	mg/L
47992901	07/10/2023	TSS	<0.50	mg/L
48103501	07/17/2023	TSS	0.5	mg/L
48197801	07/24/2023	TSS	0.7	mg/L
48327601	08/01/2023	TSS	2.1	mg/L
48492101	08/11/2023	TSS	<0.50	mg/L
48569701	08/16/2023	TSS	1.1	mg/L
48639701	08/21/2023	TSS	<0.50	mg/L
48753401	08/29/2023	TSS	0.5	mg/L
48878001	09/06/2023	TSS	1.6	mg/L
48952801	09/11/2023	TSS	0.7	mg/L
49062101	09/18/2023	TSS	0.5	mg/L
49176801	09/25/2023	TSS	1	mg/L
49280201	10/02/2023	TSS	1.6	mg/L
49510801	10/14/2023	TSS	5.4	mg/L
49537301	10/16/2023	TSS	1.3	mg/L
49657501	10/23/2023	TSS	1.9	mg/L
49813601	11/01/2023	TSS	0.6	mg/L
49890501	11/06/2023	TSS	<0.50	mg/L
49999601	11/13/2023	TSS	1.3	mg/L
50114901	11/20/2023	TSS	2.7	mg/L
50266301	12/01/2023	TSS	1.2	mg/L
50327601	12/05/2023	TSS	2.1	mg/L

## Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Total Suspended Soilds SM 2540 D

Horizon				
Sample		Analyte	Final	
Nbr.	Collect Date	(Abbrev.)	Result	Units
50435601	12/12/2023	TSS	2.7	mg/L
50551201	12/19/2023	TSS	5.9	mg/L

**Average Concentration= 1.51** 

Maximum= 5.9

# of samples= 38

## Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Ammonia SM 4500-NH3 D

Horizon		Analyte	Final	
Sample Nbr.	Collect Date	(Abbrev.)	Result	Units
46399801	04/03/2023	NH3-N	0.14	mg/L
46540101	04/10/2023	NH3-N	0.14	mg/L
46678501	04/18/2023	NH3-N	0.14	mg/L
46772301	04/24/2023	NH3-N	0.13	mg/L
46867601	05/01/2023	NH3-N	0.12	mg/L
46982901	05/08/2023	NH3-N	0.21	mg/L
47103801	05/16/2023	NH3-N	0.17	mg/L
47204201	05/22/2023	NH3-N	0.16	mg/L
47352401	06/01/2023	NH3-N	0.2	mg/L
47420601	06/06/2023	NH3-N	0.13	mg/L
47544601	06/13/2023	NH3-N	0.15	mg/L
47662201	06/20/2023	NH3-N	0.14	mg/L
47759301	06/26/2023	NH3-N	0.16	mg/L
47885501	07/03/2023	NH3-N	0.16	mg/L
47992901	07/10/2023	NH3-N	0.47	mg/L
48103501	07/17/2023	NH3-N	0.13	mg/L
48197801	07/24/2023	NH3-N	0.14	mg/L
48327601	08/01/2023	NH3-N	0.18	mg/L
48492101	08/11/2023	NH3-N	1.38	mg/L
48569701	08/16/2023	NH3-N	1.49	mg/L
48639701	08/21/2023	NH3-N	0.24	mg/L
48753401	08/29/2023	NH3-N	0.11	mg/L
48878001	09/06/2023	NH3-N	1.84	mg/L
48952801	09/11/2023	NH3-N	< 0.1	mg/L
49062101	09/18/2023	NH3-N	0.13	mg/L
49176801	09/25/2023	NH3-N	0.11	mg/L
49280201	10/02/2023	NH3-N	0.67	mg/L
49510801	10/14/2023	NH3-N	4.54	mg/L
49537301	10/16/2023	NH3-N	0.62	mg/L
49657501	10/23/2023	NH3-N	0.77	mg/L
49813601	11/01/2023	NH3-N	0.12	mg/L
49890501	11/06/2023	NH3-N	0.27	mg/L
49999601	11/13/2023	NH3-N	1.12	mg/L
50114901	11/20/2023	NH3-N	3.14	mg/L

## Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Ammonia SM 4500-NH3 D

Horizon		Analyte	Final	
Sample Nbr.	Collect Date	(Abbrev.)	Result	Units
50266301	12/01/2023	NH3-N	0.27	mg/L
50327601	12/05/2023	NH3-N	1.05	mg/L
50435601	12/12/2023	NH3-N	0.36	mg/L
50551201	12/19/2023	NH3-N	0.2	mg/L

**Average Concentration= 0.58** 

Maximum= 4.54

# of samples= 38

## Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Nitrate SM 4500-NO3 D

Horizon				
Sample		Analyte	Final	
Nbr.	<b>Collect Date</b>	(Abbrev.)	Result	Units
47352401	06/01/2023	NO3-N	20	mg/L
47420601	06/06/2023	NO3-N	25.6	mg/L
47544601	06/13/2023	NO3-N	28.2	mg/L
47662201	06/20/2023	NO3-N	28.3	mg/L
47759301	06/26/2023	NO3-N	28.9	mg/L
47885501	07/03/2023	NO3-N	26.4	mg/L
47992901	07/10/2023	NO3-N	22.4	mg/L
48103501	07/17/2023	NO3-N	28	mg/L
48197801	07/24/2023	NO3-N	28.1	mg/L
49890501	11/06/2023	NO3-N	42.8	mg/L
49999601	11/13/2023	NO3-N	31.7	mg/L
50114901	11/20/2023	NO3-N	39.9	mg/L

**Average Concentration= 29.19** 

Maximum= 42.8

# of samples= 12

## Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Treated Effluent TKN EPA 351.2

<b>Horizon Sample</b>		Analyte	Final	
Nbr.	<b>Collect Date</b>	(Abbrev.)	Result	Units
47352401	06/01/2023	TKN	1.01	mg/L
47420601	06/06/2023	TKN	1.11	mg/L
47544601	06/13/2023	TKN	1.14	mg/L
47662201	06/20/2023	TKN	1.23	mg/L
47759301	06/26/2023	TKN	1.45	mg/L
47885501	07/03/2023	TKN	1.3	mg/L
47992901	07/10/2023	TKN	1.82	mg/L
48103501	07/17/2023	TKN	1.43	mg/L
48197801	07/24/2023	TKN	1.27	mg/L
49890501	11/06/2023	TKN	1.57	mg/L
49999601	11/13/2023	TKN	3.09	mg/L
50114901	11/20/2023	TKN	5.22	mg/L

**Average Concentration= 1.80** 

Maximum= 5.22

# of samples = 12

#### Austin Water Laboratory-Environmental Analytical Services 7113 FM969 Austin, TX 78724

### Pollutant Analysis of Treated Effluent Sulfate EPA Method 300.0

Horizon

Sample Nbr.	Collect Date	Analyte (Abbrev.)	Final Result	Unit
49890501	11/06/2023	SO4	140	mg/L
50114901	11/20/2023	SO4	102	mg/L

**Average Concentration= 121** 

Maximum= 140

# of samples= 2

## Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Chloride EPA Method 300.0

Horizon		Analyte	Final	
Sample Nbr.	<b>Collect Date</b>	(Abbrev.)	Result	Units
49890501	11/06/2023	CL	218	mg/L
50114901	11/20/2023	CL	167	mg/L

**Average Concentration= 192.5** 

Maximum= 218

# of samples= 2

# Austin Water Laboratory-Environmental Analytical Services 7113 FM969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Phosphorus (T) SM 4500-P BH

Horizon Sample Nbr.	Collect Date	Analyte (Abbrev.)	Final Result	Units
46399801	04/03/2023	TP	0.93	mg/L
46540101	04/10/2023	TP	0.35	mg/L
46678501	04/18/2023	TP	0.65	mg/L
46772301	04/24/2023	TP	0.6	mg/L
46867601	05/01/2023	TP	0.74	mg/L
46982901	05/08/2023	TP	0.7	mg/L
47103801	05/16/2023	TP	0.46	mg/L
47204201	05/22/2023	TP	0.43	mg/L
47352401	06/01/2023	TP	0.21	mg/L
47420601	06/06/2023	TP	0.15	mg/L
47544601	06/13/2023	TP	0.34	mg/L
47662201	06/20/2023	TP	0.8	mg/L
47759301	06/26/2023	TP	0.69	mg/L
47885501	07/03/2023	TP	0.43	mg/L
47992901	07/10/2023	TP	0.54	mg/L
48103501	07/17/2023	TP	0.27	mg/L
48197801	07/24/2023	TP	0.29	mg/L
48327601	08/01/2023	TP	0.63	mg/L
48492101	08/11/2023	TP	1.29	mg/L
48569701	08/16/2023	TP	0.5	mg/L
48639701	08/21/2023	TP	0.49	mg/L
48753401	08/29/2023	TP	0.91	mg/L
48878001	09/06/2023	TP	0.51	mg/L
48952801	09/11/2023	TP	0.51	mg/L
49062101	09/18/2023	TP	0.45	mg/L
49176801	09/25/2023	TP	0.53	mg/L
49280201	10/02/2023	TP	0.69	mg/L
49510801	10/14/2023	TP	0.39	mg/L
49537301	10/16/2023	TP	0.67	mg/L
49657501	10/23/2023	TP	0.67	mg/L
49813601	11/01/2023	TP	0.41	mg/L
49890501	11/06/2023	TP	0.24	mg/L
49999601	11/13/2023	TP	0.72	mg/L

## Austin Water Laboratory-Environmental Analytical Services 7113 FM969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Phosphorus (T) SM 4500-P BH

Horizon		Analyte	Final	
Sample Nbr.	Collect Date	(Abbrev.)	Result	Units
50114901	11/20/2023	TP	0.85	mg/L
50266301	12/01/2023	TP	0.7	mg/L
50327601	12/05/2023	TP	1.13	mg/L
50435601	12/12/2023	TP	1.32	mg/L
50551201	12/19/2023	TP	1	mg/L

**Average Concentration= 0.61** 

Maximum= 1.32

# of samples= 38

Date	Analyte	Result	Collect Time	Test Time
27-Dec-23	PH	7.42	7:00	7:10
26-Dec-23	PH	7.32	9:20	9:30
25-Dec-23	PH	7.31	9:30	9:40
24-Dec-23	PH	7.45	8:20	8:30
23-Dec-23	PH	7.62	11:00	11:10
22-Dec-23	PH	7.31	7:00	7:10
21-Dec-23	PH	7.24	7:00	7:10
20-Dec-23	PH	6.65	7:00	7:10
19-Dec-23	PH	6.95	7:00	7:10
18-Dec-23	PH	7.19	7:00	7:10
17-Dec-23	PH	7.78	11:00	11:10
16-Dec-23	PH	8.22	11:40	11:50
15-Dec-23	PH	7.6	7:40	7:50
14-Dec-23	PH	7.49	7:00	7:10
13-Dec-23	PH	7.49	7:00	7:10
12-Dec-23	PH	6.8	7:00	7:10
11-Dec-23	PH	7.44	11:30	11:40
10-Dec-23	PH	7.81	7:00	7:10
9-Dec-23	PH	7.41	6:50	7:00
8-Dec-23	PH	7.53	7:00	7:10
7-Dec-23	PH	7.3	6:50	7:00
6-Dec-23	PH	7.3	7:00	7:10
5-Dec-23	PH	7.39	7:10	7:20
4-Dec-23	PH	6.71	7:40	7:50
3-Dec-23	PH	6.92	8:05	8:10
2-Dec-23	PH	7.18	8:00	8:10
1-Dec-23	PH	7.7	7:00	7:10
30-Nov-23	PH	7.38	6:50	7:00
29-Nov-23	PH	7.35	7:15	7:25
28-Nov-23	PH	7.53	7:15	7:25
27-Nov-23	PH	7.7	7:15	7:25
26-Nov-23	PH	7.61	8:20	8:30
25-Nov-23	PH	7.49	8:15	8:25
24-Nov-23	PH	7.39	7:00	7:10
23-Nov-23	PH	7.4	6:45	6:55
22-Nov-23	PH	7.38	7:15	7:25
21-Nov-23	PH	7.41	7:00	7:10
20-Nov-23	PH	7.54	7:00	7:10
19-Nov-23	PH	7.47	6:40	6:50
18-Nov-23	PH	7.54	9:00	9:05

Date	Analyte	Result	Collect Time	Test Time
17-Nov-23	PH	7.44	6:45	6:55
16-Nov-23	PH	7.29	7:15	7:25
15-Nov-23	PH	7.46	7:15	7:25
14-Nov-23	PH	7.19	7:15	7:25
13-Nov-23	PH	7.8	7:00	7:10
12-Nov-23	PH	7.67	6:00	6:10
11-Nov-23	PH	7.76	11:30	11:40
10-Nov-23	PH	7.58	9:15	9:20
9-Nov-23	PH	7.5	7:20	7:30
8-Nov-23	PH	7.6	7:30	7:40
7-Nov-23	PH	7.38	7:20	7:30
6-Nov-23	PH	7.95	8:30	8:40
5-Nov-23	PH	7.68	7:30	7:40
4-Nov-23	PH	7.61	7:40	7:50
3-Nov-23	PH	7.72	6:45	6:55
2-Nov-23	PH	7.86	6:00	6:05
1-Nov-23	PH	7.8	6:45	6:55
31-Oct-23	PH	7.88	6:50	7:00
30-Oct-23	PH	7.77	6:50	7:00
29-Oct-23	PH	7.3	11:30	11:40
28-Oct-23	PH	7.4	7:30	7:40
27-Oct-23	PH	7.4	6:50	7:00
26-Oct-23	PH	7.9	6:30	6:40
25-Oct-23	PH	7.53	7:30	7:40
24-Oct-23	PH	7.6	7:00	7:10
23-Oct-23	PH	7.62	7:50	7:55
22-Oct-23	PH	7.21	11:50	11:55
21-Oct-23	PH	7.32	8:00	8:05
20-Oct-23	PH	7.26	6:45	6:55
19-Oct-23	PH	7.49	7:20	7:30
18-Oct-23	PH	6.8	7:20	7:30
17-Oct-23	PH	7.08	7:20	7:30
16-Oct-23	PH	7.38	7:00	7:10
15-Oct-23	PH	7.15	12:20	12:25
14-Oct-23	PH	7.38	10:20	10:25
13-Oct-23	PH	7.53	7:20	7:30
12-Oct-23	PH	7.94	7:20	7:30
11-Oct-23	PH	7.71	7:30	7:40
10-Oct-23	PH	7.63	8:00	8:10
9-Oct-23	PH	7.58	8:00	8:10

Date	Analyte	Result	Collect Time	Test Time
8-Oct-23	PH	7.56	6:45	6:55
7-Oct-23	PH	7.8	7:30	7:40
6-Oct-23	PH	7.51	8:00	8:10
5-Oct-23	PH	7.12	8:00	8:10
4-Oct-23	PH	7.2	7:30	7:40
3-Oct-23	PH	7.8	7:10	7:20
2-Oct-23	PH	7.5	7:15	7:25
1-Oct-23	PH	7.66	7:20	7:30
30-Sep-23	PH	7.56	7:30	7:40
29-Sep-23	PH	7.5	7:30	7:40
28-Sep-23	PH	7.35	12:30	12:35
27-Sep-23	PH	7.08	11:35	11:40
26-Sep-23	PH	7.17	10:40	10:50
25-Sep-23	PH	7.5	7:30	7:45
24-Sep-23	PH	7.6	7:15	7:25
23-Sep-23	PH	7.6	12:40	12:50
22-Sep-23	PH	7.4	7:40	7:50
21-Sep-23	PH	7.4	7:50	8:00
20-Sep-23	PH	7.5	7:30	7:40
19-Sep-23	PH	7.5	7:40	7:50
18-Sep-23	PH	7.6	8:30	8:40
17-Sep-23	PH	7.5	6:30	6:40
16-Sep-23	PH	7.4	12:20	12:30
15-Sep-23	PH	7.4	7:30	7:40
14-Sep-23	PH	7.5	7:10	7:20
13-Sep-23	PH	7.6	7:00	7:10
12-Sep-23	PH	7.6	7:00	7:10
11-Sep-23	PH	7.6	7:00	7:10
10-Sep-23	PH	7.4	6:40	6:50
9-Sep-23	PH	7.4	6:40	6:50
8-Sep-23	PH	7.4	7:30	7:40
7-Sep-23	PH	7.2	7:30	7:40
6-Sep-23	PH	7.3	7:30	7:40
5-Sep-23	PH	7.4	7:50	8:00
4-Sep-23	PH	7.3	7:00	7:10
3-Sep-23	PH	7.3	7:10	7:20
2-Sep-23	PH	7.1	7:05	7:15
1-Sep-23	PH	7.4	8:00	8:10
31-Aug-23	PH	7.5	7:50	8:00
30-Aug-23	PH	7.8	7:40	7:50

Field Weasurements of ph					
Date	Analyte	Result	Collect Time	Test Time	
29-Aug-23	PH	7.3	7:40	7:50	
28-Aug-23	PH	7.4	7:20	7:30	
27-Aug-23	PH	7.2	9:50	9:55	
26-Aug-23	PH	7.3	9:20	9:30	
25-Aug-23	PH	7.4	7:30	7:40	
24-Aug-23	PH	7.3	7:40	7:50	
23-Aug-23	PH	7.4	7:40	7:50	
22-Aug-23	PH	7.5	7:55	8:00	
21-Aug-23	PH	7.5	7:30	7:40	
20-Aug-23	PH	7.6	6:30	6:35	
19-Aug-23	PH	7.8	12:30	12:40	
18-Aug-23	PH	7.6	7:40	7:50	
17-Aug-23	PH	7.5	7:40	7:50	
16-Aug-23	PH	7.4	7:50	8:00	
15-Aug-23	PH	7.1	7:40	7:50	
14-Aug-23	PH	6.9	8:00	8:10	
13-Aug-23	PH	7	7:15	7:25	
12-Aug-23	PH	7.6	7:40	7:50	
11-Aug-23	PH	7.5	8:00	8:10	
10-Aug-23	PH	7.5	8:00	8:10	
9-Aug-23	PH	7.2	8:30	8:40	
8-Aug-23	PH	7.2	8:00	8:10	
7-Aug-23	PH	7.2	8:00	8:10	
6-Aug-23	PH	7.4	11:00	11:10	
5-Aug-23	PH	7.5	11:20	11:30	
4-Aug-23	PH	7.4	7:00	7:10	
3-Aug-23	PH	7.4	7:20	7:30	
2-Aug-23	PH	7.5	7:45	7:55	
1-Aug-23	PH	7.3	7:50	8:00	
31-Jul-23	PH	7.6	8:00	8:10	
30-Jul-23	PH	7.6	6:50	7:00	
29-Jul-23	PH	7.7	7:15	7:25	
28-Jul-23	PH	7.5	7:30	7:40	
27-Jul-23	PH	7.8	8:00	8:10	
26-Jul-23	PH	7.9	7:30	7:40	
25-Jul-23	PH	7.8	7:30	7:40	
24-Jul-23	PH	7.6	7:30	7:30	
23-Jul-23	PH	7.4	7:10	7:20	
22-Jul-23	PH	7.5	6:50	7:00	
21-Jul-23	PH	7.5	7:40	7:50	

Date	Analyte	Result	Collect Time	Test Time
20-Jul-23	PH	7.1	7:30	7:40
19-Jul-23	PH	7.6	8:00	8:10
18-Jul-23	PH	7.3	7:30	7:40
17-Jul-23	PH	7.8	7:55	8:05
16-Jul-23	PH	7.5	7:55	8:05
15-Jul-23	PH	7.6	7:55	8:05
14-Jul-23	PH	7.8	9:00	9:10
13-Jul-23	PH	7.2	8:00	8:10
12-Jul-23	PH	7.3	8:00	8:10
11-Jul-23	PH	7.5	8:00	8:10
10-Jul-23	PH	7.4	8:00	8:10
9-Jul-23	PH	7.7	7:00	7:10
8-Jul-23	PH	7.7	7:00	7:10
7-Jul-23	PH	7.5	7:30	7:40
6-Jul-23	PH	7.7	7:00	7:10
5-Jul-23	PH	7.5	7:30	7:40
4-Jul-23	PH	7.8	10:00	10:10
3-Jul-23	PH	7.7	8:00	8:10
2-Jul-23	PH	7.5	9:00	9:10
1-Jul-23	PH	7.8	9:00	9:10
30-Jun-23	PH	7.8	7:30	7:40
29-Jun-23	PH	7.7	7:00	7:10
28-Jun-23	PH	7.9	8:00	8:10
27-Jun-23	PH	7.9	8:40	8:50
26-Jun-23	PH	7.9	8:30	8:40
25-Jun-23	PH	7.4	7:00	7:10
24-Jun-23	PH	7.7	7:00	7:10
23-Jun-23	PH	7.7	7:15	7:25
22-Jun-23	PH	7.4	8:30	8:40
21-Jun-23	PH	7.7	7:00	7:10
20-Jun-23	PH	7.6	7:30	7:40
19-Jun-23	PH	7.6	7:15	7:20
18-Jun-23	PH	7.7	6:40	6:50
17-Jun-23	PH	7.6	15:50	16:00
16-Jun-23	PH	7.4	7:30	7:40
15-Jun-23	PH	7.5	9:00	9:10
14-Jun-23	PH	7.5	8:00	8:10
13-Jun-23	PH	7.7	7:15	7:20
12-Jun-23	PH	7.5	7:30	7:40
11-Jun-23	PH	7.6	8:30	8:40

Date	Analyte	Result	Collect Time	Test Time
10-Jun-23	PH	8.3	9:30	9:40
9-Jun-23	PH	7.6	7:50	7:55
8-Jun-23	PH	7.4	7:15	7:20
7-Jun-23	PH	7.6	7:15	7:20
6-Jun-23	PH	7.5	7:00	7:10
5-Jun-23	PH	7.7	7:00	7:10
4-Jun-23	PH	7.8	11:20	11:30
3-Jun-23	PH	7.8	12:30	12:40
2-Jun-23	PH	7.7	7:10	7:20
1-Jun-23	PH	7.8	7:00	7:10
31-May-23	PH	7.5	7:00	7:10
30-May-23	PH	7.6	8:00	8:10
29-May-23	PH	7.7	7:40	7:50
28-May-23	PH	7.7	9:00	9:10
27-May-23	PH	7.6	9:00	9:10
26-May-23	PH	7.7	7:00	7:10
25-May-23	PH	7.7	7:00	7:10
24-May-23	PH	7.8	7:00	7:10
23-May-23	PH	7.4	7:00	7:10
22-May-23	PH	7.5	7:00	7:10
21-May-23	PH	7.8	7:15	7:25
20-May-23	PH	7.8	6:30	6:40
19-May-23	PH	7.7	7:10	7:20
18-May-23	PH	7.8	7:20	7:30
17-May-23	PH	7.8	7:30	7:40
16-May-23	PH	7.8	7:10	7:20
15-May-23	PH	7.7	7:30	7:40
14-May-23	PH	7.4	6:55	7:05
13-May-23	PH	7.6	7:50	8:00
12-May-23	PH	7.8	7:00	7:10
11-May-23	PH	7.7	7:00	7:10
10-May-23	PH	7.6	7:00	7:10
9-May-23	PH	7.4	7:00	7:10
8-May-23	PH	7.6	7:20	7:30
7-May-23	PH	7.8	9:00	9:05
6-May-23	PH	7.7	12:30	12:40
5-May-23	PH	7.7	9:15	9:25
4-May-23	PH	8.1	7:10	7:20
3-May-23	PH	8	7:10	7:20
2-May-23	PH	7.9	7:30	7:40

Date	Analyte	Result	Collect Time	Test Time
1-May-23	PH	7.7	7:30	7:40
30-Apr-23	PH	7.8	9:00	9:10
29-Apr-23	PH	7.8	9:00	9:10
28-Apr-23	PH	7.5	7:00	7:10
27-Apr-23	PH	7.8	7:10	7:20
26-Apr-23	PH	7	7:00	7:10
25-Apr-23	PH	7.4	7:00	7:10
24-Apr-23	PH	7.3	7:10	7:20
23-Apr-23	PH	7.7	12:30	12:40
22-Apr-23	PH	7.5	6:40	6:50
21-Apr-23	PH	7.7	2:50	3:00
20-Apr-23	PH	7.6	7:00	7:10
19-Apr-23	PH	7.6	7:00	7:10
18-Apr-23	PH	7.6	7:00	7:10
17-Apr-23	PH	7.5	7:00	7:10
16-Apr-23	PH	7.5	13:00	13:10
15-Apr-23	PH	7.4	7:00	7:10
14-Apr-23	PH	7.1	11:40	11:50
13-Apr-23	PH	7.4	11:20	11:30
12-Apr-23	PH	7.4	11:30	11:40
11-Apr-23	PH	7.3	7:30	7:40
10-Apr-23	PH	7.5	7:40	7:50
9-Apr-23	PH	7.6	9:10	9:15
8-Apr-23	PH	7.6	12:00	12:10
7-Apr-23	PH	7.4	8:00	8:10
6-Apr-23	PH	7.5	8:00	8:10
5-Apr-23	PH	7.9	7:20	7:30
4-Apr-23	PH	7.3	7:40	7:45
3-Apr-23	PH	7	9:00	9:10
2-Apr-23	PH	7.4	12:45	12:55
1-Apr-23	PH	7.3	12:45	12:55
31-Mar-23	PH	7.2	8:45	8:55
27-Mar-23	PH	7.1	7:40	7:50
26-Mar-23	PH	7.4	9:00	9:10
25-Mar-23	PH	7.3	8:45	8:50
24-Mar-23	PH	7.3	7:30	7:40
23-Mar-23	PH	7	7:30	7:40
22-Mar-23	PH	7.4	7:20	7:30
21-Mar-23	PH	7.5	7:30	7:40
20-Mar-23	PH	7.6	8:40	8:50

### Pollutant Analysis of Treated Effluent Field Measurements of pH

Date	Analyte	Result	Collect Time	Test Time
19-Mar-23	PH	7.4	7:30	7:40
18-Mar-23	PH	7.4	7:20	7:30
17-Mar-23	PH	7.4	11:20	11:30
16-Mar-23	PH	7.4	7:30	7:40
15-Mar-23	PH	7.3	7:20	7:30
14-Mar-23	PH	7.4	7:10	7:20
13-Mar-23	PH	7.4	7:30	7:40
12-Mar-23	PH	7.2	7:05	7:15
11-Mar-23	PH	7	7:15	7:25
10-Mar-23	PH	7.6	7:30	7:40
9-Mar-23	PH	7.4	7:00	7:10
8-Mar-23	PH	7.5	7:20	7:30
7-Mar-23	PH	7.5	7:15	7:25
6-Mar-23	PH	7.3	8:30	8:40
5-Mar-23	PH	7.4	11:30	11:45
4-Mar-23	PH	7.7	7:00	7:10
3-Mar-23	PH	7.4	9:15	9:25
2-Mar-23	PH	7.5	7:00	7:10
1-Mar-23	PH	7.6	7:00	7:10

Average Conc.= 7.5

**Maximum Concentration=** 8.3

# of samples= 299

Field Measurements of Dissolved Oxygen				
Date	Analyte	Result	Collect Time	Test Time
27-Dec-23	DO	9.25	7:00	7:10
26-Dec-23	DO	9.36	9:20	9:30
25-Dec-23	DO	8.72	9:30	9:40
24-Dec-23	DO	8.24	8:20	8:30
23-Dec-23	DO	8.33	11:00	11:10
22-Dec-23	DO	8.64	7:00	7:10
21-Dec-23	DO	8.44	7:00	7:10
20-Dec-23	DO	8.81	7:00	7:10
19-Dec-23	DO	9.13	7:00	7:10
18-Dec-23	DO	9.22	7:00	7:10
17-Dec-23	DO	8.64	11:00	11:10
16-Dec-23	DO	8.71	11:40	11:50
15-Dec-23	DO	8.95	7:40	7:50
14-Dec-23	DO	8.9	7:00	7:10
13-Dec-23	DO	8.93	7:00	7:10
12-Dec-23	DO	9.1	7:00	7:10
11-Dec-23	DO	8.79	11:30	11:40
10-Dec-23	DO	9.22	7:00	7:10
9-Dec-23	DO	8.22	6:50	7:00
8-Dec-23	DO	8.36	7:00	7:10
7-Dec-23	DO	8.68	6:50	7:00
6-Dec-23	DO	8.92	7:00	7:10
5-Dec-23	DO	8.8	7:10	7:20
4-Dec-23	DO	9.18	7:40	7:50
3-Dec-23	DO	9.32	8:05	8:10
2-Dec-23	DO	8.84	8:00	8:10
1-Dec-23	DO	8.71	7:00	7:10
30-Nov-23	DO	8.68	6:50	7:00
29-Nov-23	DO	9.06	7:15	7:25
28-Nov-23	DO	8.95	7:15	7:25
27-Nov-23	DO	8.99	7:15	7:25
26-Nov-23	DO	8.82	8:20	8:30
25-Nov-23	DO	8.62	8:15	8:25
24-Nov-23	DO	9.15	7:00	7:10
23-Nov-23	DO	8.7	6:45	6:55
22-Nov-23	DO	8.57	7:15	7:25
21-Nov-23	DO	8.31	7:00	7:10
20-Nov-23	DO	8.29	7:00	7:10

Date	Analyte	Result	Collect Time	Test Time
19-Nov-23	DO	8.52	6:40	6:50
18-Nov-23	DO	8.57	9:00	9:05
17-Nov-23	DO	8.55	6:45	6:55
16-Nov-23	DO	8.62	7:15	7:25
15-Nov-23	DO	8.49	7:15	7:25
14-Nov-23	DO	8.61	7:15	7:25
13-Nov-23	DO	8.6	7:00	7:10
12-Nov-23	DO	8.94	6:00	6:10
11-Nov-23	DO	8.7	11:30	11:40
10-Nov-23	DO	8.05	9:15	9:20
9-Nov-23	DO	8.26	7:20	7:30
8-Nov-23	DO	8.2	7:30	7:40
7-Nov-23	DO	8.3	7:20	7:30
6-Nov-23	DO	8.7	8:30	8:40
5-Nov-23	DO	8.53	7:30	7:40
4-Nov-23	DO	8.85	7:40	7:50
3-Nov-23	DO	9.1	6:45	6:55
2-Nov-23	DO	9.03	6:00	6:05
1-Nov-23	DO	9.14	6:45	6:55
31-Oct-23	DO	9.14	6:50	7:00
30-Oct-23	DO	8.96	6:50	7:00
29-Oct-23	DO	7.8	11:30	11:40
28-Oct-23	DO	7.75	7:30	7:40
27-Oct-23	DO	7.45	6:50	7:00
26-Oct-23	DO	7.98	6:30	6:40
25-Oct-23	DO	7.8	7:30	7:40
24-Oct-23	DO	7.57	7:00	7:10
23-Oct-23	DO	8.1	7:50	7:55
22-Oct-23	DO	8.15	11:50	11:55
21-Oct-23	DO	8.56	8:00	8:05
20-Oct-23	DO	8.3	6:45	6:55
19-Oct-23	DO	8.5	7:20	7:30
18-Oct-23	DO	8.8	7:20	7:30
17-Oct-23	DO	8.38	7:20	7:30
16-Oct-23	DO	8.27	7:00	7:10
15-Oct-23	DO	7.04	12:20	12:25
14-Oct-23	DO	8.28	10:20	10:25
13-Oct-23	DO	8.1	7:20	7:30
12-Oct-23	DO	8.2	7:20	7:30
11-Oct-23	DO	8.11	7:30	7:40

Field Measurements of Dissolved Oxygen				
Date	Analyte	Result	Collect Time	Test Time
10-Oct-23	DO	7.86	8:00	8:10
9-Oct-23	DO	8.6	8:00	8:10
8-Oct-23	DO	8.2	6:45	6:55
7-Oct-23	DO	7.5	7:30	7:40
6-Oct-23	DO	7.31	8:00	8:10
5-Oct-23	DO	7.6	8:00	8:10
4-Oct-23	DO	7.2	7:30	7:40
3-Oct-23	DO	7.8	7:10	7:20
2-Oct-23	DO	7.9	7:15	7:25
1-Oct-23	DO	7.67	7:20	7:30
30-Sep-23	DO	7.64	7:30	7:40
29-Sep-23	DO	7.95	7:30	7:40
28-Sep-23	DO	8.1	12:30	12:35
27-Sep-23	DO	7.85	11:35	11:40
26-Sep-23	DO	7.55	10:40	10:50
25-Sep-23	DO	6.63	7:30	7:45
24-Sep-23	DO	7.48	7:15	7:25
23-Sep-23	DO	7.64	12:40	12:50
22-Sep-23	DO	7.36	7:40	7:50
21-Sep-23	DO	7.19	7:50	8:00
20-Sep-23	DO	7.28	7:30	7:40
19-Sep-23	DO	7.1	7:40	7:50
18-Sep-23	DO	7.85	8:30	8:40
17-Sep-23	DO	7.6	6:30	6:40
16-Sep-23	DO	7.4	12:20	12:30
15-Sep-23	DO	7.2	7:30	7:40
14-Sep-23	DO	7.26	7:10	7:20
13-Sep-23	DO	7.4	7:00	7:10
12-Sep-23	DO	7.1	7:00	7:10
11-Sep-23	DO	6.3	7:00	7:10
10-Sep-23	DO	5.12	6:40	6:50
9-Sep-23	DO	5.7	6:40	6:50
8-Sep-23	DO	6.9	7:30	7:40
7-Sep-23	DO	6.7	7:30	7:40
6-Sep-23	DO	5.6	7:30	7:40
5-Sep-23	DO	6.64	7:50	8:00
4-Sep-23	DO	5.9	7:00	7:10
3-Sep-23	DO	7.29	7:10	7:20
2-Sep-23	DO	7.43	7:05	7:15
1-Sep-23	DO	7.14	8:00	8:10

Date	Analyte	Result	Collect Time	Test Time
31-Aug-23	DO	7.01	7:50	8:00
30-Aug-23	DO	7.48	7:40	7:50
29-Aug-23	DO	7.01	7:40	7:50
28-Aug-23	DO	6.92	7:20	7:30
27-Aug-23	DO	6.05	9:50	9:55
26-Aug-23	DO	6.78	9:20	9:30
25-Aug-23	DO	7.18	7:30	7:40
24-Aug-23	DO	6.8	7:40	7:50
23-Aug-23	DO	6.75	7:40	7:50
22-Aug-23	DO	5.76	7:55	8:00
21-Aug-23	DO	6.87	7:30	7:40
20-Aug-23	DO	5.9	6:30	6:35
19-Aug-23	DO	7.12	12:30	12:40
18-Aug-23	DO	7.03	7:40	7:50
17-Aug-23	DO	7.22	7:40	7:50
16-Aug-23	DO	7.23	7:50	8:00
15-Aug-23	DO	7.43	7:40	7:50
14-Aug-23	DO	7.41	8:00	8:10
13-Aug-23	DO	7.44	7:15	7:25
12-Aug-23	DO	7.25	7:40	7:50
11-Aug-23	DO	6.88	8:00	8:10
10-Aug-23	DO	7.51	8:00	8:10
9-Aug-23	DO	7.53	8:30	8:40
8-Aug-23	DO	7.21	8:00	8:10
7-Aug-23	DO	6.72	8:00	8:10
6-Aug-23	DO	6.58	11:00	11:10
5-Aug-23	DO	6.41	11:20	11:30
4-Aug-23	DO	6.93	7:00	7:10
3-Aug-23	DO	7.42	7:20	7:30
2-Aug-23	DO	7.28	7:45	7:55
1-Aug-23	DO	6.37	7:50	8:00
31-Jul-23	DO	7.1	8:00	8:10
30-Jul-23	DO	6.53	6:50	7:00
29-Jul-23	DO	7.06	7:15	7:25
28-Jul-23	DO	7.39	7:30	7:40
27-Jul-23	DO	6.68	8:00	8:10
26-Jul-23	DO	6.91	7:30	7:40
25-Jul-23	DO	7.04	7:30	7:40
24-Jul-23	DO	6.9	7:30	7:30
23-Jul-23	DO	6.85	7:10	7:20

Date	Analyte	Result	Collect Time	Test Time
22-Jul-23	DO	8.35	6:50	7:00
21-Jul-23	DO	6.39	7:40	7:50
20-Jul-23	DO	7.1	7:30	7:40
19-Jul-23	DO	7.85	8:00	8:10
18-Jul-23	DO	7.06	7:30	7:40
17-Jul-23	DO	6.61	7:55	8:05
16-Jul-23	DO	6.95	7:55	8:05
15-Jul-23	DO	7	7:55	8:05
14-Jul-23	DO	7.66	9:00	9:10
13-Jul-23	DO	6.45	8:00	8:10
12-Jul-23	DO	7.56	8:00	8:10
11-Jul-23	DO	7.64	8:00	8:10
10-Jul-23	DO	7.6	8:00	8:10
9-Jul-23	DO	7.4	7:00	7:10
8-Jul-23	DO	6.88	7:00	7:10
7-Jul-23	DO	7.3	7:30	7:40
6-Jul-23	DO	7.4	7:00	7:10
5-Jul-23	DO	7.2	7:30	7:40
4-Jul-23	DO	7.8	10:00	10:10
3-Jul-23	DO	7.2	8:00	8:10
2-Jul-23	DO	7.82	9:00	9:10
1-Jul-23	DO	7.71	9:00	9:10
30-Jun-23	DO	6.8	7:30	7:40
29-Jun-23	DO	6.7	7:00	7:10
28-Jun-23	DO	6.6	8:00	8:10
27-Jun-23	DO	6.75	8:40	8:50
26-Jun-23	DO	6.5	8:30	8:40
25-Jun-23	DO	6.4	7:00	7:10
24-Jun-23	DO	6.9	7:00	7:10
23-Jun-23	DO	6.85	7:15	7:25
22-Jun-23	DO	6.9	8:30	8:40
21-Jun-23	DO	6.8	7:00	7:10
20-Jun-23	DO	6.97	7:30	7:40
19-Jun-23	DO	7.2	7:15	7:20
18-Jun-23	DO	7.1	6:40	6:50
17-Jun-23	DO	7.6	15:50	16:00
16-Jun-23	DO	7.8	7:30	7:40
15-Jun-23	DO	7.54	9:00	9:10
14-Jun-23	DO	7.46	8:00	8:10
13-Jun-23	DO	7.2	7:15	7:20

Date	Analyte	Result	Collect	Test Time
- Date	_		Time	Test Time
12-Jun-23	DO	7.55	7:30	7:40
11-Jun-23	DO	7.78	8:30	8:40
10-Jun-23	DO	7.84	9:30	9:40
9-Jun-23	DO	7.5	7:50	7:55
8-Jun-23	DO	7.9	7:15	7:20
7-Jun-23	DO	7.61	7:15	7:20
6-Jun-23	DO	7.42	7:00	7:10
5-Jun-23	DO	7.63	7:00	7:10
4-Jun-23	DO	8.02	11:20	11:30
3-Jun-23	DO	7.36	12:30	12:40
2-Jun-23	DO	7.75	7:10	7:20
1-Jun-23	DO	7.3	7:00	7:10
31-May-23	DO	7.9	7:00	7:10
30-May-23	DO	7.47	8:00	8:10
29-May-23	DO	8.56	7:40	7:50
28-May-23	DO	8.45	9:00	9:10
27-May-23	DO	8.47	9:00	9:10
26-May-23	DO	8.15	7:00	7:10
25-May-23	DO	7.7	7:00	7:10
24-May-23	DO	7.6	7:00	7:10
23-May-23	DO	7.4	7:00	7:10
22-May-23	DO	7.2	7:00	7:10
21-May-23	DO	7.48	7:15	7:25
20-May-23	DO	7.71	6:30	6:40
19-May-23	DO	7.9	7:10	7:20
18-May-23	DO	8.3	7:20	7:30
17-May-23	DO	8.11	7:30	7:40
16-May-23	DO	7.8	7:10	7:20
15-May-23	DO	7.7	7:30	7:40
14-May-23	DO	7.2	6:55	7:05
13-May-23	DO	7.99	7:50	8:00
12-May-23	DO	8.25	7:00	7:10
11-May-23	DO	8.1	7:00	7:10
10-May-23	DO	7.8	7:00	7:10
9-May-23	DO	7.7	7:00	7:10
8-May-23	DO	8.1	7:20	7:30
7-May-23	DO	7.73	9:00	9:05
6-May-23	DO	8.23	12:30	12:40
5-May-23	DO	8.05	9:15	9:25
4-May-23	DO	8.1	7:10	7:20

Date	Analyte	Result	Collect	Test Time
3-May-23	DO	8.4	7:10	7:20
2-May-23	DO	8.5	7:30	7:40
1-May-23	DO	7.95	7:30	7:40
30-Apr-23	DO	8.91	9:00	9:10
29-Apr-23	DO	8.9	9:00	9:10
28-Apr-23	DO	7.8	7:00	7:10
27-Apr-23	DO	8.02	7:10	7:20
26-Apr-23	DO	7.9	7:00	7:10
25-Apr-23	DO	8.3	7:00	7:10
24-Apr-23	DO	7.87	7:10	7:20
23-Apr-23	DO	8.91	12:30	12:40
22-Apr-23	DO	8	6:40	6:50
21-Apr-23	DO	8.1	2:50	3:00
20-Apr-23	DO	8.2	7:00	7:10
19-Apr-23	DO	7.9	7:00	7:10
18-Apr-23	DO	8.2	7:00	7:10
17-Apr-23	DO	8.1	7:00	7:10
16-Apr-23	DO	8.9	13:00	13:10
15-Apr-23	DO	7.9	7:00	7:10
14-Apr-23	DO	8.3	11:40	11:50
13-Apr-23	DO	8.1	11:20	11:30
12-Apr-23	DO	8.2	11:30	11:40
11-Apr-23	DO	8.41	7:30	7:40
10-Apr-23	DO	8.4	7:40	7:50
9-Apr-23	DO	9.14	9:10	9:15
8-Apr-23	DO	9.36	12:00	12:10
7-Apr-23	DO	8.2	8:00	8:10
6-Apr-23	DO	7.83	8:00	8:10
5-Apr-23	DO	7.14	7:20	7:30
4-Apr-23	DO	8.07	7:40	7:45
3-Apr-23	DO	7.7	9:00	9:10
2-Apr-23	DO	4.33	12:45	12:55
1-Apr-23	DO	4.76	12:45	12:55
31-Mar-23	DO	7.8	8:45	8:55
27-Mar-23	DO	7.3	7:40	7:50
26-Mar-23	DO	8.97	9:00	9:10
25-Mar-23	DO	8.73	8:45	8:50
24-Mar-23	DO	6.4	7:30	7:40
23-Mar-23	DO	8.1	7:30	7:40
22-Mar-23	DO	8.3	7:20	7:30

### Pollutant Analysis of Treated Effluent Field Measurements of Dissolved Oxygen

Date	Analyte	Result	Collect Time	Test Time
21-Mar-23	DO	8.6	7:30	7:40
20-Mar-23	DO	9.12	8:40	8:50
19-Mar-23	DO	8.92	7:30	7:40
18-Mar-23	DO	8.7	7:20	7:30
17-Mar-23	DO	9.1	11:20	11:30
16-Mar-23	DO	8.4	7:30	7:40
15-Mar-23	DO	8.5	7:20	7:30
14-Mar-23	DO	8.54	7:10	7:20
13-Mar-23	DO	7.8	7:30	7:40
12-Mar-23	DO	7.89	7:05	7:15
11-Mar-23	DO	9.14	7:15	7:25
10-Mar-23	DO	8.51	7:30	7:40
9-Mar-23	DO	8.02	7:00	7:10
8-Mar-23	DO	8.1	7:20	7:30
7-Mar-23	DO	8.12	7:15	7:25
6-Mar-23	DO	8.62	8:30	8:40
5-Mar-23	DO	9.02	11:30	11:45
4-Mar-23	DO	8.81	7:00	7:10
3-Mar-23	DO	8.9	9:15	9:25
2-Mar-23	DO	8.06	7:00	7:10
1-Mar-23	DO	8.25	7:00	7:10

Average Conc.= 7.8

Maximum Concentration= 9.4

# of samples= 299

### Pollutant Analysis of Treated Effluent Field Measurements of Chlorine Residuals

			Callant Time	
Date	Analyte	Result	Collect Time	Test Time
27-Dec-23	CL2	2.6	7:00	7:10
26-Dec-23	CL2	1.4	9:20	9:30
25-Dec-23	CL2	1.17	9:30	9:40
24-Dec-23	CL2	1.4	8:20	8:30
23-Dec-23	CL2	1.18	11:00	11:10
22-Dec-23	CL2	2.2	7:00	7:10
21-Dec-23	CL2	2.3	7:00	7:10
20-Dec-23	CL2	2.2	7:00	7:10
19-Dec-23	CL2	1.9	7:00	7:10
18-Dec-23	CL2	2.1	7:00	7:10
17-Dec-23	CL2	1.61	11:00	11:10
16-Dec-23	CL2	1.45	11:40	11:50
15-Dec-23	CL2	3	7:40	7:50
14-Dec-23	CL2	1.3	7:00	7:10
13-Dec-23	CL2	1.9	7:00	7:10
12-Dec-23	CL2	2.9	7:00	7:10
11-Dec-23	CL2	2.6	11:30	11:40
10-Dec-23	CL2	1.9	7:00	7:10
9-Dec-23	CL2	3.4	6:50	7:00
8-Dec-23	CL2	2.1	7:00	7:10
7-Dec-23	CL2	1.3	6:50	7:00
6-Dec-23	CL2	1.9	7:00	7:10
5-Dec-23	CL2	2.4	7:10	7:20
4-Dec-23	CL2	1.7	7:40	7:50
3-Dec-23	CL2	1	8:05	8:10
2-Dec-23	CL2	3.4	8:00	8:10
1-Dec-23	CL2	3.5	7:00	7:10
30-Nov-23	CL2	4	6:50	7:00
29-Nov-23	CL2	3	7:15	7:25
28-Nov-23	CL2	3.2	7:15	7:25
27-Nov-23	CL2	3.4	7:15	7:25
26-Nov-23	CL2	3.3	8:20	8:30
25-Nov-23	CL2	2.6	8:15	8:25
24-Nov-23	CL2	2.7	7:00	7:10
23-Nov-23	CL2	1.9	6:45	6:55
22-Nov-23	CL2	2.1	7:15	7:25
21-Nov-23	CL2	2.1	7:00	7:10
20-Nov-23	CL2	3	7:00	7:10
19-Nov-23	CL2	1.84	6:40	6:50
18-Nov-23	CL2	1.08	9:00	9:05

### Pollutant Analysis of Treated Effluent Field Measurements of Chlorine Residuals

	Analyte		Collect Time	Test Time
Date	-	Result	Collect Time	
17-Nov-23	CL2	1.8	6:45	6:55
16-Nov-23	CL2	1.6	7:15	7:25
15-Nov-23	CL2	1.4	7:15	7:25
14-Nov-23	CL2	1.2	7:15	7:25
13-Nov-23	CL2	1.7	7:00	7:10
12-Nov-23	CL2	4	6:00	6:10
11-Nov-23	CL2	3.8	11:30	11:40
10-Nov-23	CL2	3.9	9:15	9:20
9-Nov-23	CL2	3.7	7:20	7:30
8-Nov-23	CL2	1.3	7:30	7:40
7-Nov-23	CL2	4	7:20	7:30
6-Nov-23	CL2	4	8:30	8:40
5-Nov-23	CL2	3.9	7:30	7:40
4-Nov-23	CL2	1	7:40	7:50
3-Nov-23	CL2	2.9	6:45	6:55
2-Nov-23	CL2	4	6:00	6:05
1-Nov-23	CL2	1.5	6:45	6:55
31-Oct-23	CL2	2.1	6:50	7:00
30-Oct-23	CL2	1.6	6:50	7:00
29-Oct-23	CL2	1.6	11:30	11:40
28-Oct-23	CL2	1.3	7:30	7:40
27-Oct-23	CL2	1	6:50	7:00
26-Oct-23	CL2	1	6:30	6:40
25-Oct-23	CL2	1	7:30	7:40
24-Oct-23	CL2	1	7:00	7:10
23-Oct-23	CL2	1.1	7:50	7:55
22-Oct-23	CL2	1.2	11:50	11:55
21-Oct-23	CL2	1.5	8:00	8:05
20-Oct-23	CL2	2.6	6:45	6:55
19-Oct-23	CL2	1.4	7:20	7:30
18-Oct-23	CL2	1.5	7:20	7:30
17-Oct-23	CL2	1	7:20	7:30
16-Oct-23	CL2	1.9	7:00	7:10
15-Oct-23	CL2	3.7	12:20	12:25
14-Oct-23	CL2	1.94	10:20	10:25
13-Oct-23	CL2	2.8	7:20	7:30
12-Oct-23	CL2	4	7:20	7:30
11-Oct-23	CL2	4	7:30	7:40
10-Oct-23	CL2	4	8:00	8:10
9-Oct-23	CL2	4	8:00	8:10

Date	Analyte	Result	Collect Time	Test Time
8-Oct-23	CL2	3.9	6:45	6:55
7-Oct-23	CL2	4	7:30	7:40
6-Oct-23	CL2	2.6	8:00	8:10
5-Oct-23	CL2	1.2	8:00	8:10
4-Oct-23	CL2	1.1	7:30	7:40
3-Oct-23	CL2	1.2	7:10	7:20
2-Oct-23	CL2	1.1	7:15	7:25
1-Oct-23	CL2	1	7:20	7:30
30-Sep-23	CL2	1.1	7:30	7:40
29-Sep-23	CL2	1.6	7:30	7:40
28-Sep-23	CL2	2.1	12:30	12:35
27-Sep-23	CL2	2.9	11:35	11:40
26-Sep-23	CL2	3.5	10:40	10:50
25-Sep-23	CL2	1	7:30	7:45
24-Sep-23	CL2	1	7:15	7:25
23-Sep-23	CL2	1.3	12:40	12:50
22-Sep-23	CL2	1.5	7:40	7:50
21-Sep-23	CL2	1	7:50	8:00
20-Sep-23	CL2	3	7:30	7:40
19-Sep-23	CL2	1.7	7:40	7:50
18-Sep-23	CL2	1.1	8:30	8:40
17-Sep-23	CL2	1.1	6:30	6:40
16-Sep-23	CL2	3.9	3.9 12:20	
15-Sep-23	CL2	2.9	7:30	7:40
14-Sep-23	CL2	2.1	7:10	7:20
13-Sep-23	CL2	3.8	7:00	7:10
12-Sep-23	CL2	2.8	7:00	7:10
11-Sep-23	CL2	2.7	7:00	7:10
10-Sep-23	CL2	1.4	6:40	6:50
9-Sep-23	CL2	2.5	6:40	6:50
8-Sep-23	CL2	2.6	7:30	7:40
7-Sep-23	CL2	3.8	7:30	7:40
6-Sep-23	CL2	1.9	7:30	7:40
5-Sep-23	CL2	1	7:50	8:00
4-Sep-23	CL2	1.1	7:00	7:10
3-Sep-23	CL2	1	7:10	7:20
2-Sep-23	CL2	1.2	7:05	7:15
1-Sep-23	CL2	1.9	8:00	8:10
31-Aug-23	CL2	1.3	7:50	8:00
30-Aug-23	CL2	1.2	7:40	7:50

Date	Analyte	Result	Collect Time	Test Time
29-Aug-23	CL2	1	7:40	7:50
28-Aug-23	CL2	1	7:20	7:30
27-Aug-23	CL2	1.05	9:50	9:55
26-Aug-23	CL2	1.56	9:20	9:30
25-Aug-23	CL2	2.6	7:30	7:40
24-Aug-23	CL2	1.2	7:40	7:50
23-Aug-23	CL2	2.4	7:40	7:50
22-Aug-23	CL2	1.4	7:55	8:00
21-Aug-23	CL2	1	7:30	7:40
20-Aug-23	CL2	1.8	6:30	6:35
19-Aug-23	CL2	2.9	12:30	12:40
18-Aug-23	CL2	1.1	7:40	7:50
17-Aug-23	CL2	1	7:40	7:50
16-Aug-23	CL2	1	7:50	8:00
15-Aug-23	CL2	1.9	7:40	7:50
14-Aug-23	CL2	4	8:00	8:10
13-Aug-23	CL2	1.01	7:15	7:25
12-Aug-23	CL2	1.89	7:40	7:50
11-Aug-23	CL2	1.1	1.1 8:00	
10-Aug-23	CL2	1.3	8:00	8:10
9-Aug-23	CL2	2.2	8:30	8:40
8-Aug-23	CL2	4	8:00	8:10
7-Aug-23	CL2	1.5	1.5 8:00	
6-Aug-23	CL2	2	11:00	11:10
5-Aug-23	CL2	2.1	11:20	11:30
4-Aug-23	CL2	2	7:00	7:10
3-Aug-23	CL2	3.1	7:20	7:30
2-Aug-23	CL2	1	7:45	7:55
1-Aug-23	CL2	1.1	7:50	8:00
31-Jul-23	CL2	1.1	8:00	8:10
30-Jul-23	CL2	1.1	6:50	7:00
29-Jul-23	CL2	1.7	7:15	7:25
28-Jul-23	CL2	1	7:30	7:40
27-Jul-23	CL2	1.6	8:00	8:10
26-Jul-23	CL2	1.6	7:30	7:40
25-Jul-23	CL2	1.7	7:30	7:40
24-Jul-23	CL2	1.2	7:30	7:30
23-Jul-23	CL2	2.2	7:10	7:20
22-Jul-23	CL2	2.4	6:50	7:00
21-Jul-23	CL2	2.7	7:40	7:50

Date	Analyte	Result	Collect Time	Test Time
20-Jul-23	CL2	2.1	7:30	7:40
19-Jul-23	CL2	1.9	8:00	8:10
18-Jul-23	CL2	1.4	7:30	7:40
17-Jul-23	CL2	1	7:55	8:05
16-Jul-23	CL2	1.11	7:55	8:05
15-Jul-23	CL2	1.27	7:55	8:05
14-Jul-23	CL2	2	9:00	9:10
13-Jul-23	CL2	1.3	8:00	8:10
12-Jul-23	CL2	1.5	8:00	8:10
11-Jul-23	CL2	1	8:00	8:10
10-Jul-23	CL2	1.5	8:00	8:10
9-Jul-23	CL2	2.4	7:00	7:10
8-Jul-23	CL2	2.6	7:00	7:10
7-Jul-23	CL2	1.7	7:30	7:40
6-Jul-23	CL2	1.8	7:00	7:10
5-Jul-23	CL2	2	7:30	7:40
4-Jul-23	CL2	3.9	10:00	10:10
3-Jul-23	CL2	1.5	8:00	8:10
2-Jul-23	CL2	2.4	9:00	9:10
1-Jul-23	CL2	2.9	9:00	9:10
30-Jun-23	CL2	1.5	7:30	7:40
29-Jun-23	CL2	1.8	7:00	7:10
28-Jun-23	CL2	1.5	8:00	8:10
27-Jun-23	CL2	1.4	8:40	8:50
26-Jun-23	CL2	1.2	8:30	8:40
25-Jun-23	CL2	1.7	7:00	7:10
24-Jun-23	CL2	2	7:00	7:10
23-Jun-23	CL2	2.1	7:15	7:25
22-Jun-23	CL2	1.9	8:30	8:40
21-Jun-23	CL2	2.1	7:00	7:10
20-Jun-23	CL2	1.9	7:30	7:40
19-Jun-23	CL2	2.4	7:15	7:20
18-Jun-23	CL2	2.9	6:40	6:50
17-Jun-23	CL2	1.6	15:50	16:00
16-Jun-23	CL2	3.7	7:30	7:40
15-Jun-23	CL2	2.8	9:00	9:10
14-Jun-23	CL2	3.7	8:00	8:10
13-Jun-23	CL2	3	7:15	7:20
12-Jun-23	CL2	2.1	7:30	7:40
11-Jun-23	CL2	3.2	8:30	8:40

Field Weasdrellents of Chlorine Residuals					
Date	Analyte	Result	Collect Time	Test Time	
10-Jun-23	CL2	2.9	9:30	9:40	
9-Jun-23	CL2	4	7:50	7:55	
8-Jun-23	CL2	3.2	7:15	7:20	
7-Jun-23	CL2	2.4	7:15	7:20	
6-Jun-23	CL2	3.9	7:00	7:10	
5-Jun-23	CL2	3.2	7:00	7:10	
4-Jun-23	CL2	4	11:20	11:30	
3-Jun-23	CL2	3	12:30	12:40	
2-Jun-23	CL2	2.9	7:10	7:20	
1-Jun-23	CL2	3.9	7:00	7:10	
31-May-23	CL2	3.7	7:00	7:10	
30-May-23	CL2	1.8	8:00	8:10	
29-May-23	CL2	1.7	7:40	7:50	
28-May-23	CL2	1.14	9:00	9:10	
27-May-23	CL2	3.3	9:00	9:10	
26-May-23	CL2	1.4	7:00	7:10	
25-May-23	CL2	1.3	1.3 7:00		
24-May-23	CL2	1.3	1.3 7:00		
23-May-23	CL2	3	7:00	7:10	
22-May-23	CL2	3.5	3.5 7:00		
21-May-23	CL2	3.9 7:15		7:25	
20-May-23	CL2	3.2 6:30		6:40	
19-May-23	CL2	2.4	2.4 7:10		
18-May-23	CL2	1	7:20	7:30	
17-May-23	CL2	1	7:30	7:40	
16-May-23	CL2	1	7:10	7:20	
15-May-23	CL2	1	7:30	7:40	
14-May-23	CL2	1.13	6:55	7:05	
13-May-23	CL2	3.4	7:50	8:00	
12-May-23	CL2	3.7	7:00	7:10	
11-May-23	CL2	2.5	7:00	7:10	
10-May-23	CL2	3.4	7:00	7:10	
9-May-23	CL2	2.4	7:00	7:10	
8-May-23	CL2	3.3	7:20	7:30	
7-May-23	CL2	4	9:00	9:05	
6-May-23	CL2	3.6	12:30	12:40	
5-May-23	CL2	2.1	9:15	9:25	
4-May-23	CL2	2.5	7:10	7:20	
3-May-23	CL2	4	7:10	7:20	
2-May-23	CL2	2	7:30	7:40	

Date	Analyte	Result	Collect Time	Test Time
1-May-23	CL2	1.9	7:30	7:40
30-Apr-23	CL2	1.07	9:00	9:10
29-Apr-23	CL2	1.05	9:00	9:10
28-Apr-23	CL2	2.4	7:00	7:10
27-Apr-23	CL2	3.8	7:10	7:20
26-Apr-23	CL2	3.7	7:00	7:10
25-Apr-23	CL2	3	7:00	7:10
24-Apr-23	CL2	2.6	7:10	7:20
23-Apr-23	CL2	1.5	12:30	12:40
22-Apr-23	CL2	1.6	6:40	6:50
21-Apr-23	CL2	3.8	2:50	3:00
20-Apr-23	CL2	2.4	7:00	7:10
19-Apr-23	CL2	2	7:00	7:10
18-Apr-23	CL2	1.6	7:00	7:10
17-Apr-23	CL2	1.2	7:00	7:10
16-Apr-23	CL2	1.1	13:00	13:10
15-Apr-23	CL2	3.3	7:00	7:10
14-Apr-23	CL2	1.8	11:40	11:50
13-Apr-23	CL2	1.9	1.9 11:20	
12-Apr-23	CL2	1.8	11:30	11:40
11-Apr-23	CL2	3	7:30	7:40
10-Apr-23	CL2	2.3	7:40	7:50
9-Apr-23	CL2	4	4 9:10	
8-Apr-23	CL2	3.9	12:00	12:10
7-Apr-23	CL2	3.7	8:00	8:10
6-Apr-23	CL2	4	8:00	8:10
5-Apr-23	CL2	2.5	7:20	7:30
4-Apr-23	CL2	2.7	7:40	7:45
3-Apr-23	CL2	1.94	9:00	9:10
2-Apr-23	CL2	1.3	12:45	12:55
1-Apr-23	CL2	1.1	12:45	12:55
31-Mar-23	CL2	2.2	8:45	8:55
27-Mar-23	CL2	1.7	7:40	7:50
26-Mar-23	CL2	1.1	9:00	9:10
25-Mar-23	CL2	1.2	8:45	8:50
24-Mar-23	CL2	1.1	7:30	7:40
23-Mar-23	CL2	1.4	7:30	7:40
22-Mar-23	CL2	1.7	7:20	7:30
21-Mar-23	CL2	1.8	7:30	7:40
20-Mar-23	CL2	2.8	8:40	8:50

### Pollutant Analysis of Treated Effluent Field Measurements of Chlorine Residuals

Date	Analyte	Result	Collect Time	Test Time
19-Mar-23	CL2	2.7	7:30	7:40
18-Mar-23	CL2	3.2	7:20	7:30
17-Mar-23	CL2	1.3	11:20	11:30
16-Mar-23	CL2	2.4	7:30	7:40
15-Mar-23	CL2	3	7:20	7:30
14-Mar-23	CL2	1.5	7:10	7:20
13-Mar-23	CL2	1.7	7:30	7:40
12-Mar-23	CL2	1.8	7:05	7:15
11-Mar-23	CL2	2.6	7:15	7:25
10-Mar-23	CL2	2	7:30	7:40
9-Mar-23	CL2	2.6	7:00	7:10
8-Mar-23	CL2	2.4	7:20	7:30
7-Mar-23	CL2	3.1	7:15	7:25
6-Mar-23	CL2	1.6	8:30	8:40
5-Mar-23	CL2	1.7	11:30	11:45
4-Mar-23	CL2	2.3	7:00	7:10
3-Mar-23	CL2	1.1	9:15	9:25
2-Mar-23	CL2	2.7	7:00	7:10
1-Mar-23	CL2	2.4	7:00	7:10

Average Conc.= 2.2

Maximum Concentration= 4.0

# of samples= 299

# Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Treated Effluent E.Coli SM 9223

Horizon Sample		Analyte	Final	
Nbr.	Collect Date	(Abbrev.)	Result	Units
46399805	04/03/2023	ECOLI	< 1	MPN/100mL
46867605	05/01/2023	ECOLI	< 1	MPN/100mL
47352405	06/01/2023	ECOLI	< 1	MPN/100mL
47992905	07/10/2023	ECOLI	< 1	MPN/100mL
49657504	10/23/2023	ECOLI	< 1	MPN/100mL

**Average Concentration= 1.00** 

Maximum= 1.00

# of samples = 5

# Austin Water Laboratory-Environmental Analytical Services 7113 FM969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Total Dissolved Solids SM 2540 C

Horizon Sample Nbr.			Analyte	Final	
1		Collect Date	(Abbrev.)	Result	Unit
•	49999601	11/13/2023	TDS	678	mg/L
	50114901	11/20/2023	TDS	758	mg/L

**Average Concentration= 718** 

Maximum= 758

# of samples= 2

## Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Treated Effluent Alkalinity -SM 2320B

	Aikaiinity - Sivi 2320b						
Horizon							
Sample		Analyte	Final				
Nbr.	Collect Date	(Abbrev.)	Result	Units			
46399801	04/03/2023	ALK	32.8	mg/L			
46540101	04/10/2023	ALK	52.5	mg/L			
46678501	04/18/2023	ALK	59.3	mg/L			
46772301	04/24/2023	ALK	62.8	mg/L			
46867601	05/01/2023	ALK	120	mg/L			
46982901	05/08/2023	ALK	60	mg/L			
47103801	05/16/2023	ALK	121	mg/L			
47204201	05/22/2023	ALK	59.3	mg/L			
47352401	06/01/2023	ALK	62.6	mg/L			
47420601	06/06/2023	ALK	53.7	mg/L			
47544601	06/13/2023	ALK	58.8	mg/L			
47662201	06/20/2023	ALK	61.4	mg/L			
47759301	06/26/2023	ALK	84.7	mg/L			
47885501	07/03/2023	ALK	68.1	mg/L			
47992901	07/10/2023	ALK	38	mg/L			
48103501	07/17/2023	ALK	66.2	mg/L			
48197801	07/24/2023	ALK	66.5	mg/L			
48327601	08/01/2023	ALK	40	mg/L			
48492101	08/11/2023	ALK	78	mg/L			
48569701	08/16/2023	ALK	49.3	mg/L			
48639701	08/21/2023	ALK	76.3	mg/L			
48753401	08/29/2023	ALK	49.7	mg/L			
48878001	09/06/2023	ALK	68.6	mg/L			
48952801	09/11/2023	ALK	88.3	mg/L			
49062101	09/18/2023	ALK	83.7	mg/L			
49176801	09/25/2023	ALK	60.9	mg/L			
49280201	10/02/2023	ALK	86.5	mg/L			
49510801	10/14/2023	ALK	66.4	mg/L			
49537301	10/16/2023	ALK	31.7	mg/L			
49657501	10/23/2023	ALK	123	mg/L			
49657501	10/23/2023	ALK	123	mg/L			
49813601	11/01/2023	ALK	142	mg/L			
49890501	11/06/2023	ALK	105	mg/L			
49999601	11/13/2023	ALK	87.4	mg/L			
50114901	11/20/2023	ALK	128	mg/L			
50266301	12/01/2023	ALK	70.9	mg/L			
50327601	12/05/2023	ALK	80.5	mg/L			
50435601	12/12/2023	ALK	25.7	mg/L			
50551201	12/19/2023	ALK	57.8	mg/L			

**Average Concentration= 73.09** 

Maximum= 142

# of samples= 39

## ATTACHMENT 8 OPERATOR LIST

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

#### **Austin Water**

#### **Remote Treatment Facilities**

Operator	License Number	<b>Expiration Date</b>	Class
DARRELL DEVOOGHT	WW0062004	4/22/2025	Α
MARCUS RUIZ	WW0070108	9/8/2025	Α
DON R MILLER	WW0062045	9/18/2025	А
MARCUS ANDERSON	WW0053964	9/2/2024	В
FRANCISCO SILVA	WW0052790	6/23/2024	В
RICHARD REES	WW0070916	11/14/2025	В
DANA LORENZEN	WW0062864	10/25/2025	С
THOMAS JUSTIN BLEDSOE	WW0072156	3/23/2026	С
CARLOS MOORE	WW0066907	10/20/2024	D
CHUKWUNONSO OKPALAEZE	IN TRAINING		
ENRIQUE QUIROZ	IN TRAINING		
ELI MENDOZA	IN TRAINING		
TRISTAN SOTO	IN TRAINING		
MARSHALL HARRIS	IN TRAINING		
JOSHUA ARROYO	IN TRAINING		

## ATTACHMENT 9 TRANSPORTED SLUDGE STATEMENT

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

#### City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit - WQ0010543014

#### Application for Domestic WWTP-TCEQ Form 100054-Technical Report Transported Sludge Statement

CN600135198 RN105331755 TX0129950 WQ0010543014

Sludge produced at the Taylor Lane WWTP, an Austin Water facility, is transported to another Austin Water facility, Walnut Creek Wastewater Treatment Plant, WQ00105043011, and then transferred via pipeline to an Austin Water permitted sludge processing facility, Hornsby Bend Biosolids Management Plant, WQ0003823000.

## ATTACHMENT 10 TRANSPORTER REGISTRATION

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP Jon Niermann, Chairman Emily Lindley, Commissioner Bobby Janecka, Commissioner Toby Baker, Executive Director



#### Texas Commission on Environmental Quality

Protecting Texas by Reducing and Preventing Pollution

July 07, 2022

TAMMY WEST
CITY OF AUSTIN
625 E 10TH ST STE 315
AUSTIN, TX 78701-2612

Re: Renewal of Sludge Transportation Registration

CITY OF AUSTIN AUSTIN WATER

Registration Number: 22083

CN600135198

RN103157798

Dear Tammy West:

The Section Manager of the Registration and Reporting Section has issued the enclosed registration in accordance with Title 30 of the Texas Administrative Code (30 TAC) Chapter 312 Subsection (§) 312.147 (b). This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Issuance of this authorization is not an acknowledgment that your operation is in full compliance with state and federal rules and regulations. Failure to comply with all rules and regulations may result in enforcement action and/or the revocation of your registration.

Your registration number is required to appear on all tanks and containers used for the collection and transportation of sewage sludge and similar waste. It should also be used on all correspondence regarding your sludge registration.

A copy of your sludge transporter registration, a copy of your application for registration and copies of all amendments to this registration must be available at all times and at all locations where business is being transacted under this registration, including all motorized vehicles operated under this registration.

If you have any questions or comments, please contact the Sludge Transporter Registration Program at (512) 239-6413.

Sincerely,

Shannon W. Frazier, Manager Registration & Reporting Section

**Enclosures** 

CC: TCEQ Region 11, AUSTIN



#### Texas Commission on Environmental Quality

#### SLUDGE TRANSPORTER REGISTRATION

Registration Number: 22083

CN600135198

RN103157798

For the Commission

CITY OF AUGTIN

Print Date: July 07, 2022

Company: CITY OF AUSTIN

Regulated Entity: CITY OF AUSTIN AUSTIN WATER

Organization Type: CITY GOVERNMENT

County: TRAVIS

Transport Waste into Texas: NO

**Physical Address:** 

625 E 10TH ST

AUSTIN, TX 78701-2612

Mailing Address:

625 E 10TH ST STE 315 AUSTIN, TX 78701-2612 Registered Since: February 10, 1995 Expiration Date: August 31, 2024

Status: ACTIVE

TCEQ Region: 11

Transport Waste out of Texas: NO

**Contact Information** 

Contact: TAMMY WEST

**Phone:** 512-972-0143

Fax:

**E-Mail:** TAMMY.YATES.WEST@AUSTINTEXAS.GOV

Sticker Numbers Issued and Listed below will expire on August 31, 2024:

00765	00766	00767	00768	00769	00770	00771	00772	00773
00774	00775	00776	00777	00778	00779	00780	00781	00782
00783	00784	00785	00786	00787	00788	00789	00790	00791
00792	00793	00794	00795	00796	00797	00798	00799	



#### Texas Commission on Environmental Quality

#### **SLUDGE TRANSPORTER**

Registration Number: 22083

Print Date: July 07, 2022

For the Commission

#### **Disposal Facility Information**

Facility ID 730010	Waste Type WT	Facility Name SHAW LANE WTP SLUDGE APPLICATION SITE	<u>Program</u> SLUDGE
WQ0003823000	WW	HORNSBY BEND SLUDGE FACILITY	SLUDGETR
WQ0010543011	DS; PP; WW	WALNUT CREEK WWTP	WWPERMIT
WQ0010543012	DS	SOUTH AUSTIN REGIONAL WWTP	WWPERMIT



#### Texas Commission on Environmental Quality

#### SLUDGE TRANSPORTER

Registration Number: 22083

Print Date: July 07, 2022

For the Commission

#### **Vehicle Information**

License Plate	Year	Vehicle Make	Sticker Issued	Vehicle Capacity
1096009	2010	INTERNATIONAL	07/18/2012	29 CY
1096010	2010	INTERNATIONAL	07/18/2012	29 CY
1096011	2010	INTERNATIONAL	07/18/2012	29 CY
1265581	2008	INTERNATIONAL	07/18/2012	29 CY
1265600	2008	INTERNATIONAL	07/18/2012	29 CY
1338084	2008	INTERNATIONAL	07/18/2012	29 CY
1220856	2002	STERLING	07/18/2012	29 CY
1256445	2001	VOLVO	07/08/2014	29 CY
1221312	2001	VOLVO	07/08/2014	29 CY
1257143	2007	INTERNATIONAL	09/04/2014	29 CY
1178356	2015	INTERNATIONAL	10/30/2014	29 CY
1178357	2015	INTERNATIONAL	10/30/2014	29 CY
1338202	2017	INTERNATIONAL	07/16/2018	29 CY
1338335	2017	INTERNATIONAL	07/16/2018	29 CY
1353742	2018	FREIGHTLINER	07/16/2018	29 CY
1353743	2018	FREIGHTLINER	07/16/2018	29 CY
1354295	2019	FREIGHTLINER	08/01/2019	300 GAL
1396017	2019	FREIGHTLINER	06/23/2020	29 CY
9071733	2000	INTERNATIONAL	06/23/2020	5500 GAL
1265599	2008	INTERNATIONAL	06/23/2020	3 CY
1278799	2008	INTERNATIONAL	06/23/2020	3 CY
864940	2004	INTERNATIONAL	06/23/2020	3 CY
1409029	2020	INTERNATIONAL	06/23/2020	29 CY
797833	2001	VOLVO	06/23/2020	9 CY
1279164	2008	INTERNATIONAL	06/23/2020	3 CY
1409030	2020	FREIGHTLINER	06/23/2020	29 CY
1001000	2008	INTERNATIONAL	06/23/2020	3 CY
1121302	2008	INTERNATIONAL	06/23/2020	9 CY
1308117	2008	INTERNATIONAL	06/23/2020	9 CY
1265614	2008	INTERNATIONAL	06/23/2020	3 CY
1265611	2008	INTERNATIONAL	06/23/2020	9 CY
1309060	2002	INTERNATIONAL	09/03/2020	29 CY
1178035	2013	NAVISTAR	09/03/2020	3 CY .
1108769	2011	INTERNATIONAL	09/05/2020	3 CY
1178692	2005	INTERNATIONAL	09/05/2020	9 CY

## ATTACHMENT 11 INFLUENT ANALYSIS

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

# Austin Water Laboratory-Environmental Analytical Services 7113 FM 969 Austin, TX 78724 Pollutant Analysis of Influent BOD SM 5210 B

Horizon Sample Nbr.	Collect Date	Analyte (Abbrev.)	Final Result	Units	Daily Flow, MGD	Daily BOD Loading, ppd
44331602	12/01/2022	BOD	179	mg/L	0.038	57
44415702	12/06/2022	BOD	98.4	mg/L	0.041	34
44573002	12/14/2022	BOD	77.8	mg/L	0.044	29
44762802	12/27/2022	BOD	72.2	mg/L	0.045	27
44874702	01/03/2023	BOD	79.3	mg/L	0.048	32
44974302	01/09/2023	BOD	85.5	mg/L	0.042	30
45112002	01/17/2023	BOD	83.9	mg/L	0.050	35
45226802	01/24/2023	BOD	86.1	mg/L	0.052	37
45488102	02/08/2023	BOD	145	mg/L	0.063	76
45637702	02/16/2023	BOD	144	mg/L	0.053	64
45733202	02/23/2023	BOD	103	mg/L	0.048	41
45823302	03/01/2023	BOD	74	mg/L	0.053	33
45930602	03/07/2023	BOD	59.5	mg/L	0.052	26
46038102	03/14/2023	BOD	120	mg/L	0.052	52
46145002	03/20/2023	BOD	58.3	mg/L	0.055	27
46267402	03/27/2023	BOD	102	mg/L	0.053	45
46399802	04/03/2023	BOD	50	mg/L	0.048	20
46540102	04/10/2023	BOD	60	mg/L	0.052	26
46678502	04/18/2023	BOD	352	mg/L	0.042	123
46772302	04/24/2023	BOD	150	mg/L	0.046	58
46867602	05/01/2023	BOD	83.3	mg/L	0.047	33
46982902	05/08/2023	BOD	119	mg/L	0.046	46
47103802	05/16/2023	BOD	89.8	mg/L	0.055	41
47204202	05/22/2023	BOD	211	mg/L	0.048	84
47352402	06/01/2023	BOD	87.8	mg/L	0.045	33
47420602	06/06/2023	BOD	108	mg/L	0.049	44
47544602	06/13/2023	BOD	108	mg/L	0.046	41
47662202	06/20/2023	BOD	123	mg/L	0.044	45
47759302	06/26/2023	BOD	98	mg/L	0.027	22
47885502	07/03/2023	BOD	158	mg/L	0.043	57
47992902	07/10/2023	BOD	128	mg/L	0.053	57
48103502	07/17/2023	BOD	115	mg/L	0.051	49
48197802	07/24/2023	BOD	56.1	mg/L	0.057	27
48327602	08/01/2023	BOD	118	mg/L	0.050	49
48492102	08/11/2023	BOD	98.8	mg/L	0.049	40
48569702	08/16/2023	BOD	67.9	mg/L	0.044	25
48639702	08/21/2023	BOD	67.6	mg/L	0.052	29

#### **Austin Water Laboratory-Environmental Analytical Services** 7113 FM 969 Austin, TX 78724 **Pollutant Analysis of Influent BOD SM 5210 B**

<b>Horizon Sample</b>		Analyte	Final		Daily Flow,	Daily BOD
Nbr.	Collect Date	(Abbrev.)	Result	Units	MGD	Loading, ppd
48753402	08/29/2023	BOD	68.6	mg/L	0.046	26
48878002	09/06/2023	BOD	107	mg/L	0.048	43
48952802	09/11/2023	BOD	75.2	mg/L	0.052	33
49176802	09/25/2023	BOD	136	mg/L	0.056	64
49280202	10/02/2023	BOD	109	mg/L	0.049	45
49400401	10/09/2023	BOD	107	mg/L	0.052	46
49510802	10/14/2023	BOD	68.8	mg/L	0.052	30
49537302	10/16/2023	BOD	83.1	mg/L	0.052	36
49657502	10/23/2023	BOD	78.8	mg/L	0.049	32
49813602	11/01/2023	BOD	78.4	mg/L	0.048	31
49890502	11/06/2023	BOD	95.9	mg/L	0.058	46
49999602	11/13/2023	BOD	82.9	mg/L	0.066	46
50114902	11/20/2023	BOD	127	mg/L	0.048	51
50266302	12/01/2023	BOD	77.8	mg/L	0.056	36
50327602	12/05/2023	BOD	92.8	mg/L	0.058	45
50435602	12/12/2023	BOD	112	mg/L	0.041	38
50551202	12/19/2023	BOD	106	mg/L	0.050	44
	Average Con	centration=	104.1			
	J			Daily Flow=	0.049	

Avg Daily Loading = 42

## ATTACHMENT 12 DESIGN CALCULATIONS

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

## DESIGN CALCULATIONS PHASE I

## FOR TAYLOR LANE

**PURPOSE** The purpose of this report is to present the basis of design and summary of unit sizing and hydraulic calculations for the 0.100 MGD Wastewater Treatment Plant.

**INFLUENT QUALITY CHARACTERISTICS** The influent wastewater quality characteristics used for design are estimates based on State Design Criteria and are as follows:

PARAMETER	CONCENTRATION
BOD <sub>5</sub>	280 mg/l
TSS	280 mg/l
$NH_3$	50 mg/l

#### INFLUENT FLOW CHARACTERISTICS

The plant process and hydraulic design are based on the following flows:

Average Daily Flow (	(Qav)	100,000 GPD	69 GPM

Peak 2-Hr. Flow (Qpk) 4 400,000 GPD 278 GPM

**EFFLUENT QUALITY CHARACTERISTICS** The design is of the activated sludge type based on Single Stage Nitrification to produce the following effluent quality characteristics:

<u>PARAMETER</u>	CONCENTRATION
BOD <sub>5</sub>	10 mg/l
TSS	15 mg/l
$NH_3$	2 mg/l

### **Organic Loading**

#### **Influent Conditions**

	GPD	GPM	CFS
Average Daily Flow (Qav)	100,000	69	0.155
2 hr. Peak Flow (Qpk)	400,000	278	0.619
BOD <sub>5</sub> (lbs/day)	234	lbs/day	
TSS (lbs/day)	234	lbs/day	
NH <sub>3</sub> (lbs/day)	42	lbs/day	
	2 hr. Peak Flow (Qpk) BOD <sub>5</sub> (lbs/day) TSS (lbs/day)	$\begin{array}{llllllllllllllllllllllllllllllllllll$	$ \begin{array}{llllllllllllllllllllllllllllllllllll$

#### **Aeration**

			Temporary
1	Aeration Volume Required	6,672 cf	
2	Total Aeration Volume Available	6,851 cf	9091 cf
3	Organic Loading (lbs/day/1000cf)	34.1 lbs	25.7 lbs
4	TCEQ Maximum Organic Loading (lbs/day/1000cf)	35 lbs	

5 Aeration Zone two zones: one permanent @ 6,851 cf & one temporary @ 2,240 cf

#### **Clarifier**

1	Clarifier Area Required	333 sf
2	Diameter	23 ft
3	Area	415 sf
4	TCEQ Maximum Surface Loading	1,200 GPD/sf
5	Surface Loading @ Qpk	963 GPD/sf
6	Stilling Well Diameter	4 ft
7	Stilling Well Area	12.57 sf
8	Stilling Well Velocity	0.077 ft/sec
9	Side Water Depth	10.00 ft
10	Detention Time @ Qpk	1.86 hrs

#### **Clarifier Weir**

1	Clarifier Wall to Weir Length	12 in
2	Weir Diameter	21 ft
3	Weir Length	65.97 ft
4	Maximum Weir loading at Qpk	20,000 GPD/ft
5	Weir Loading at Qpk	6,063 GPD/ft
6	Clarifier Wall to Weir Area	69 sf
7	Maximum Upflow Velocity	0.10 ft/sec
8	Upflow Velocity at Qpk	0.0090 ft/sec

### **Organic Loading Continued**

#### Sludge Holding Tank

	<u> </u>		Temporary
1	Total Volume Available	4,760 cf	2,380 cf
2	Sludge Holding Tank Loadings	20.38 cf/lb	10.19 cf/lb

3 Sludge Holding Tank (SHT) Summary two SHT @ 2,380 cf each, one SHT can serve as a temporary aeration basin

### **Air Requirements**

		200 GPD/sqft			400 GPD/sqft		
	Air Lifts	GPM	SCFM	DIA	GPM	SCFM	DIA
1	RAS/WAS	57.70	13	6 in	115.41	24	6 in
3	Total Air Lifts		13	scfm		24	scfm
	Air Requirements						
1	Process: 3200 scfm/day per lb. BOD <sub>5</sub>	527	scfm				
2	Sludge Holding Tank (SHT) 30 scfm per 1,000 cf	143 scfm					
3	Total Air Lifts	<u>24</u>	<u>scfm</u>				
4	Total Air Required	693	scfm				
5	Air Provided	Provide two One duty, or		-	ment blower	s at 775 sc	fm each.
		Note: The process calculation is based on a clean water oxygen transfer efficiency of 0.85% per foot of submergence. The submergence is 9 foot and the correction factor is 1.69.				gen	

Other Air LiftsGPMSCFMDIAOne (1) SHT Decant Airlift<br/>feet within 2 hours)(3<br/>80154 in

1

Note: Decanting does not occur as air is used in the digesters, so the air numbers are not included in the total air required.

### **Hydraulic Calculations**

I. <u>FLOW</u>

Qavg = 69 GPM 100,000 GPD 0.155 CFS

Qpk = 278 GPM 400,000 GPD 0.619 CFS

II. <u>CLARIFIER</u>

Weir Diameter = 21 ft

Weir Length = 66 ft

Use two (2) 90° "V" notches per foot of weir = 132 notches

1 Elevation @ Qavg

Flow per Notch = 0.00117 CFS

 $H_{avg} = 0.046 \text{ ft}$ 

2 Elevation @ Qpk

Flow per Notch = 0.00469 CFS

 $H_{pk} = 0.080 \text{ ft}$ 

3 Minimum Depth of Wide Launder @ Qpk

Launder splits flow =  $Qpk \div 2 = 139 GPM$ 

Launder Width = 12 inches

Depth =  $0.65(GPM \div width)^{2/3}$  = 3.33 inches

### **Hydraulic Calculations Continued**

#### III. <u>AERATION ZONE</u>

Combined Flow Mix Liquor Transfer to Centerwell at Qpk

Return Activated Sludge RAS = 115 GPM

SCUM = 43 GPM

Qpk + RAS + SCUM = 436 GPM

Select pipe size to provide less than 2.5 ft/sec velocity 12 "

NOTE: With 12", Vel. = 1.237 ft/sec, transfer pipe losses = 0.079 ft
Between aeration basins, total pipe losses = 0.062 ft

 $\Delta$  Total = 0.141 ft

#### V. SUMMARY OF ELEVATIONS (in feet)

UNII	<u>ELEV.</u>
100 Year Flood	XX
Structure Dimensions	
Foundation of Clarifier	441.50
Top of Clarifier Wall	454.67
Foundation of Aeration	442.00
Top of Aeration Wall	455.17
Foundation of Sludge Holding Tank	442.00
Top of Sludge Holding Tank Wall	455.17

Water Elevations in Tanks	STATIC	<u>AVG</u>	MAX
Clarifier	452.92	452.97	453.00
Aeration	452.92	452.98	453.14
Sludge Holding Tank	Varies fr	om 450.67 to 4	453.67

#### <u>Notes</u>

Clarifier Sidewater Depth @ Qpk 10.00

The sump is 3' in diameter, 8" tall, and in the clarifier.

## DESIGN CALCULATIONS PHASE II

#### Aero-Mod, Inc. **ACTIVATED SLUDGE DESIGN CALCULATIONS**

Project: Taylor Lane, Texas 24-May-23 Date: Engineer: Smith Turrieta English Units:

SEQUOX BNR Act. Sludge Process:

**Population Equivalent** 2919 **DESIGN CONDITIONS & PARAMETERS** 

@0.2lbsBod/cap

		Filtered	<b>Э</b>	
	Influent	Effluent		
Flow (Q), MGD	0.250		Aeration Basin	
BOD <sub>5</sub> , mg/l	280	5.0	Retention Time, hours	20.0
BOD <sub>5</sub> , lbs/day	584	10.4	Aeration Tank Volume, Mgal	0.208
BOD <sub>L</sub> , mg/l	409		MCRT, days	15.0
TSS, mg/l	280	5.0	Wastewater Temperature, °C	20
TSS, lbs/day	584	10.4	Aerobic Digester	
Ammonia-N, mg/l	50.0	1.0	Volume, % of Aeration Tank	42.5
Ammonia-N, lbs/day	104.3	2.1	Maximum MLSS, mg/l	12,000
TIN, mg/l		4.0	Maximum MLSS, %	1.20%
TIN, lbs/day		8.3	Digester Temperature, °C	20
Phosphorus-P, mg/l	6.0	1.0 *	Sludge Holding Tank	
Phosphorus-P, lbs/day	12.5	2.0	Volume, % of Aeration Tank	0.0
Net Alkalinity Loss, mg/l as	CaCO <sub>3</sub>	(257)	Maximum MLSS, mg/l	25,000
	* Assumes Cher	nical Addition	Maximum MLSS, %	2.50%

#### PROJECTED OPERATING CONDITIONS - AERATION BASIN

Mixed Liquor Suspended Solids, mg/l	3,677
Excess MLSS due to Phos-P Uptake/Removal, mg/l 243	
Mixed Liquor Volatile Suspended Solids, %	67%
F/M Ratio, lbs BOD <sub>5</sub> /lb MLVSS	0.14
F/M Ratio, lbs BOD <sub>5</sub> /lb MLSS	0.09
Organic Loading, lbs BOD <sub>5</sub> /1000 cf of tank/day	21.0
Oxygen Requirements (Carbonaceous), mg/l/hr	13.36
Oxygen Requirements (Nitrogenous), mg/l/hr	11.27
Solids Production, lbs/day	426
WAS - Solids Wasted per Day, lbs/day	416
WAS - Solids Wasted per Day, gal/day @ 0.37%	13,549

#### PROJECTED OPERATING CONDITIONS - AEROBIC DIGESTER

Volatile Solids Loading in Digester, lbs VSS/1,000 cf of tank/day	23
Volatile Solids Reduction in Digester, %	30%
Solids Wasted from Digester, lbs/day	332
Mass Solids Yield in Process & Digester per Mass Influent BOD <sub>5</sub> , %	59%
Volume Wasted from Digester, gallons/day	3,314
Digester Sludge Age, days	30
Air Required for Stabilization, scfm	105
Air Required for Mixing @ 30 cfm/1000 cf	355

### Aero-Mod, Inc.

NUTRIENT REMOVAL DESIGN CALCULATIONS							
Project: Engineer:	Taylor Lane, Texas Smith Turrieta					Date: Inits:	24-May-23 English
NITRIFICA	ATION						
	1	65% 35%		ation Rate, g NH₃-N/g MLVSS ation Rate, g NH₃-N/g MLVSS		97' 99 0.024 .031 .016	1
	Nitrogen Required for Biological Reproduction (12	.2 g pe	er 100 g l	oiomass), mg/l		9.4	4
DENITRIF		٠.	· ·	<i>,.</i> G			
	DeNitrification Portion in First Stage Aeration Bass DeNitrification Rate in First Stage Aeration Bass C:N Ratio in First Stage Aeration Basin, g BOD DeNitrification Portion in Second Stage Aeration Benitrification Rate in Second Stage Aeration C:N Ratio in Second Stage Aeration Basin, g Benitrification Rate in Second Stage Aeration Basin, g Benitrification Basin, g Beni	sin, g D <sub>5</sub> :g T Basin, Basin BOD <sub>5</sub> :	NO <sub>3</sub> -N KN rem % <sup>1</sup> , g NO <sub>3</sub>	noved <sup>2</sup> <sub>3</sub> -N removed/g MLVSS·d		40% 0.02	3 : 1
ALKALINI	TY						
	Alkalinity Consumption by Nitrification, mg/l as Ca Alkalinity Production by DeNitrification, mg/l as Ca Alkalinity Consumption by Chemical Addition, mg/ Net Alkalinity Gain (Loss), mg/l as C	aCO <sub>3</sub> ′I as C		(	.57) :10 :(10) :57)		
PHOSPHO	DRUS						
	<u>Biological</u> Sludge Age Range of Fermentation Zone, days				9 to 1	4	
	Readily Biodegradable COD - rbCOD (25% of CO rbCOD lost by NO <sub>3</sub> -N in RAS, mg/l rbCOD lost by O <sub>2</sub> in RAS, mg/l Phosphorus Removed by BPR Mechanism, mg/l (Phosphorus Required for Biological Reproduction Phosphorus Content in Digester/Sludge Holding Shosphorus Remaining after Biological Uptake, m	(Capa (2.3 g ng Sup Superi	bility) per 100 pernata	nt, mg/l	2.8	144 5.3 1.3 0.1 1.3 0.1 4.4	3 2 0 8
	Soluble Phosphorus Level Desired, mg/l (for chen	nical a	addition	)		1.0	0
	Chemical  Alum (as Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> • 14H <sub>2</sub> O @ 48% solution)  Al added, mg/l Al Added, mmole/l AlPO <sub>4</sub> Produced, mmole/l Excess Al Added, mmole/l AlPO <sub>4</sub> Sludge, mg/l Al(OH) <sub>3</sub> Sludge, mg/l SS, Phos-P removal by Alum, mg/l Alum added, lbs/day (1.5 SF) Alum added, mg/l Alum added, gpd	2.99 0.11 0.00 13.4 0.0 13.5 102.9 49	 	Ferric (as FeCl <sub>3</sub> @ Fe added, mg/l Fe Added, mmole/l FePO <sub>4</sub> Produced, mmolexcess Fe Added, mmolexcess Fe Added, mg/l Fe(OH) <sub>3</sub> Sludge, mg/l SS, Phos-P removal by Ferric Chloride added,	ole/I ole/I / Ferric, I lbs/day ( mg/I	mg/l	6.15 0.11 0.11 0.00 16.6 0.0 16.6 55.9 27

Chemical Used: Alum

SS Added to MLSS by Chem-P Removal, mg/l

13.5

### Aero-Mod, Inc. AERATION DESIGN CALCULATIONS

Date:

26.6

24-Apr-23

Engineer: Smith Turrieta Units: English Tubular EPDM Fine Bubble Diffuser Type Used: Peak Peak Design Design Q, MGD TKN<sub>o</sub>, mg/l 0.250 N/A 65.0 N/A BOD<sub>o</sub>, mg/l 280 N/A TKN<sub>assimilation</sub>, mg/l 11.9 N/A BOD<sub>rem</sub>, mg/l 280 N/A TKN<sub>rem</sub>, mg/l 65.0 N/A BOD<sub>rem</sub>, Ib/day TKN<sub>rem</sub>, lb/day 584 N/A 135.5 N/A O<sub>2</sub> Requirement, lb O<sub>2</sub>/lb BOD<sub>rem</sub> O2 Requirement, Ib O2/Ib TKNrem 4.60 **AERATION REQUIREMENTS - FIRST STAGE** Design Peak Removal in First Stage 75% 82.5% BOD<sub>oxv</sub> - Oxygen Required for BOD [Q \* BOD<sub>rem</sub> \* 8.34 \* O<sub>2</sub> Req. / 24], lbs O<sub>2</sub>/hr 27.4 N/A TKN<sub>oxy</sub> - Oxygen Required for TKN [Q \* TKN<sub>rem</sub> \* 8.34 \* O<sub>2</sub> Req. / 24], lbs O<sub>2</sub>/hr N/A 19.5 Actual Oxygenation Rate (AOR), lbs O2/hr 46.8 N/A Standard Oxygenation Rate (SOR), lbs O<sub>2</sub>/hr N/A 121.8 SOR = [(AOR \*  $C_{s,20}$ ) / ( $\alpha$  \*  $\Theta$ ^(T-20) \* (Tau \*  $\Omega$  \*  $\beta$  \*  $C_{s,20}$  -  $C_L$ ) \* F)] Where: C<sub>s,T,H</sub> Actual Value of D.O. Saturation, mg/l 9.08  $C_L$ Residual D.O. Conc., mg/l 2.0 Temperature of Water. °C C<sub>s,20</sub> Steady State Value of D.O. Saturation, mg/l 9.08 Т 20 Tau Oxygen Saturation Value  $(C_{s,T,H}/C_{s,20})$ 1 000 F Diffuser Fouling Factor 0.90 α Alpha - Oxygen Transfer Correction Factor for Waste 0.60 Θ Theta - Oxygen Transfer Coeff 1.024 Beta - Salinity-Surface Tension Correction Factor 0.95 Site Elevation, FASL 500 Omega (P<sub>H</sub>/P<sub>s</sub>) Atmospheric Pressure at Site Elevation, psi 0.982 Air Requirement = [SOR / (Oxygen Density \* TE% \* Diffuser Depth) / 60], scfm 446 N/A Where: Oxygen Density, lbs O2/cf 0.0175 Diffuser Depth Below Water Surface, ft 13.0 2.00% Transfer Efficiency per Foot of Submergence, % Denitrification Credit = [Air Rqmt \* (TKN<sub>oxy</sub> / AOR) \* 50% \* ((TKN<sub>o</sub> - TN<sub>e</sub>) / TKN<sub>o</sub>)], scfm 87 N/A Where:  $TN_e = TKN_o / 2$  (assumed when D.O. control is not used) Total Aeration Required in Aeration Basin, scfm 359 N/A **Air Correction**  $icfm = scfm / [((T_{std} + 460) / (T_{air} + 460)) * ((P_H - (RH\% * SVP_{Tair})) / (14.7 - (RH\%_{std} * SVP_{std}))) * ((P_A / P_H)]$ Maximum Air Temperature, °F Where: T<sub>std</sub>, °F  $T_{air}$ 68 104 RH%<sub>std</sub> 36% RH% Maximum Relative Humidity, % 90% SVP<sub>std</sub>, psi SVP<sub>Tair</sub> Saturated Vapor Pressure of Air @ Tair, psi 0.34 1.058  $\mathsf{P}_\mathsf{A}$ Actual Atmospheric Pressure after Blower Inlet, psi 14.23 Minimum Air Required for Mixing in First Stage Aeration Basin, cfm 141 Side Roll Minimum Air Required for Mixing in Second & Third Stage Aeration Basin, cfm 143 Side Roll Minimum Air Required for Operating Full Plant, cfm (mixing requirement for 24 hrs) 470 <u>Peak</u> Design <u>Peak</u> <u>Design</u> Aeration Pressure, in. H2O 204 204 7.4 7.4 psi, std (does not include blower inlet/outlet) scfm scfm icfm icfm Aeration Basin - Fine Bubble 359 0 420 0 Aeration Basin - Coarse Bubble 209 0 245 0 Aerobic Digester Tank (sequenced aeration) 178 0 178 0 Selector Tank 15 0 15 0 Clarifier RAS Airlift Pumps & Skimmers 54 0 Total Air Required 814 911 Total Air Available 1,089 **POWER REQUIREMENTS** Unit Power Power Operating Power for Aeration Basin, HP 33.9 Blower Operating Power for Digester, HP Blower 9.0 Operating Power for Selector Tank, HP Blower 0.7 Operating Power for Clarifier, HP Blower 2.7 N/A 0.0 Operating Power for Pneumatic System, HP Air Compr. 0.4Operating Power Required at Full Loading, HP 46.8

Minimum Power Required to Operate Full Plant, HP

Project:

Taylor Lane, Texas

### Aero-Mod, Inc. AERATION DESIGN CALCULATIONS

Date:

24-Apr-23

Units: Engineer: Smith Turrieta English Diffuser Type Used: Stainless Steel Coarse Bubble **AERATION REQUIREMENTS - SECOND & THIRD STAGE** Design Peak Removal in Second Stage 25% 17.5% Oxygen Required for BOD [Q \* BOD<sub>rem</sub> \* 8.34 \* O<sub>2</sub> Req. / 24], lbs O<sub>2</sub>/hr 9.1 N/A Oxygen Required for TKN [Q \* TKN<sub>rem</sub> \* 8.34 \* O<sub>2</sub> Req. / 24], lbs O<sub>2</sub>/hr 6.5 N/A N/A Actual Oxygenation Rate (AOR), lbs O2/hr 15.6 Standard Oxygenation Rate (SOR), lbs O<sub>2</sub>/hr 29.2 N/A SOR = [(AOR \*  $C_{s,20}$ ) / ( $\alpha$  \*  $\Theta \wedge^{(T-20)}$  \* (Tau \*  $\Omega$  \*  $\beta$  \*  $C_{s,20}$  -  $C_L$ ) \* F)] Where: C<sub>s.T.H</sub> Actual Value of D.O. Saturation, mg/l 9.08 2.0  $C_L$ Residual D.O. Conc, mg/l Т Temperature of Water, °C 20 C<sub>s,20</sub> Steady State Value of D.O. Saturation, mg/l 9.08 Tau Oxygen Saturation Value (C<sub>s,T,H</sub>/C<sub>s,20</sub>) 1.000 F Diffuser Fouling Factor 1.00 Θ Theta - Oxygen Transfer Coeffi 1.024 Alpha - Oxygen Transfer Correction Factor for Waste 0.75 В Beta - Salinity-Surface Tension Correction Factor 0.95 500 Site Elevation, FASL Omega (P<sub>H</sub>/P<sub>s</sub>)  $P_{H}$ Atmospheric Pressure at Site Elevation, psi/FASL 14.43 Ω 0.982 Air Requirement = [SOR / (Oxygen Density \* TE% \* Diffuser Depth) / 60], scfm 243 N/A Where: Oxygen Density, lbs O2/cf 0.0175 Diffuser Depth Below Water Surface, ft 13.5 Transfer Efficiency per Foot of Submergence, % 0.85% Denitrification Credit = [Air Rqmt \* (TKN<sub>oxy</sub> / AOR) \* 50% \* ((TKN<sub>o</sub> - TN<sub>e</sub>) / TKN<sub>o</sub>)], scfm 34 N/A Where:  $TN_e = TKN_o / 2$  (assumed when D.O. control is not used) Total Aeration Required in Aeration Basin, scfm 209 N/A **Air Correction**  $icfm = scfm / [((T_{std} + 460) / (T_{air} + 460)) * ((P_H - (RH% * SVP_{Tair})) / (14.7 - (RH%_{std} * SVP_{std}))) * ((P_A / P_H)]$ Maximum Air Temperature, °F Where: T<sub>std</sub>, °F  $T_{air}$ 104 RH%<sub>std</sub> 36% RH% 90% Maximum Relative Humidity, % SVP<sub>std</sub>, psi  $SVP_{Tair}$ Saturated Vapor Pressure of Air @ Tair, psi 0.34 1.058  $P_A$ Actual Atmospheric Pressure after Blower Inlet, psi 14.23 Minimum Air Required for Mixing in Second & Third Stage Aeration Basin, cfm 143 Side Roll Aeration Pressure, in. H<sub>2</sub>O 189 189 psi, std 6.8 6.8 (does not include blower inlet/outlet) **Peak** <u>Design</u> **Peak** Design scfm scfm icfm icfm Aeration Basin - Coarse Bubble 0 245 0 209

Proiect:

Taylor Lane, Texas

## Aero-Mod, Inc. CLARIFIER DESIGN CALCULATIONS

Project:Taylor Lane, TexasDate:24-Apr-23Engineer:Smith TurrietaUnits:English

Clarifier Type Used: Split-ClarAtor

#### **FLOW CONDITIONS**

Design Flow, MGD	0.250	
Peaking Factor, hourly	4.00	1.000 MGD
Duration, min	120	
Peaking Factor, sustained	2.00	0.500 MGD
Aeration Tank Volume, Mgal	0.208	
MLSS, mg/l	3,434	
Avg. RAS Recycle Rate. %	150%	

#### **EQUIPMENT SIZING & SELECTION**

Number of Clarifiers	2	Surface Area per Clarifier, sf	504
Clarifier Unit Model	24504	Total Surface Area, sf	1,008
Bridge Length, ft	24	Total Weir Length, ft	90
Clarifier Unit Width, ft	21	Tank Wall Depth, ft	16.0
Number of Units per Clarifier	1	Tank Water Depth, ft	14.0

#### **SURFACE OVERFLOW RATE**

	Design
Design Flow, gpd/sf	248
Peak Day Flow, gpd/sf	496
Peak Hour Flow, gpd/sf	992
Max. Flow Allowed Through Clarifier Orifice, gpd/sf	1,000 * Max orifice conti

#### **WEIR OVERFLOW RATE**

Design Flow, gpd/lin. ft	2,778
Peak Flow, gpd/lin. ft	11,111

#### **SOLIDS LOADING RATE**

Design Flow, lbs/day/sf	17.8
Peak Flow, lbs/day/sf	39.1

#### **RETENTION TIME - including RAS**

Design Flow, hr	4.1
Peak Flow, hr	1.8

#### PEAK FLOW HANDLING - IN-BASIN SURGE STORAGE

Hourly Peak Flow, MGD	1.000	Vol. of In-Basin Surge Storage, gal		9,400
Max. Flow Through Clarifier, MGD	1.008	Capacity of Surge Storage, hr.	n/a	
Stored Peak Flow, gpm	0			

## Aero-Mod, Inc. TANKAGE DESIGN CALCULATIONS

Project:Taylor Lane, TexasDate:24-May-23Engineer:Smith TurrietaUnits:EnglishTank Construction:Cast-in-Place Concrete

#### SELECTOR TANK

Anoxic Selector	Volume Requ	ired, gal <b>15,879</b>	
Number of Tanks	1	Tank Length, ft	21.0
Tank Wall Height, ft	16.0	Tank Width, ft	5.00
Tank Water Depth, ft	14.0	Total Volume, gallons	10,996
Freeboard, ft	2.0	Retention Time (Design + RAS), min.	25

#### AERATION TANK Volume Selected, gal 208,333

Tank Wall Height, ft	16.0	Number of Trains	2
Tank Water Depth, ft	14.0	Number of Stages	2

Stage 1		Stage 2	
Number of Tanks	2	Number of Tanks	2
Tank Length, ft	18.50	Tank Length, ft	40.75
Tank Width, ft	27.125	Tank Width, ft	12.5
Area of Each Tank, sf	502	Area of Each Tank, sf	509
Total Volume, gallons	105,100	Total Volume, gallons	106,684

Total volume provided, gal 211,783

#### **CLARIFIER TANK**

Number of Tanks	2	Tank Length, ft	24.0
Tank Wall Height, ft	16.0	Tank Width, ft	21.0
Tank Water Depth, ft	14.0	Total Volume, gallons	93,058

#### AEROBIC DIGESTER TANK Volume Selected, gal 88,542

Number of Tanks	2	Tank Length, ft	10
Tank Wall Height, ft	16.0	Tank Width, ft	40.88
Tank Water Depth, ft	14.5	Total Volume, gallons	88,678

#### **OVERALL TANKAGE DIMENSIONS**

Total Length, ft	54.50	Wall Thickness, in	15.0
Total Width, ft	85.5	Floor Thickness, in	15.0
•	-	,	
Total Area, sf	4,660	Total Concrete for Walls, cy	424
Total Wall Length, LF	572	Total Concrete for Slab, cy	229
		Total Grout for Clarifier, cv	62

# DESIGN CALCULATIONS PHASE III

#### Aero-Mod, Inc. ACTIVATED SLUDGE DESIGN CALCULATIONS

Project: Taylor Lane, Texas Date: 10-Jan-24 Kimley-Horn Engineer: Units: English

Act. Sludge Process: SEQUOX BNR

**Population Equivalent** 2919 **DESIGN CONDITIONS & PARAMETERS** 

@0.2lbsBod/cap

DEGICAL CONDITIONS & 1744 AME 1216		@0.210020a.oap		
	Influent	Filtered Effluent		
Flow (Q), MGD	0.250		Aeration Basin	
BOD <sub>5</sub> , mg/l	280	5.0 *	Retention Time, hours	20.1
BOD <sub>5</sub> , lbs/day	584	10.4	Aeration Tank Volume, Mgal	0.210
BOD <sub>L</sub> , mg/l	409		MCRT, days	15.0
TSS, mg/l	280	5.0 *	Wastewater Temperature, °C	20
TSS, lbs/day	584	10.4	Aerobic Digester	
Ammonia-N, mg/l	50.0	1.0	Volume, % of Aeration Tank	42.8
Ammonia-N, lbs/day	104.3	2.1	Maximum MLSS, mg/l	12,000
TIN, mg/l		10.0	Maximum MLSS, %	1.20%
TIN, lbs/day		20.9	Digester Temperature, °C	20
Phosphorus-P, mg/l	6.0	1.0 **	Sludge Holding Tank	
Phosphorus-P, lbs/day	12.5	2.0	Volume, % of Aeration Tank	0.0
Net Alkalinity Loss, mg/l as C	CaCO <sub>3</sub>	(268)	Maximum MLSS, mg/l	25,000
	Requ	ires Filtration *	Maximum MLSS, %	2.50%

Assumes BIO-P: if carbon limited, chemical may be required \*\*

#### PROJECTED OPERATING CONDITIONS - AERATION BASIN

Mixed Liquor Suspended Solids, mg/l	3,412
Mixed Liquor Volatile Suspended Solids, %	71%
F/M Ratio, lbs BOD <sub>5</sub> /lb MLVSS	0.14
F/M Ratio, lbs BOD <sub>5</sub> /lb MLSS	0.10
Organic Loading, lbs BOD <sub>5</sub> /1000 cf of tank/day	20.8
Oxygen Requirements (Carbonaceous), mg/l/hr	13.27
Oxygen Requirements (Nitrogenous), mg/l/hr	11.20
Solids Production, lbs/day	398
WAS - Solids Wasted per Day, lbs/day	387
WAS - Solids Wasted per Day, gal/day @ 0.34%	13,615

#### PROJECTED OPERATING CONDITIONS - AEROBIC DIGESTER

Volatile Solids Loading in Digester, lbs VSS/1,000 cf of tank/day	23
Volatile Solids Reduction in Digester, %	30%
Solids Wasted from Digester, Ibs/day	303
Mass Solids Yield in Process & Digester per Mass Influent BOD <sub>5</sub> , %	54%
Volume Wasted from Digester, gallons/day	3,027
Digester Sludge Age, days	30
Air Required for Stabilization, scfm	105
Air Required for Mixing @ 30 cfm/1000 cf	360

#### Aero-Mod, Inc. NUTRIENT REMOVAL DESIGN CALCULATIONS

Project: Taylor Lane, Texas Engineer: Kimley-Horn	Date: Units:	10-Jan-24 English
NITRIFICATION		
MLVSS in First Stage Aeration Basins, kg MLVSS in Second Stage Aeration Basins, kg Nitrification Rate in MLSS, g NH <sub>3</sub> -N/g MLVSS/d  First Stage Ammonia reduction 1 65% Nitrification Rate, g NH <sub>3</sub> -N/g MLVSS-d  Second Stage Ammonia reduction 1 35% Nitrification Rate, g NH <sub>3</sub> -N/g MLVSS-d  Notes: Assumed		974 962 024
Nitrogen Required for Biological Reproduction (12.2 g per 100 g biomass), mg/l		9.4
DENITRIFICATION		
DeNitrification Portion in First Stage Aeration Basin, % <sup>1</sup> DeNitrification Rate in First Stage Aeration Basin, g NO <sub>3</sub> -N removed/g MLVSS·d C:N Ratio in First Stage Aeration Basin, g BOD <sub>5</sub> :g TKN removed <sup>2</sup> DeNitrification Portion in Second Stage Aeration Basin, % <sup>1</sup> DeNitrification Rate in Second Stage Aeration Basin, g NO <sub>3</sub> -N removed/g MLVSS·d C:N Ratio in Second Stage Aeration Basin, g BOD <sub>5</sub> :g TKN removed <sup>2</sup> Notes: <sup>1</sup> Assumed <sup>2</sup> Minimum C:N ratio for DeNitrification is 3:1  ALKALINITY  Alkalinity Consumption by Nitrification, mg/l as CaCO <sub>3</sub> (45) Alkalinity Production by DeNitrification, mg/l as CaCO <sub>3</sub> (26)  Net Alkalinity Gain (Loss), mg/l as CaCO <sub>3</sub> (26)	40% 0.	031 8.6 : 1 021 4.5 : 1
PHOSPHORUS		
Readily Biodegradable COD - rbCOD (25% of COD), mg/l rbCOD lost by NO <sub>3</sub> -N in RAS, mg/l rbCOD lost by O <sub>2</sub> in RAS, mg/l Phosphorus Removed by BPR Mechanism, mg/l (Capability) Phosphorus Required for Biological Reproduction (2.3 g per 100 g biomass), mg/l Phosphorus Content in Digester/Sludge Holding Supernatant, mg/l 6.	2 1 1	140 11.1 4.9 0.4 1.8
Phosphorus Content in Digester/Sludge Holding Supernatant Impact to Influent, mg/l Phosphorus Remaining after Biological Uptake, mg/l		).45 ).00

## Aero-Mod, Inc. AERATION DESIGN CALCULATIONS

Actual Oxygenation Rate (AOR), Ibs $O_2$ /hr  Standard Oxygenation Rate (SOR), Ibs $O_2$ /hr  SOR = [(AOR * $C_{s,20}$ ) / ( $\alpha$ * $\Theta^{\Lambda(T-20)}$ * (Tau * $\Omega$ * $\beta$ * $C_{s,20}$ - $C_L$ ) * F)]  Where: $\begin{array}{cccccccccccccccccccccccccccccccccccc$
$ \begin{array}{c} \text{xygen Required for BOD} \left[ \text{Q} * \text{BOD}_{\text{rem}} * 8.34 * \text{O}_2 \text{ Req.} / 24 \right], lbs \text{O}_2/\text{hr} } & 10.9 \\ \text{xygen Required for TKN} \left[ \text{Q} * \text{TKN}_{\text{rem}} * 8.34 * \text{O}_2 \text{ Req.} / 24 \right], lbs \text{O}_2/\text{hr} } & 7.8 \\ \hline \textbf{Actual Oxygenation Rate (AOR), lbs O}_2/\text{hr} & 18.7 \\ \hline \textbf{Standard Oxygenation Rate (SOR), lbs O}_2/\text{hr} & 35.1 \\ \hline \text{SOR} = \left[ \left( \text{AOR} * \text{C}_{\text{s,20}} \right) / \left( \alpha * \Theta^{\Lambda(\text{T-20})} * \left( \text{Tau} * \Omega * \beta * \text{C}_{\text{s,20}} - \text{C}_{\text{L}} \right) * \text{F} \right) \right] } \\ \hline \text{Where:} & \textbf{C}_{\text{s,T,H}} \text{ Actual Value of D.O. Saturation, mg/l} & 9.08 & \textbf{C}_{\text{L}} & \text{Residual D.O. Conc, mg/l} \\ \hline \textbf{C}_{\text{s,20}} & \text{Steady State Value of D.O. Saturation, mg/l} & 9.08 & \textbf{T} & \text{Temperature of Water, } ^{\circ}\text{C} \\ \hline \textbf{Tau} & \text{Oxygen Saturation Value } (\text{C}_{\text{s,T,H}}/\text{C}_{\text{s,20}}) & 1.000 & \textbf{F} & \text{Diffuser Fouling Factor} \\ \hline \alpha & \text{Alpha - Oxygen Transfer Correction Factor for Waste} & 0.75 & \Theta & \text{Theta - Oxygen Transfer Coeffi} \\ \hline \beta & \text{Beta - Salinity-Surface Tension Correction Factor} & 0.95 & \text{Site Elevation, FASL} \\ \hline \textbf{P}_{\text{H}} & \text{Atmospheric Pressure at Site Elevation, psi/FASL} & 14.43 & \Omega & \text{Omega} \left( \text{P}_{\text{H}}/\text{P}_{\text{s}} \right) \\ \hline \text{sir Requirement} = \left[ \text{SOR} / \left( \text{Oxygen Density * TE% * Diffuser Depth} \right) / 60 \right], \text{ scfm} & 291 \\ \hline \text{Where:} & \boxed{\text{Oxygen Density, lbs O}_2/\text{cf}} & 0.0175 & \text{Diffuser Depth Below Water Surface, ft} \\ \hline \text{Transfer Efficiency per Foot of Submergence, } % & 0.85\% & 0.85\% \\ \hline \end{array}$
$ \begin{array}{c} \text{xygen Required for TKN [Q * TKN_{rem}* 8.34 * O_2 Req. / 24], lbs O_2/hr} & 7.8 \\ \hline \textbf{Actual Oxygenation Rate (AOR), lbs O_2/hr} & 18.7 \\ \hline \textbf{Standard Oxygenation Rate (SOR), lbs O_2/hr} & 35.1 \\ \hline \textbf{SOR} = [(AOR * C_{s,20}) / (\alpha * \Theta^{\Lambda(T-20)}* (Tau * \Omega * \beta * C_{s,20} - C_L) * F)] \\ \hline \textbf{Where:} & \textbf{C}_{s,T,H} \text{ Actual Value of D.O. Saturation, mg/l} & 9.08 & \textbf{C}_L & \text{Residual D.O. Conc, mg/l} \\ \textbf{C}_{s,20} & \text{Steady State Value of D.O. Saturation, mg/l} & 9.08 & \textbf{T} & \text{Temperature of Water, } ^{\circ}C \\ \hline \textbf{Tau} & \text{Oxygen Saturation Value } (\textbf{C}_{s,T,H}/\textbf{C}_{s,20}) & 1.000 & \textbf{F} & \text{Diffuser Fouling Factor} \\ \alpha & \text{Alpha - Oxygen Transfer Correction Factor for Waste} & 0.75 & \Theta & \text{Theta - Oxygen Transfer Coeffi} \\ \beta & \text{Beta - Salinity-Surface Tension Correction Factor} & 0.95 & \text{Site Elevation, FASL} \\ \hline \textbf{P}_H & \text{Atmospheric Pressure at Site Elevation, psi/FASL} & 14.43 & \Omega & \text{Omega} (\textbf{P}_H/\textbf{P}_s) \\ \hline \textbf{ir Requirement} = [\textbf{SOR} / (\textbf{Oxygen Density} * \textbf{TE}\% * \textbf{Diffuser Depth}) / \textbf{60}], \textbf{scfm} & \textbf{291} \\ \hline \textbf{Where:} & \hline{\textbf{Oxygen Density, lbs O}_2/cf} & 0.0175 & \hline{\textbf{Diffuser Depth Below Water Surface, ft}} \\ \hline \textbf{Transfer Efficiency per Foot of Submergence, }\% & \textbf{0.85}\% & \textbf{0.85}\% \\ \hline \end{array}$
Actual Oxygenation Rate (AOR), Ibs $O_2$ /hr  Standard Oxygenation Rate (SOR), Ibs $O_2$ /hr  SOR = [(AOR * $C_{s,20}$ ) / ( $\alpha$ * $\Theta^{\Lambda(T-20)}$ * (Tau * $\Omega$ * $\beta$ * $C_{s,20}$ - $C_L$ ) * F)]  Where: $\begin{array}{cccccccccccccccccccccccccccccccccccc$
Standard Oxygenation Rate (SOR), Ibs $O_2$ /hr SOR = [(AOR * $C_{s,20}$ ) / ( $\alpha$ * $\Theta$ ^(T-20) * (Tau * $\Omega$ * $\beta$ * $C_{s,20}$ - $C_L$ ) * F)]  Where: $\begin{array}{c} C_{s,T,H} \text{ Actual Value of D.O. Saturation, mg/l} & 9.08 & C_L & \text{Residual D.O. Conc, mg/l} \\ C_{s,20} \text{ Steady State Value of D.O. Saturation, mg/l} & 9.08 & T & \text{Temperature of Water, } ^{\circ}C \\ Tau & \text{Oxygen Saturation Value } (C_{s,T,H}/C_{s,20}) & 1.000 & F & \text{Diffuser Fouling Factor} \\ \alpha & \text{Alpha - Oxygen Transfer Correction Factor for Waste} & 0.75 & \Theta & \text{Theta - Oxygen Transfer Coeffi} \\ \beta & \text{Beta - Salinity-Surface Tension Correction Factor} & 0.95 & \text{Site Elevation, FASL} \\ P_H & \text{Atmospheric Pressure at Site Elevation, psi/FASL} & 14.43 & \Omega & \text{Omega} (P_H/P_s) \\ \hline \text{If Requirement} = [SOR / (Oxygen Density * TE% * Diffuser Depth) / 60], scfm & 291 \\ \hline \text{Where:} & \text{Oxygen Density, lbs } O_2/\text{cf} & 0.0175 & \text{Diffuser Depth Below Water Surface, ft} \\ \hline \text{Transfer Efficiency per Foot of Submergence, } & 0.85\% & 0.85\% \\ \hline \end{array}$
SOR = $[(AOR * C_{s,20}) / (\alpha * \Theta^{\Lambda(T-20)} * (Tau * \Omega * \beta * C_{s,20} - C_L) * F)]$ Where: $\begin{bmatrix} \mathbf{C_{s,T,H}} & \text{Actual Value of D.O. Saturation, mg/l} & 9.08 & \mathbf{C_L} & \text{Residual D.O. Conc, mg/l} \\ \mathbf{C_{s,20}} & \text{Steady State Value of D.O. Saturation, mg/l} & 9.08 & \mathbf{T} & \text{Temperature of Water, } ^{\circ}C \\ \mathbf{Tau} & \text{Oxygen Saturation Value } (C_{s,T,H}/C_{s,20}) & 1.000 & \mathbf{F} & \text{Diffuser Fouling Factor} \\ \alpha & \text{Alpha - Oxygen Transfer Correction Factor for Waste} & 0.75 & \Theta & \text{Theta - Oxygen Transfer Coeffi} \\ \beta & \text{Beta - Salinity-Surface Tension Correction Factor} & 0.95 & \text{Site Elevation, FASL} \\ \mathbf{P_H} & \text{Atmospheric Pressure at Site Elevation, psi/FASL} & 14.43 & \Omega & \text{Omega} (P_H/P_s) \\ \end{bmatrix}$ ir Requirement = $[\mathbf{SOR} / (\mathbf{Oxygen Density} * \mathbf{TE\%} * \mathbf{Diffuser Depth}) / 60]$ , scfm 291  Where: $[\mathbf{Oxygen Density, lbs O_2/cf} $ 0.0175 $[\mathbf{O.0175}]$ Diffuser Depth Below Water Surface, ft $[\mathbf{Transfer Efficiency per Foot of Submergence, %}]$
Where: $\begin{array}{c ccccccccccccccccccccccccccccccccccc$
C <sub>s,20</sub> Steady State Value of D.O. Saturation, mg/l       9.08       T       Temperature of Water, °C         Tau       Oxygen Saturation Value (C <sub>s,T,H</sub> /C <sub>s,20</sub> )       1.000       F       Diffuser Fouling Factor         α       Alpha - Oxygen Transfer Correction Factor for Waste       0.75       Θ       Theta - Oxygen Transfer Coeffi         β       Beta - Salinity-Surface Tension Correction Factor       0.95       Site Elevation, FASL         P <sub>H</sub> Atmospheric Pressure at Site Elevation, psi/FASL       14.43       Ω       Omega (P <sub>H</sub> /P <sub>s</sub> )         ir Requirement = [SOR / (Oxygen Density * TE% * Diffuser Depth) / 60], scfm       291         Where:       Oxygen Density, lbs $O_2$ /cf       0.0175       Diffuser Depth Below Water Surface, ft         Transfer Efficiency per Foot of Submergence, %       0.85%
C <sub>s,20</sub> Steady State Value of D.O. Saturation, mg/l       9.08       T       Temperature of Water, °C         Tau       Oxygen Saturation Value (C <sub>s,T,H</sub> /C <sub>s,20</sub> )       1.000       F       Diffuser Fouling Factor         α       Alpha - Oxygen Transfer Correction Factor for Waste       0.75       Θ       Theta - Oxygen Transfer Coeffi         β       Beta - Salinity-Surface Tension Correction Factor       0.95       Site Elevation, FASL         P <sub>H</sub> Atmospheric Pressure at Site Elevation, psi/FASL       14.43       Ω       Omega (P <sub>H</sub> /P <sub>s</sub> )         ir Requirement = [SOR / (Oxygen Density * TE% * Diffuser Depth) / 60], scfm       291         Where: Oxygen Density, lbs O <sub>2</sub> /cf       0.0175       Diffuser Depth Below Water Surface, ft         Transfer Efficiency per Foot of Submergence, %       0.85%
α       Alpha - Oxygen Transfer Correction Factor for Waste       0.75       Θ       Theta - Oxygen Transfer Coeffi         β       Beta - Salinity-Surface Tension Correction Factor       0.95       Site Elevation, FASL         PH       Atmospheric Pressure at Site Elevation, psi/FASL       14.43       Ω       Omega (PH/Ps)         ir Requirement = [SOR / (Oxygen Density * TE% * Diffuser Depth) / 60], scfm       291         Where:       Oxygen Density, lbs O₂/cf       0.0175       Diffuser Depth Below Water Surface, ft         Transfer Efficiency per Foot of Submergence, %       0.85%
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
P <sub>H</sub> Atmospheric Pressure at Site Elevation, psi/FASL 14.43 Ω Omega (P <sub>H</sub> /P <sub>s</sub> )  ir Requirement = [SOR / (Oxygen Density * TE% * Diffuser Depth) / 60], scfm 291  Where: Oxygen Density, lbs O <sub>2</sub> /cf 0.0175 Diffuser Depth Below Water Surface, ft 0.85%
ir Requirement = [SOR / (Oxygen Density * TE% * Diffuser Depth) / 60], scfm  291  Where: Oxygen Density, lbs O <sub>2</sub> /cf Transfer Efficiency per Foot of Submergence, %  0.0175 Diffuser Depth Below Water Surface, ft 0.85%
Where: Oxygen Density, lbs O <sub>2</sub> /cf 0.0175 Diffuser Depth Below Water Surface, ft Transfer Efficiency per Foot of Submergence, % 0.85%
Transfer Efficiency per Foot of Submergence, % 0.85%
enitrification Credit = [Air Rqmt * (TKN <sub>oxy</sub> / AOR) * 50% * ((TKN <sub>o</sub> - TN <sub>e</sub> ) / TKN <sub>o</sub> )], scfm  Where: TN <sub>e</sub> = TKN <sub>o</sub> / 2 (assumed when D.O. control is not used)
Total Aeration Required in Aeration Basin, scfm 254
r Correction
$icfm = scfm / [((T_{std} + 460) / (T_{air} + 460)) * ((P_H - (RH\% * SVP_{Tair})) / (14.7 - (RH\%_{std} * SVP_{std}))) * ((P_A / P_H)]$
icfm = scfm / [(( $T_{std} + 460$ ) / ( $T_{air} + 460$ )) * (( $P_{H} - (RH\% * SVP_{Tair})$ ) / (14.7 - ( $RH\%_{std} * SVP_{std}$ ))) * (( $P_{A} / P_{H}$ )]  Where: $T_{std}$ , °F 68 $T_{air}$ Maximum Air Temperature, °F 104
Where: T <sub>std</sub> , °F 68 T <sub>air</sub> Maximum Air Temperature, °F <b>104</b> RH% <sub>std</sub> 36% RH% Maximum Relative Humidity, % <b>90%</b>
Where: T <sub>std</sub> , °F 68 T <sub>air</sub> Maximum Air Temperature, °F 104 RH% <sub>std</sub> 36% RH% Maximum Relative Humidity, % 90% SVP <sub>std</sub> , psi 0.34 SVP <sub>Tair</sub> Saturated Vapor Pressure of Air @ T <sub>air</sub> , psi 1.058
Where: T <sub>std</sub> , °F 68 T <sub>air</sub> Maximum Air Temperature, °F 104 RH% <sub>std</sub> 36% RH% Maximum Relative Humidity, % 90% SVP <sub>std</sub> , psi 0.34 SVP <sub>Tair</sub> Saturated Vapor Pressure of Air @ T <sub>air</sub> , psi 1.058
Where: T <sub>std</sub> , °F 68 T <sub>air</sub> Maximum Air Temperature, °F 104 RH% <sub>std</sub> 36% RH% Maximum Relative Humidity, % 90% SVP <sub>std</sub> , psi 0.34 SVP <sub>Tair</sub> Saturated Vapor Pressure of Air @ T <sub>air</sub> , psi 1.058 P <sub>A</sub> Actual Atmospheric Pressure after Blower Inlet, psi 14.23  Minimum Air Required for Mixing in Second & Third Stage Aeration Basin, cfm 139 Signature of Air @ T <sub>air</sub> , psi 1.058 P <sub>A</sub> Actual Atmospheric Pressure after Blower Inlet, psi 14.23
Where: T <sub>std</sub> , °F 68 T <sub>air</sub> Maximum Air Temperature, °F 104 RH% <sub>std</sub> 36% RH% Maximum Relative Humidity, % 90% SVP <sub>std</sub> , psi 0.34 SVP <sub>Tair</sub> Saturated Vapor Pressure of Air @ T <sub>air</sub> , psi 1.058 P <sub>A</sub> Actual Atmospheric Pressure after Blower Inlet, psi 14.23  Minimum Air Required for Mixing in Second & Third Stage Aeration Basin, cfm 139 Signature Aeration Pressure, in. H <sub>2</sub> O 189
Where: T <sub>std</sub> , °F 68 T <sub>air</sub> Maximum Air Temperature, °F 104 RH% <sub>std</sub> 36% RH% Maximum Relative Humidity, % 90% SVP <sub>std</sub> , psi 0.34 SVP <sub>Tair</sub> Saturated Vapor Pressure of Air @ T <sub>air</sub> , psi 1.058 P <sub>A</sub> Actual Atmospheric Pressure after Blower Inlet, psi 14.23  Minimum Air Required for Mixing in Second & Third Stage Aeration Basin, cfm 139 Signature 14.23
Where: T <sub>std</sub> , °F 68 T <sub>air</sub> Maximum Air Temperature, °F 104 RH% <sub>std</sub> 36% RH% Maximum Relative Humidity, % 90% SVP <sub>std</sub> , psi 0.34 SVP <sub>Tair</sub> Saturated Vapor Pressure of Air @ T <sub>air</sub> , psi 1.058 P <sub>A</sub> Actual Atmospheric Pressure after Blower Inlet, psi 14.23  Minimum Air Required for Mixing in Second & Third Stage Aeration Basin, cfm 139 Signature Aeration Pressure, in. H <sub>2</sub> O 189

#### Aero-Mod, Inc. AERATION DESIGN CALCULATIONS

Project: Engineer: Diffuser Ty	Taylor Lane Kimley-Horr <b>/pe Used:</b>	n	M Fine Bubble	е				Date: Units:	10-Jan-24 English
			Design	Peak				Design	Peak
Q, MGD			0.250	0.300	TKN <sub>o</sub> , n	ng/l	•	65.0	65.0
BOD <sub>o</sub> , mo	g/l		280	280	TKN <sub>assir</sub>	milation, mg/l		11.9	9.9
BOD <sub>rem</sub> , r	ng/l		280	280	TKN <sub>rem</sub> ,	mg/l		65.0	65.0
BOD <sub>rem</sub> , I	b/day		584	701	TKN <sub>rem</sub> ,	lb/day		135.5	162.6
O <sub>2</sub> Requi	rement, lb O <sub>2</sub>	2/lb BOD <sub>rem</sub>	1.500		O <sub>2</sub> Req	uirement, Ib	$O_2$ /lb TKN <sub>rem</sub>	4.60	
AERATION	I REQUIREM	IENTS - FIRS	T STAGE					Design	Peak
BOD	0 0		D (O + DOD	* 0 0 4 * 0 . D	/ 0.41		al in First Stage		77.5%
-		quired for BOI						25.5	33.9
I KN <sub>oxy</sub> -		quired for TKN genation Rate			q. / 24], ID	is O <sub>2</sub> /nr	•	18.2 <b>43.7</b>	24.2 <b>58.1</b>
		Oxygenation R ((AOR * C <sub>s,20</sub> ) /			* C <sub>s,20</sub> - C	C <sub>L</sub> ) * F)]		113.6	151.0
Where:	C <sub>s,T,H</sub> Actual	Value of D.O. Sa	turation, mg/l		9.08	CL	Residual D.O. 0	Conc., mg/l	2.0
	-,	y State Value of D		ng/I	9.08	T	Temperature of	Water, ⁰C	20
	, ,	en Saturation Valu	( 0,1,11 0,20)		1.000	F	Diffuser Fouling		0.90
	_	- Oxygen Transfe			0.60	Θ	Theta - Oxygen		1.024
	<u> </u>	Salinity-Surface T pheric Pressure a			0.95 14.43	Ω	Site Elevation, For Omega (P <sub>H</sub> /P <sub>s</sub> )	-ASL	<b>500</b> 0.982
							оода (: <sub>П</sub> .: <sub>s</sub> )		
Air Req	uirement = [	SOR / (Oxyge	n Density * I	E% * Diffusei	r Depth) /	60], sctm		416	553
Where:	Oxygen Densit	ty, lbs O₂/cf ency per Foot of S	Submergence %		0.0175 <b>2.00%</b>	Diffuser Dep	oth Below Water	Surface, ft	13.0
	-								
Denitrif	ication Cred	lit = [Air Rqmt	* (TKN <sub>oxy</sub> / A	OR) * 50% * (	(TKN <sub>o</sub> - T	N <sub>e</sub> ) / TKN <sub>o</sub> )	], scfm	73	100
Where:	$TN_e = TKN_o / 2$	2 (assumed when	D.O. control is no	ot used)					
				ot useu)					
			ation Require		n Basin, s	scfm		343	453
	scfm / [((T <sub>s</sub>	Total Aer td + 460) / (T <sub>air</sub>	ration Require	ed in Aeration	P <sub>Tair</sub> )) / (1	4.7 - (RH%,	std * SVP <sub>std</sub> )))	* ((P <sub>A</sub> / P <sub>H</sub> )]	453
icfm =	scfm / [((T <sub>s</sub>	Total Aer td + 460) / (T <sub>air</sub>	ration Require . + 460)) * ((P <sub>H</sub>	ed in Aeration  4 - (RH% * SV  Maximum Air Te	P <sub>Tair</sub> )) / (1	<b>4.7 - (RH</b> %,	std * SVP <sub>std</sub> )))	* ((P <sub>A</sub> / P <sub>H</sub> )]	453
icfm =	scfm / [((T <sub>s</sub>	Total Aer td + 460) / (T <sub>air</sub> 68 36%	ration Require . + 460)) * ((P <sub>P</sub> T <sub>air</sub> RH%	ed in Aeration (RH% * SV Maximum Air Te Maximum Relati	P <sub>Tair</sub> )) / (1 emperature, ve Humidity	<b>4.7 - (RH%</b> , °F		* ((P <sub>A</sub> / P <sub>H</sub> )] 104 90%	453
icfm =	scfm / [((T <sub>s</sub>	Total Aer td + 460) / (T <sub>air</sub>	ration Require . + 460)) * ((P <sub>H</sub> T <sub>air</sub> RH% SVP <sub>Tair</sub>	ed in Aeration  - (RH% * SV  Maximum Air Te  Maximum Relatir  Saturated Vapor	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure c	<b>4.7 - (RH%</b> , °F ', % of Air @ T <sub>air</sub> , ps	i	* ((P <sub>A</sub> / P <sub>H</sub> )]  104  90% 1.058	453
icfm =	scfm / [((T <sub>s</sub>	Total Aer td + 460) / (T <sub>air</sub> 68 36%	ration Require  . + 460)) * ((P <sub>H</sub> T <sub>air</sub> RH%  SVP <sub>Tair</sub>	ed in Aeration (RH% * SV Maximum Air Te Maximum Relati	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure c	<b>4.7 - (RH%</b> , °F ', % of Air @ T <sub>air</sub> , ps	i	* ((P <sub>A</sub> / P <sub>H</sub> )] 104 90%	453
icfm =	T <sub>std</sub> , °F RH% <sub>std</sub> SVP <sub>std</sub> , psi	Total Aer  td + 460) / (T <sub>air</sub> 68  36%  0.34  n Air Required	ration Require  + 460)) * ((P <sub>H</sub> T <sub>air</sub> RH%  SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F	ed in Aeration  1 - (RH% * SV  Maximum Air Te  Maximum Relati  Saturated Vapor  Actual Atmosphe  First Stage Ae  Second & Thir	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressur ration Bard Stage A	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  ssin, cfm  Aeration Bas	il Inlet, psi sin, cfm	* ((P <sub>A</sub> / P <sub>H</sub> )]  104  90% 1.058	453 Side Roll Side Roll
icfm =	T <sub>std</sub> , °F RH% <sub>std</sub> SVP <sub>std</sub> , psi	Total Aer  td + 460) / (T <sub>air</sub> 68  36%  0.34  n Air Required n Air Required Minimum Air	ration Require  . + 460)) * ((P <sub>H</sub> T <sub>air</sub> RH%  SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F  for Mixing in S	ed in Aeration  - (RH% * SV  Maximum Air Te  Maximum Relati Saturated Vapor Actual Atmosphe  First Stage Ae Second & Thir Operating Full	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressur ration Bard Stage A	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  ssin, cfm  Aeration Bas	il Inlet, psi sin, cfm	* ((P <sub>A</sub> / P <sub>H</sub> )]  104  90%  1.058  14.23  141  139	Side Roll
icfm =	T <sub>std</sub> , °F RH% <sub>std</sub> SVP <sub>std</sub> , psi	Total Aer  td + 460) / (T <sub>air</sub> 68  36%  0.34  n Air Required n Air Required Minimum Air	Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for G ssure, in. H <sub>2</sub> O	ed in Aeration  - (RH% * SV  Maximum Air Te  Maximum Relati Saturated Vapor Actual Atmosphe  First Stage Ae Second & Thir Operating Full	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressure ration Bard Stage A I Plant, cf	4.7 - (RH%,  "F , %  of Air @ T <sub>air</sub> , ps re after Blower sin, cfm Aeration Bas m (mixing requir	il Inlet, psi sin, cfm ement for 24 hrs)	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23 141 139 473  Design	Side Roll Side Roll Peak
icfm =	T <sub>std</sub> , °F RH% <sub>std</sub> SVP <sub>std</sub> , psi	Total Aer  td + 460) / (T <sub>air</sub> 68  36%  0.34  n Air Required n Air Required Minimum Air  Aeration Pres	Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for G ssure, in. H <sub>2</sub> O	ed in Aeration  1 - (RH% * SV  Maximum Air Te  Maximum Relati Saturated Vapor  Actual Atmosphe  First Stage Ae  Second & Thir  Operating Full	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressure ration Bard Stage A I Plant, cf	4.7 - (RH%,  "F , %  of Air @ T <sub>air</sub> , ps re after Blower sin, cfm Aeration Bas m (mixing requir	il Inlet, psi sin, cfm ement for 24 hrs)	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23 141 139 473  Design 204	Side Roll Side Roll Peak 204
icfm =	Scfm / [((T <sub>s</sub>	Total Aer  td + 460) / (T <sub>air</sub> 68  36%  0.34  n Air Required n Air Required Minimum Air  Aeration Prespoi, std	ration Require  .+ 460)) * ((P <sub>H</sub> T <sub>air</sub> RH%  SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for 0  ssure, in. H <sub>2</sub> O  (does not include	ed in Aeration  1 - (RH% * SV  Maximum Air Te  Maximum Relati Saturated Vapor  Actual Atmosphe  First Stage Ae  Second & Thir  Operating Full	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressure ration Bard Stage A I Plant, cf	4.7 - (RH%,  °F , %  of Air @ T <sub>air</sub> , ps re after Blower sin, cfm Aeration Bas m (mixing requir  Design  scfm 343	in Inlet, psi sin, cfm ement for 24 hrs)  Peak  scfm 453	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Pesign 204 7.4  icfm 402	Side Roll Side Roll  Peak 204 7.4 icfm 530
icfm =	Scfm / [((T <sub>s</sub> T <sub>std</sub> , °F  RH% <sub>std</sub> SVP <sub>std</sub> , psi  Minimum  Minimum  Aeration Ba  Aeration Ba	Total Aer  td + 460) / (Tair  68 36% 0.34  n Air Required n Air Required Minimum Air  Aeration Prespsi, std	ration Require  .+ 460)) * ((P <sub>H</sub> T <sub>air</sub> RH%  SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for 0  ssure, in. H <sub>2</sub> O  (does not include	ed in Aeration  1 - (RH% * SV  Maximum Air Te  Maximum Relatir  Saturated Vapor  Actual Atmosphe  First Stage Ae Second & Thir  Operating Full  blower inlet/outlet	P <sub>Tair</sub> )) / (1 emperature, ve Humidity r Pressure ceric Pressur ration Bar d Stage / I Plant, cf	4.7 - (RH%,  °F , %  of Air @ T <sub>air</sub> , ps re after Blower  sin, cfm Aeration Bas m (mixing requir  Design  scfm  343 254	sin, cfm ement for 24 hrs)  Peak  scfm  453 229	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Pesign 204 7.4  icfm  402 297	Side Roll Side Roll Peak 204 7.4 icfm 530 268
icfm =	Scfm / [((T <sub>s</sub> T <sub>std</sub> , °F  RH% <sub>std</sub> SVP <sub>std</sub> , psi  Minimum  Minimum  Aeration Ba  Aeration Ba  Aerobic Dig	Total Aer  td + 460) / (Tair  68 36% 0.34  n Air Required n Air Required Minimum Air  Aeration Prespis, std  asin - Fine Bublisin - Coarse Bester Tank	ration Require  .+ 460)) * ((P <sub>H</sub> T <sub>air</sub> RH%  SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for 0  ssure, in. H <sub>2</sub> O  (does not include	ed in Aeration  1 - (RH% * SV  Maximum Air Te  Maximum Relati Saturated Vapor  Actual Atmosphe  First Stage Ae  Second & Thir  Operating Full	P <sub>Tair</sub> )) / (1 emperature, ve Humidity r Pressure ceric Pressur ration Bar d Stage / I Plant, cf	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  sin, cfm Aeration Bas m (mixing requir  Design  scfm  343 254 180	sin, cfm ement for 24 hrs)  Peak  scfm 453 229 180	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Design 204 7.4  icfm  402 297 180	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180
icfm =	RH% <sub>std</sub> SVP <sub>std</sub> , psi  Minimum Minimum Meration Ba Aeration Ba Aerobic Dig Bio-P / Sele	Total Aer  td + 460) / (Tair  68 36% 0.34  n Air Required n Air Required Minimum Air  Aeration Prespis, std  asin - Fine Bublisin - Coarse Bester Tank	Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for C ssure, in. H <sub>2</sub> O (does not include ble subble	ed in Aeration  1 - (RH% * SV  Maximum Air Te  Maximum Relatir  Saturated Vapor  Actual Atmosphe  First Stage Ae Second & Thir  Operating Full  blower inlet/outlet	P <sub>Tair</sub> )) / (1 emperature, ve Humidity r Pressure ceric Pressur ration Bar d Stage / I Plant, cf	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  Sin, cfm  Aceration Bas m (mixing requir  Design  343 254 180 19 54	sin, cfm ement for 24 hrs)  Peak  scfm  453 229 180 19 54	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23 141 139 473  Design 204 7.4 icfm  402 297 180 19 54	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180 19
icfm =	RH% <sub>std</sub> SVP <sub>std</sub> , psi  Minimum Minimum Meration Ba Aeration Ba Aerobic Dig Bio-P / Sele	Total Aer  td + 460) / (T <sub>air</sub> 68  36%  0.34  n Air Required n Air Required Minimum Air  Aeration Prespsi, std  sisin - Fine Bublisin - Coarse Bester Tank	Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for C ssure, in. H <sub>2</sub> O (does not include ble subble	ed in Aeration  1 - (RH% * SV  Maximum Air Te  Maximum Relati Saturated Vapor Actual Atmosphe First Stage Ae Second & Thir Operating Full  blower inlet/outlet  (sequenced a	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressur ration Bar of Stage A I Plant, cf	4.7 - (RH%,  °F  f Air @ T <sub>air</sub> , ps e after Blower  sin, cfm Aeration Bas m (mixing requir  Design  343 254 180 19	sin, cfm ement for 24 hrs)  Peak  scfm  453 229 180 19 54	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Design 204 7.4  icfm  402 297 180 19 54 952	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180 19 54 1,051
icfm = Where:	Scfm / [((T <sub>s</sub> T <sub>std</sub> , °F  RH% <sub>std</sub> SVP <sub>std</sub> , psi  Minimum  Minimum  Aeration Ba  Aeration Ba  Aerobic Dig  Bio-P / Sele  Clarifier RA	Total Aer  td + 460) / (Tair  68 36% 0.34  n Air Required n Air Required Minimum Air  Aeration Prespi, std  usin - Fine Bublisin - Coarse B ester Tank extor Tank S Airlift Pumps	Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for C ssure, in. H <sub>2</sub> O (does not include ble subble	ed in Aeration  A - (RH% * SV  Maximum Air Te  Maximum Relati  Saturated Vapor  Actual Atmosphe  First Stage Ae  Second & Thir  Operating Full  blower inlet/outlet	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressur ration Bar of Stage A I Plant, cf	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  Sin, cfm  Aceration Bas m (mixing requir  Design  343 254 180 19 54	sin, cfm ement for 24 hrs)  Peak  scfm  453 229 180 19 54 935	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Pesign 204 7.4  icfm 402 297 180 19 54 952 1,132	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180 19 54 1,051 1,231
icfm = Where:	Aeration Ba Aeration Ba Aerobic Dig Bio-P / Sele Clarifier RA	Total Aer  td + 460) / (Tair  68 36% 0.34  n Air Required n Air Required Minimum Air  Aeration Prespis, std  asin - Fine Bublisin - Coarse Bester Tank ector Tank S Airlift Pumps	ration Require  Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for 0  ssure, in. H <sub>2</sub> O (does not include) ble subble s & Skimmers	ed in Aeration  A - (RH% * SV  Maximum Air Te  Maximum Relati  Saturated Vapor  Actual Atmosphe  First Stage Ae  Second & Thir  Operating Full  blower inlet/outlet  (sequenced a  Total Air R  Total Air A	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressur ration Bar of Stage A I Plant, cf	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  Sin, cfm  Aceration Bas m (mixing requir  Design  343 254 180 19 54	sin, cfm ement for 24 hrs)  Peak  scfm  453 229 180 19 54 935	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Pesign 204 7.4  icfm  402 297 180 19 54 952 1,132	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180 19 54 1,051 1,231 Power
icfm = Where:	Aeration Ba Aeration Ba Aerobic Dig Bio-P / Sele Clarifier RA	Total Aer  total Aer  68 36% 0.34  Air Required Air Required Minimum Air  Aeration Prespis, std  asin - Fine Bublisin - Coarse Bester Tank ector Tank S Airlift Pumps  Over for Aeration	ration Require  Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for 0  ssure, in. H <sub>2</sub> O (does not include) ble subble s & Skimmers	ed in Aeration  A - (RH% * SV  Maximum Air Te  Maximum Relati  Saturated Vapor  Actual Atmosphe  First Stage Ae  Second & Thir  Operating Full  blower inlet/outlet  (sequenced a  Total Air R  Total Air A	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressur ration Bar of Stage A I Plant, cf	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  Sin, cfm  Aceration Bas m (mixing requir  Design  343 254 180 19 54	sin, cfm ement for 24 hrs)  Peak  scfm  453 229 180 19 54 935  Unit Blower	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Posign 204 7.4  icfm  402 297 180 19 54 952 1,132  Power 34.8	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180 19 54 1,051 1,231 Power 38.5
icfm = Where:	Aeration Ba Aeration Ba Aeration Ba Aerobic Dig Bio-P / Sele Clarifier RA:	Total Aer  td + 460) / (Tair  68 36% 0.34  n Air Required n Air Required Minimum Air  Aeration Prespis, std  asin - Fine Bublisin - Coarse Bester Tank ector Tank S Airlift Pumps	ration Require  Tair RH% SVPTair PA  for Mixing in F for Mixing in S Required for 0  ssure, in. H <sub>2</sub> O (does not include) ble subble s & Skimmers	ed in Aeration  A - (RH% * SV  Maximum Air Te  Maximum Relati Saturated Vapor Actual Atmosphe First Stage Ae Second & Thir Operating Full  blower inlet/outlet  (sequenced a  Total Air R  Total Air A	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressur ration Bar of Stage A I Plant, cf	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  Sin, cfm  Aceration Bas m (mixing requir  Design  343 254 180 19 54	sin, cfm ement for 24 hrs)  Peak  scfm  453 229 180 19 54 935	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Pesign 204 7.4  icfm  402 297 180 19 54 952 1,132	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180 19 54 1,051 1,231 Power 38.5 8.7
icfm = Where:	Aeration Ba Aeration Ba Aeration Ba Aerobic Dig Bio-P / Sele Clarifier RA:  Operating F Operating F Operating F Operating F Operating F	Total Aer  td + 460) / (Tair  68  36%  0.34  The Air Required Minimum Air  Aeration Prespois, std  asin - Fine Bublesin - Coarse Bester Tank actor Tank Sharlift Pumps  Fower for Aerat  Cower for Diges  Cower for Clarift  Cower for Clarift	ration Require  A + 460)) * ((P <sub>H</sub> T <sub>air</sub> RH%  SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F  for Mixing in S  Required for 0  ssure, in. H <sub>2</sub> O  (does not include  ble  ble ble ble ble ble ble ble ble	ed in Aeration  A - (RH% * SV  Maximum Air Te  Maximum Relati Saturated Vapor Actual Atmosphe First Stage Ae Second & Thir Operating Full  blower inlet/outlet  (sequenced a  Total Air R  Total Air A	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressur ration Bar of Stage A I Plant, cf	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  Sin, cfm  Aceration Bas m (mixing requir  Design  343 254 180 19 54	sin, cfm ement for 24 hrs)  Peak  Scfm  453 229 180 19 54 935  Unit Blower Blower Blower Blower	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Pesign 204 7.4  icfm  402 297 180 19 54 952 1,132  Power 34.8 9.0 0.9 2.7	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180 19 54 1,051 1,231 Power 38.5 8.7 0.9 2.6
icfm = Where:	Aeration Ba Aeration Ba Aeration Ba Aeration Ba Aerobic Dig Bio-P / Sele Clarifier RA:  EQUIREMEN Operating F	Total Aer  td + 460) / (Tair  68 36% 0.34  Air Required Air Required Minimum Air  Aeration Prespis, std  asin - Fine Bublisin - Coarse Bester Tank ector Tank S Airlift Pumps  Ower for Aerat Cower for Diges Cower for Clarift Cower for Clarift Cower for Bio-F	ration Require  Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for 0  ssure, in. H <sub>2</sub> O (does not include ble Bubble s & Skimmers  tion Basin, HP Ster, HP P Fermentation fier, HP P Anaer. Select	ed in Aeration  1 - (RH% * SV  Maximum Air Te  Maximum Relatir  Saturated Vapor  Actual Atmosphe  First Stage Ae Second & Thir Operating Full  blower inlet/outlet  (sequenced a  Total Air A  Total Air A	P <sub>Tair</sub> )) / (1 emperature, ve Humidity Pressure ceric Pressur ration Bar of Stage A I Plant, cf	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  Sin, cfm  Aceration Bas m (mixing requir  Design  343 254 180 19 54	sin, cfm ement for 24 hrs)  Peak  Scfm  453 229 180 19 54 935  Unit  Blower Blower Blower Blower Mixer	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Pesign 204 7.4  icfm  402 297 180 19 54 952 1,132  Power 34.8 9.0 0.9 2.7 1.0	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180 19 54 1,051 1,231 Power 38.5 8.7 0.9 2.6 1.0
icfm = Where:	Aeration Ba Aeration Ba Aeration Ba Aeration Ba Aeration Ba Aerobic Dig Bio-P / Sele Clarifier RA:  EQUIREMEN Operating F	Total Aer  td + 460) / (Tair  68  36%  0.34  The Air Required Minimum Air  Aeration Prespois, std  asin - Fine Bublesin - Coarse Bester Tank actor Tank Sharlift Pumps  Fower for Aerat  Cower for Diges  Cower for Clarift  Cower for Clarift	ration Require  Tair RH% SVP <sub>Tair</sub> P <sub>A</sub> for Mixing in F for Mixing in S Required for 0  ssure, in. H <sub>2</sub> O (does not include  ble ble ble ble s & Skimmers  tion Basin, HP F Fermentation fier, HP P Anaer. Selec	ed in Aeration  I - (RH% * SV  Maximum Air Te  Maximum Relative  Saturated Vapor  Actual Atmosphe  First Stage Ae  Second & Thir  Operating Full  blower inlet/outlet  (sequenced at  Total Air At  To	P <sub>Tair</sub> )) / (1 emperature, ve Humidity r Pressure ceric Pressur ration Bard Stage / I Plant, cf	4.7 - (RH%,  °F  , %  of Air @ T <sub>air</sub> , ps  re after Blower  Sin, cfm  Aceration Bas m (mixing requir  Design  343 254 180 19 54	sin, cfm ement for 24 hrs)  Peak  Scfm  453 229 180 19 54 935  Unit Blower Blower Blower Blower	* ((P <sub>A</sub> / P <sub>H</sub> )]  104 90% 1.058 14.23  141 139 473  Pesign 204 7.4  icfm  402 297 180 19 54 952 1,132  Power 34.8 9.0 0.9 2.7	Side Roll Side Roll Peak 204 7.4 icfm 530 268 180 19 54 1,051 1,231 Power 38.5 8.7 0.9 2.6 1.0 0.9

Minimum Power Required to Operate Full Plant , HP

28.6

### Aero-Mod, Inc. CLARIFIER DESIGN CALCULATIONS

Project:	Taylor Lane, Texas	Date:	10-Jan-24
Engineer:	Kimley-Horn	Units:	English

Clarifier Type Used: Split-ClarAtor

#### **FLOW CONDITIONS**

Design Flow, MGD 0.250	
Peaking Factor, hourly 4.00	1.000 MGD
Duration, min 120	
Peaking Factor, sustained 2.00	0.500 MGD
Aeration Tank Volume, Mgal 0.210	
MLSS, mg/l 3,412	
Avg. RAS Recycle Rate, % 150%	

#### **EQUIPMENT SIZING & SELECTION**

Number of Clarifiers	2	Surface Area per Clarifier, sf	504
Clarifier Unit Model	24504	Total Surface Area, sf	1,008
Bridge Length, ft	24	Total Weir Length, ft	90
Clarifier Unit Width, ft	21	Tank Wall Depth, ft	16.0
Number of Units per Clarifier	1	Tank Water Depth, ft	14.0

#### SURFACE OVERFLOW RATE

	Design
Design Flow, gpd/sf	248
Peak Day Flow, gpd/sf	496
Peak Hour Flow, gpd/sf	992
Max. Flow Allowed Through Clarifier Orifice, gpd/sf	1,000 * Max orifice control

#### **WEIR OVERFLOW RATE**

Design Flow, gpd/lin. ft	2,778
Peak Flow, gpd/lin. ft	11,111

#### **SOLIDS LOADING RATE**

Design Flow, lbs/day/sf	17.6
Peak Flow, lbs/day/sf	38.8

#### **RETENTION TIME - including RAS**

Design Flow, hr	4.1
Peak Flow, hr	1.8

#### PEAK FLOW HANDLING - IN-BASIN SURGE STORAGE

Hourly Peak Flow, MGD	1.000	Vol. of In-Basin Surge Storage, gal		10,007
Max. Flow Through Clarifier, MGD	1.008	Capacity of Surge Storage, hr.	n/a	
Stored Peak Flow, gpm	0			

# Aero-Mod, Inc. TANKAGE DESIGN CALCULATIONS

Project: Taylor Lar Engineer: Kimley-Ho Tank Construction:	rn	e Concrete			Date: Units:	10-Jan-24 English
Freeboard Anaerobio Number of Tank Wall Tank Wate Freeboard	tion f Tanks Height, ft er Depth, ft , ft c Selector f Tanks Height, ft er Depth, ft , ft	/olume Requ 1 16.0 14.0 2.0 /olume Requ 1 16.0 14.0 2.0	Tank Width, f Tank Length, Total Volume Retention Tin ired, gal Tank Width, f Tank Length, Total Volume Retention Tin	ft e, gallons ne, min. <b>20,833</b> ft ft e, gallons ne (Design +	RAS), min.	8.0 17.00 <b>14,242</b> 82 8.00 25.00 <b>20,944</b> 48
AERATION TANK	V	olume Selec	•	209,728		
Tank Wall Height, ft Tank Water Depth, ft		16.0 14.0	Number of Tr Number of St		2 2	
·	Stage 1			Stage 2		
	f Tanks  yth, ft  h, ft  ch Tank, sf  me, gallons  Stage  f Tanks  yth, ft	2 21.00 24.000 504 <b>105,558</b> 0 0.0	Number of Ta Tank Length, Tank Width, the Area of Each Total Volume Number of Ta Tank Length, Tank Width, the	anks ft ft Tank, sf r, gallons Stage 3 anks ft	2 43.25 11.5 497 <b>104,170</b> 0 0.0	
Area of Ea	nch Tank, sf me, gallons	0 <b>0</b>	Area of Each Total Volume	Tank, sf	0.0 <b>0</b>	
	Т	otal volume	provided, gal		209,728	
CLARIFIER TANK						
Number of Tanks Tank Wall Height, ft Tank Water Depth, ft		2 16.0 14.0	Tank Width, the Tank Length, Total Volume	ft		24.0 21.0 <b>105,558</b>
AEROBIC DIGESTER	TANK V	olume Selec	ted, gal	89,763		
Number of Tanks Tank Wall Height, ft Tank Water Depth, ft		2 16.0 14.5	Tank Length, Tank Width, t Total Volume	ft		10 41.375 <b>89,763</b>
OVERALL TANKAGE	DIMENSIONS					
Total Length, ft Total Width, ft Total Area, sf Total Wall Length, LF		57.00 86.50 4,931 581	Wall Thickne Floor Thickne Total Concre Total Concre Total Grout fo	ess, in te for Walls, te for Slab, c	y	15.0 15.0 <b>430</b> <b>242</b> <b>60</b>

# ATTACHMENT 13 FEMA MAP

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

# NOTES TO USERS

To obtain more detailed information in areas where **Base Flood Elevation** (BFEs) and/or **floodways** have been determined, users are encouraged to consthe Flood Profiles and Floodway Data and/or Summary of Stillwater Elevation tables contained within the Flood Insurance Study (FIS) report that accompanithe FIRM. Users should be aware that BFEs shown on the FIRM represerounded whole-foot elevations. These BFEs are intended for flood insurance ration purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and

**Coastal Base Flood Elevations** shown on this map apply only landward 0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should aware that coastal flood elevations are also provided in the Summary tillwater Elevations tables in the Flood Insurance Study report for this jurisdictic levations shown in the Summary of Stillwater Elevations tables should be used it onstruction and/or floodplain management purposes when they are higher the elevations shown on this FIRM.

oundaries of the **floodways** were computed at cross sections and interpole etween cross sections. The floodways were based on hydraulic considerati ith regard to requirements of the National Flood Insurance Program. Floodyidths and other pertinent floodway data are provided in the Flood Insuratudy report for this jurisdiction.

The **projection** used in the preparation of this map was Texas State Plane central zone (FIPSZONE 4203). The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM. Certain areas not in Special Flood Hazard Areas may be protected by control structures. Refer to Section 2.4 "Flood Protection Measures". Flood Insurance Study report for information on flood control structures fourisdiction.

od elevations on this map are referenced to the North American Vertical Datum 1988. These flood elevations must be compared to structure and ground vations referenced to the same **vertical datum**. For information regarding nversion between the National Geodetic Vertical Datum of 1929 and the rth American Vertical Datum of 1988, visit the National Geodetic Survey bsite at <a href="http://www.ngs.noaa.gov">http://www.ngs.noaa.gov</a> or contact the National Geodetic Survey at following address:

NGS Information Services NOAA, N/NGS12 National Geodetic Survey

C-3, #9202 East-West Highway r Spring, MD 20910-3282

To obtain current elevation, description, and/or location information for **bench** marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at http://www.ngs.noaa.gov.

**Base map** information shown on this FIRM was provided in digital format by the City of Austin and CAPCOG. The projection used in the preparation of the FIRMs was Texas State Plane Central Zone (FIPSZONE 4203) and the horizontal datum was NAD83, GRS1980 spheroid. This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authorative hydraulic data) may reflect stream channel distances tha differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

ase refer to the separately printed **Map Index** for an overview map of the nty showing the layout of map panels; community map repository addresses a Listing of Communities table containing National Flood Insurance Prograns for each community as well as a listing of the panels on which each munity is located.

For information on available products associated with this FIRM, visit the Map Service Center (MSC) website at <a href="http://msc.fema.gov">http://msc.fema.gov</a>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and /or digital version of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have questions about this map, how to order products or the Insurance Program in general, please call the FEMA Map Inform (FMIX) at 1-877-336-2627 or visit the FEMA http://fema.gov/business.nfip.

JOINS PANEL 0515 PEACE ON EARTH PAT \(\sqrt{}\) Dry Greek Tochwood Greek OF OF WELLERY ROAD BOWIEM ( ZONE A-RAVIS COUNTY CORPORATED AREAS 480126 (II) **ZONE AE** FLOODING EFFECTS FROM
GILLELAND CREEK JOINS PANEL 0490 <sup>3</sup>51

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% dance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual dance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A

Flood Section No Base Flood Elevations determined.

Base Flood Elevations determined.

Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.

Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.

Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

Coastal flood zone with velocity hazard (wave action); base Flood Elevations determined. Floodway boundary

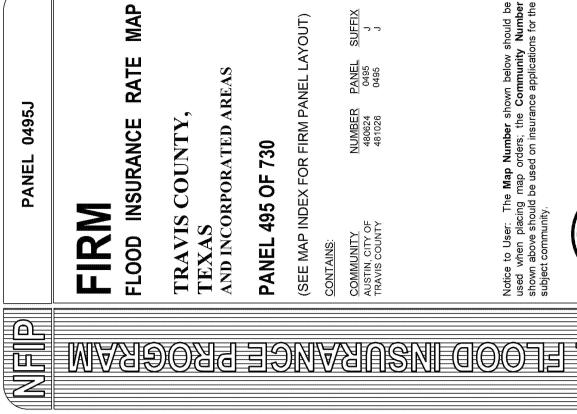
Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and

boundary dividing Special Flood Hazard Areas of different Base

Flood Elevations, flood depths or flood velocities. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases n flood heights. OTHER FLOOD AREAS
Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS OTHERWISE PROTECTED AREAS (OPAs) Areas determined to be outside the 0.2% annual chance floodpli Areas in which flood hazards are undetermined, but possible. For community map revision history prior to countywide mapping, refer to the Cd Map History table located in the Flood Insurance Study report for this jurisdiction. To determine if flood insurance is available in this community, contact your agent or call the National Flood Insurance Program at 1-800-638-6620. Geographic coordinates referenced to the North Datum of 1983 (NAD 83), Western Hemisphere EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL June 5, 1997 January 19, 2000 April 15, 2002 September 26, 2008 5000-foot grid values: Texas State Plane coordi Central zone (FIPSZONE 4203), Lambert Confor projection
Bench mark (see explanation in Notes to Users FIRM panel) August 18, 2014 - to change Base Flood Elevations and Special Flood Hazincorporate previously issued Letters of Map Revision. MAP REPOSITORY to listing of Map Repositories on Map In EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP June 16, 1993 MAP SCALE 1" = 1000' FLOODWAY AREAS IN ZONE AE Culvert, Flume, Penstock or Road or Railroad Bridge Base Flood Elevation li Base Flood Bevation v in feet\* 87°07'45", 32°22'30' 600000 FT (EL 987) ZONE A99 ZONE AO ZONE AR ZONE V ZONE X ZONE D ZONEX



RATE

TRAVIS COUNTY,
TEXAS
AND INCORPORATED AREAS

**PANEL 495 OF 730** 

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

The Map Number shown below should be nap orders; the Community Number all be used on insurance applications for the

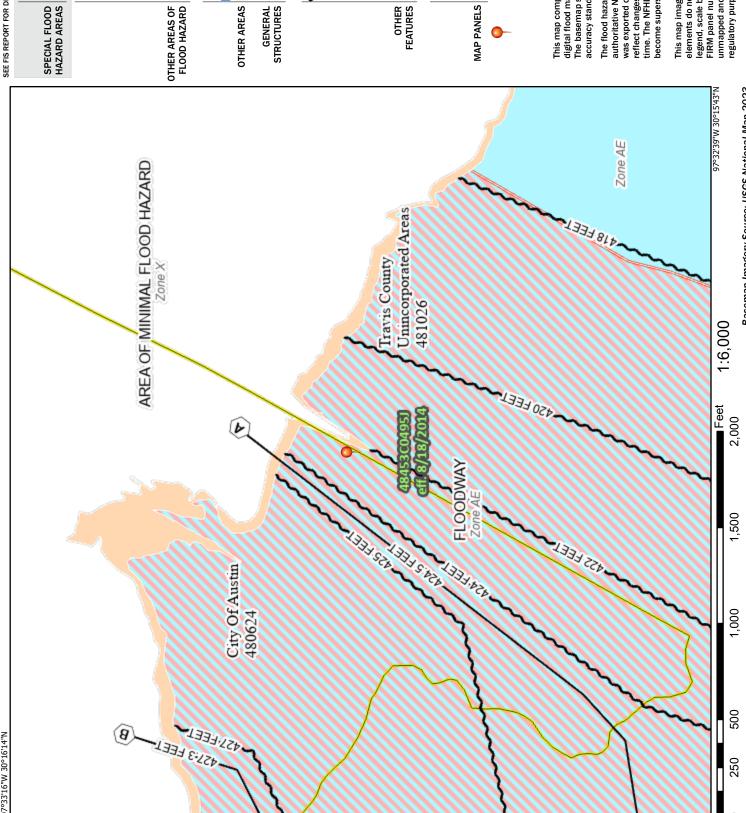
MAP NUMBER 48453C0495J

MAP REVISED AUGUST 18, 2014

Federal Emergency Management Agency

# National Flood Hazard Layer FIRMette





# **Legend**

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

HAZARD AREAS SPECIAL FLOOD

With BFE or Depth Zone AE, AO, AH, VE, AR Without Base Flood Elevation (BFE)

0.2% Annual Chance Flood Hazard, Areas depth less than one foot or with drainage areas of less than one square mile Zone X of 1% annual chance flood with average Regulatory Floodway

Future Conditions 1% Annual Chance Flood Hazard Zone X

Area with Reduced Flood Risk due to Levee. See Notes. Zone X

Area with Flood Risk due to Levee Zone D

NO SCREEN Area of Minimal Flood Hazard Zone X **Effective LOMRs** 

Area of Undetermined Flood Hazard Zone D

Channel, Culvert, or Storm Sewer STRUCTURES 1111111 Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation (B) 20.2 17.5

Base Flood Elevation Line (BFE) Coastal Transect Limit of Study mm 513 mm

**Jurisdiction Boundary** 

Coastal Transect Baseline Profile Baseline

Hydrographic Feature

Digital Data Available

No Digital Data Available

point selected by the user and does not represent an authoritative property location. The pin displayed on the map is an approximate

Unmapped

This map complies with FEMA's standards for the use of The basemap shown complies with FEMA's basemap digital flood maps if it is not void as described below accuracy standards

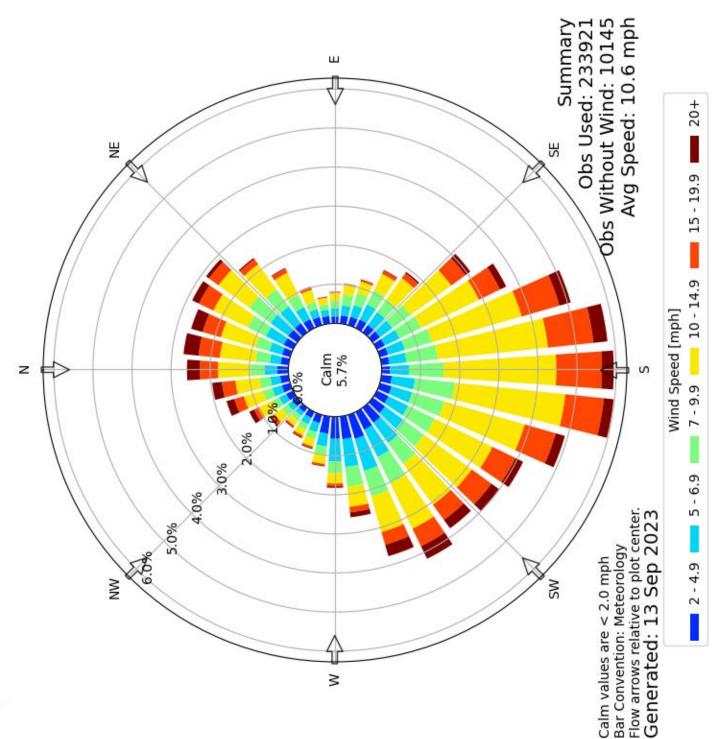
authoritative NFHL web services provided by FEMA. This map reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or The flood hazard information is derived directly from the was exported on 1/3/2024 at 1:12 PM and does not become superseded by new data over time. This map image is void if the one or more of the following map legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes. elements do not appear: basemap imagery, flood zone labels,

# ATTACHMENT 14 WIND ROSE

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP



Windrose Plot for [BGD] BORGER/HUTCHINSON Obs Between: 01 Jul 1996 02:51 AM - 13 Sep 2023 01:51 AM America/Chicago



# ATTACHMENT 15 PRETREATMENT PROGRAM SUMMARY

City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

#### City of Austin - Austin Water Taylor Lane WWTP TCEQ Permit -WQ0010543014 Application for Domestic WWTP

#### **Industrial Waste Contribution and Pretreatment Program**

The City of Austin -Austin Water's Pretreatment Program was originally approved on December 24, 1983, modified in July 1994, June 2, 2005 and on April 14, 2022.

The Taylor Lane Wastewater Treatment Plant (WWTP) primarily serves residential customers. There are no Significant or Categorical Industrial Users (SIUs/CIUs) nor does Austin Water anticipate serving any SIUs or CIUs at Taylor Lane WWTP. Therefore, Austin Water requests that the Taylor Lane WWTP to be delisted from the City's pretreatment program.

In the future, should an SIU or CIU request to discharge into Taylor Lane WWTP, then Austin Water will notify TCEQ.