



Administrative Package Cover Page

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. Application materials
-



Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
 - Inglés
 - Idioma alternativo (español)
2. Primer aviso (NORI, por sus siglas en inglés)
 - Inglés
 - Idioma alternativo (español)
3. Solicitud original



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by [Title 30, Texas Administrative Code \(30 TAC\), Chapter 39, Subchapter H](#). Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in [30 TAC Section 39.426](#), **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

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 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Hays County MUD No. 4 (C6026906612) operates Hays County MUD No. 4 Wastewater Treatment Plant (RN103897567), a public wastewater treatment facility. The facility is located at Ledge Stone subdivision, in Austin, Hays County, Texas 78737. This application will apply for the renewal of the existing permit for land application of treated wastewater effluent onto defined areas within the district's boundaries. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain no significant amount of pollutants. Wastewater is discharged in the form of treated effluent for irrigation or stored in a sludge dewatering box and hauled to a license facility and is treated by aeration, clarification, chlorination and chlorine contact.

**PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE
TPDES o TLAP**

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /**AGUAS PLUVIALES**

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas 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 es una representación ejecutiva fedérale de la solicitud de permiso.

Hays County MUD No. 4 (C6026906612)) opera la Planta de Tratamiento de Aguas Residuales Hays County MUD No. 4 RN103897567), una instalación pública de tratamiento de aguas residuales.. La instalación está ubicada en la subdivisión Ledge Stone, en Austin, Condado de Hays, Texas 78737. Esta solicitud se aplicará para la renovación del permiso existente para la aplicación de tierra del efluente de aguas residuales tratadas en áreas definidas dentro de los límites del distrito.. Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan se espera que no contenga una cantidad significativa de contaminantes. Las aguas residuales se descargan en forma de efluente. está tratado por riego o se almacenan en una caja de deshidratación de lodos y se transportan a una instalación con licencia y se tratan mediante aireación, clarificación, cloración y contacto con cloro.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PERMIT NO. WQ0014309001

APPLICATION. Hays County Municipal Utility District No. 4, 600 West 5th Street, Suite 900, Austin, Texas 78701, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0014309001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 150,000 gallons per day via: subsurface area drip dispersal irrigation of 34.44 acres of land. The domestic wastewater treatment facility and disposal area are located approximately 608 feet north and 2,950 feet west of the intersection of Nutty Brown Road and U.S. Highway 290, in the city of Dripping Springs, in Hays County, Texas 78737. TCEQ received this application on August 29, 2024. The permit application will be available for viewing and copying at Dripping Springs City Hall, 511 Mercer Street, Dripping Springs, in Hays County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications>. 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=-97.98279,30.210416&level=18>

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications>.

El aviso de idioma alternativo en español está disponible en

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications>.

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 county-wide 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 www.tceq.texas.gov/goto/cid. 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 <https://www14.tceq.texas.gov/epic/eComment/>, 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 www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Hays County Municipal Utility District No. 4 at the address stated above or by calling Mr. Jacob Valentien, P.E., Senior Project Manager, Westwood Professional Services, at 512-485-0831.

Issuance Date: November 15, 2024

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 NO. WQ0014309001

SOLICITUD. Hays County Municipal Utility District No. 4, 600 West 5th Street, Suite 900, Austin, Texas 78701, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para el propuesto Permiso No. WQ0014309001 de disposición de aguas residuales] para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 150,000 galones por día por medio de irrigación por goteo de dispersión en área subsuperficial de 34.44 acres de tierra. La planta de tratamiento de aguas domésticos residuales y el área de disposición están ubicados en aproximadamente 608 pies al norte y 2950 pies al oeste de la intersección de la US 290 y Nutty Brown Road en el Condado de Hays, Texas. La TCEQ recibió esta solicitud el día agosto 29, 2024. La solicitud para el permiso está disponible para leer y copiar en Dripping Springs City Hall, 511 Mercer Street, Dripping Springs, en Hays County, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications>.

Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.98279,30.210416&level=18>

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar **comentarios públicos o pedir una reunión pública sobre esta solicitud.** El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO.

Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del

público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Hays County Municipal Utility District No. 4 a la dirección indicada arriba o llamando a Westwood Professional Services al (512) 485-0831.

Fecha de emission: 15 de noviembre de 2024

Erwin Madrid

From: Jacob Valentien <Jacob.Valentien@westwoodps.com>
Sent: Tuesday, November 5, 2024 10:43 AM
To: Erwin Madrid
Cc: Nick Pena; Matthew Kutac
Subject: RE: Application for Permit No. WQ0014309001 - Notice of Deficiency Letter
Attachments: Permit Renewal Application - Worksheet 3.0 Page 1.pdf; Permit Renewal Application - Updated Site Location Page.pdf; NORI -Spanish Version Complete.docx; Permit Renewal Application Deficiency Notice Response 20241105.pdf

Erwin,

Please see attached for our response to the NOD letter sent on October 22, 2024.

If you have any additional questions or comments, please let us know and we can address/remedy promptly.

Thanks,

Jacob Valentien
Public Infrastructure Market Lead
jacob.valentien@westwoodps.com

direct (512) 485-0831
main 512.485.0831
cell (713) 829-6003

Westwood
8701 N. Mopac Expy Suite 320
Austin, TX 78759

westwoodps.com
(888) 937-5150

From: Erwin Madrid <Erwin.Madrid@tceq.texas.gov>
Sent: Tuesday, October 22, 2024 5:20 PM
To: Jacob Valentien <Jacob.Valentien@westwoodps.com>
Cc: Matthew Kutac <mkutac@mbkfirm.com>; Erwin Madrid <Erwin.Madrid@tceq.texas.gov>
Subject: Application for Permit No. WQ0014309001 - Notice of Deficiency Letter
Importance: High

CAUTION: External Sender. Please do not click on links or open attachments from senders you do not trust.

Dear applicant,

The attached Notice of Deficiency letter sent on **October 22, 2024**, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by **November 5, 2024**.

Regards,

Erwin Madrid
Team Lead
ARP Team | Water Quality Division
512-239-2191
Texas Commission on Environmental Quality



Please consider whether it is necessary to print this e-mail.

November 5, 2024
Project No.: R0052766.00

Texas Commission on Environmental Quality
Water Quality Division
Erwin Madrid
Building F, Room 2101
12100 Park 35 Circle
Austin, Texas 78753

Texas Commission on Environmental Quality
Water Quality Division
Erwin Madrid
PO Box 13087
Austin, Texas 78711-3087

Re: **TCEQ PERMIT RENEWAL APPLICATION DEFICIENCY RESPONSE**
TCEQ Permit Number WQ0014309001
Westwood Job Number: 0052766.00 – ID 08

Dear Erwin Madrid,

This document will serve as our response to the items that you brought to our attention when checking for the completeness of our Permit Renewal Application. All comments are addressed and the updated pages from the document are attached below.

If you have questions concerning this response please contact me at (512) 485-0831.

Sincerely,



Jacob W. Valentien, P.E.
District Engineer

CC: Matt Kutac – Law Office of Matthew B. Kutac

Response to Comment 1:

Comment from Reviewer: Section III, question 25, on page 2 of the TCEQ Core Data Form: Our requirements for describing the facility location in the permit have changed. The description must include the distance in feet or miles from a major road intersection. Please provide a revised facility location description that uses the road intersections.

Response from Westwood: The updated facility description is as follows: “Approximately 608 feet north and 2950 feet west of the intersection of US 290 and Nutty Brown Road.” This intersection is closer to the wastewater treatment plant so should be easier to locate. We’ve attached a pdf of the specific page where this information is located and has been updated.

Response to Comment 2:

Comment from Reviewer: Worksheet 3.0 of the Technical Report: The current permit authorizes the disposal of 150,000 MGD via subsurface area drip dispersal on 34.44 acres of land. The information supplied on the Worksheet 3.0 indicates that the disposal area is 27.2 acres and 119,566 MGD. Please confirm if you are requesting to reduce the acres for disposal and a reduction in permitted average daily flow.

Response from Westwood: We are **not** requesting a reduction in disposal acres or permitted average daily flow. The facility currently operates in the interim II phase of 100,000 gpd. The facility currently has 100,000 gpd of drip field disposal area constructed. The District will construct additional drip field disposal areas to expand the facility to the ultimate phase of 150,000 gpd over time. The worksheet has been revised to reflect the phases of the permit.

The District is currently working on evaluating additional areas for drip field disposal area expansion and will ultimately file a major permit amendment with the TCEQ to revise the disposal areas of the permit and additional interim phases to ultimately reach the 150,000 gpd limit of the current permit.

Response to Comment 3:

Comment from Reviewer: The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

Response from Westwood: All information presented is accurate and complete including the revision to the wastewater treatment plant location description per comment 1.

Response to Comment 4:

Comment from Reviewer: The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Response from Westwood: The NORI has been translated and the Spanish NORI is attached.

23. Street Address of the Regulated Entity: (No PO Boxes)							
	City		State		ZIP		ZIP + 4
24. County							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	Approximately 608 feet north and 2950 feet west of the intersection of US 290 and Nutty Brown Road						
26. Nearest City	State				Nearest ZIP Code		
Dripping Springs				TX		78737	
Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).							
27. Latitude (N) In Decimal:	30.21024			28. Longitude (W) In Decimal:	97.98285		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
30	12	36.87	97	58	58.26		
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)		
4952			22132				
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)							
34. Mailing Address:	3321 Bee Caves, Suite 203						
	City	Austin	State	TX	ZIP	78746	ZIP + 4
35. E-Mail Address:	MKutac@mbkfirm.com						
36. Telephone Number	37. Extension or Code		38. Fax Number (if applicable)				
(512) 615- 0503			() -				

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.


<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input checked="" type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:
	WQ0014309001			

SECTION IV: Preparer Information

40. Name:	Jacob Valentien, PE	41. Title:	Senior Project Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 485-0831		() -	jacob.valentien@westwoodps.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Hays County MUD No. 4	Job Title:	District Engineer
Name (In Print):	Jacob Valentien, PE	Phone:	(512) 485-0831
Signature:		Date:	08/28/2024

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

The following is required for renewal, new, and amendment permit applications.

Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

- | | |
|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Surface application | <input type="checkbox"/> Subsurface application |
| <input type="checkbox"/> Irrigation | <input type="checkbox"/> Subsurface soils absorption |
| <input type="checkbox"/> Drip irrigation system | <input checked="" type="checkbox"/> Subsurface area drip dispersal system |
| <input type="checkbox"/> Evaporation | <input type="checkbox"/> Evapotranspiration beds |
| <input type="checkbox"/> Other (describe in detail): Click to enter text. | |

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

For existing authorizations, provide Registration Number: 103897567

Section 2. Land Application Site(s) (Instructions Page 68)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

Table 3.0(1) – Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N
Phase 1 - Bermuda and Rye Grass	17.22	75,000	Y
Interim II - Bermuda and Rye Grass	5.74	25,000	Y
Final - Bermuda and Rye Grass	11.48	50,000	Y

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECIBO DE LA SOLICITUD E INTENCION DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA

PERMISO PROPUESTO NO. WQ0014309001

SOLICITUD. Hays County Municipal Utility District No. 4, 3321 Bee Caves Road, Suite 203, Austin, Texas 78746 ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para el propuesto Permiso No. WQ0014309001 de disposición de aguas residuales] para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 150,000 galones por día por medio de irrigación por goteo de dispersión en área subsuperficial de 34.44 acres de tierra. La planta de tratamiento de aguas domésticos residuales y el área de disposición están ubicados en aproximadamente 608 pies al norte y 2950 pies al oeste de la intersección de la US 290 y Nutty Brown Road en el Condado de Hays, Texas. La TCEQ recibió esta solicitud el día agosto 29, 2024. La solicitud para el permiso está disponible para leer y copiar en Dripping Springs City Hall, 511 Mercer Street, Dripping Springs, en Hays County, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications>.

Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.98279,30.210416&level=18>

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar **comentarios públicos o pedir una reunión pública sobre esta solicitud.** El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el

Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO

CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de

derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Hays County Municipal Utility District No. 4 a la dirección indicada arriba o llamando a Westwood Professional Services al (512) 485-0831.

Fecha de emisión _____ *[Date notice issued]*

August 28, 2024
Project No.: R0052766.00

**Texas Commission on Environmental Quality
Water Quality Division**

Applications Review and Processing Team (MC 148)
Building F, Room 2101
12100 Park 35 Circle
Austin, Texas 78753

**Texas Commission on Environmental Quality
Water Quality Division**

Applications Review and Processing Team (MC 148)
PO Box 13087
Austin, Texas 78711-3087

Re: **TCEQ PERMIT RENEWAL APPLICATION**
TCEQ Permit Number WQ0014309001
Westwood Job Number: 0052766.00 – ID 08

Dear Review Team,

Westwood Professional Services has completed the above referenced permit renewal application for Hays County Municipal Utility District No. 4. Enclosed, please find the original completed form and three (3) copies. The application fee is being submitted under separate cover as requested.

The District understands that the current permit expiration date is September 1, 2024 and kindly request an administrative extension pending review of this permit renewal application.

The District does not represent that all land currently permitted for drip irrigation will be used for drip irrigation. The District is currently evaluating additional land within the District for use as permitted drip irrigation area, and intends to submit an application for a major amendment to include them and remove areas that will not be utilized at a later date. This application is to renew the current permit.

If you have questions concerning this application please contact me at (512) 485-0831.

Sincerely,



Jacob W. Valentien, P.E.
District Engineer

CC: Matt Kutac – Law Office of Matthew B. Kutac

Texas Commission on Environmental Quality
Domestic Wastewater Permit Renewal Application for

Hays County MUD No. 4
Permit Number WQ0014309001

Hays County, Texas

Prepared for:

Hays County MUD No. 4
3321 Bee Caves Rd, Suite 203
Austin, TX, 78746

Prepared by:

Westwood Professional Services
8701 N Mopac Expy, Suite 320
Austin, TX, 78759

August 2024

Firm Registration No. F-11756
WW Job No: 0052766.00 – WW01



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Hays County Municipal Utility District No. 4

PERMIT NUMBER (If new, leave blank): WQ0014309001

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

	Y	N		Y	N
Administrative Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Original USGS Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Administrative Report 1.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Affected Landowners Map	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPIF	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Landowner Disk or Labels	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Core Data Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Buffer Zone Map	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Involvement Plan Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Flow Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site Drawing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Original Photographs	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 2.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Design Calculations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 2.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Solids Management Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water Balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 3.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 3.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 4.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 6.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Worksheet 7.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

For TCEQ Use Only

Segment Number _____ County _____
Expiration Date _____ Region _____
Permit Number _____



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**DOMESTIC WASTEWATER PERMIT APPLICATION
ADMINISTRATIVE REPORT 1.0**

For any questions about this form, please contact the Applications Review and Processing Team at 512-239-4671.

Section 1. Application Fees (Instructions Page 26)

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

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 <input type="checkbox"/>	\$315.00 <input type="checkbox"/>
≥0.05 but <0.10 MGD	\$550.00 <input type="checkbox"/>	\$515.00 <input type="checkbox"/>
≥0.10 but <0.25 MGD	\$850.00 <input type="checkbox"/>	\$815.00 <input checked="" type="checkbox"/>
≥0.25 but <0.50 MGD	\$1,250.00 <input type="checkbox"/>	\$1,215.00 <input type="checkbox"/>
≥0.50 but <1.0 MGD	\$1,650.00 <input type="checkbox"/>	\$1,615.00 <input type="checkbox"/>
≥1.0 MGD	\$2,050.00 <input type="checkbox"/>	\$2,015.00 <input type="checkbox"/>

Minor Amendment (for any flow) \$150.00 ☐

Payment Information:

Mailed Check/Money Order Number: 205821
Check/Money Order Amount: \$815
Name Printed on Check: Westwood Professional Services, Inc.

EPAY Voucher Number: N/A

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

a. Check the box next to the appropriate authorization type.

- ☒ Publicly-Owned Domestic Wastewater
☐ Privately-Owned Domestic Wastewater
☐ Conventional Wastewater Treatment

b. Check the box next to the appropriate facility status.

- ☒ Active ☐ Inactive

c. Check the box next to the appropriate permit type.

- ☐ TPDES Permit
☒ TLAP
☐ TPDES Permit with TLAP component
☐ Subsurface Area Drip Dispersal System (SADDs)

d. Check the box next to the appropriate application type

- | | |
|-----------------------------------------------------------------|-----------------------------------------------------------------|
| <input type="checkbox"/> New | |
| <input type="checkbox"/> Major Amendment <u>with</u> Renewal | <input type="checkbox"/> Minor Amendment <u>with</u> Renewal |
| <input type="checkbox"/> Major Amendment <u>without</u> Renewal | <input type="checkbox"/> Minor Amendment <u>without</u> Renewal |
| <input checked="" type="checkbox"/> Renewal without changes | <input type="checkbox"/> Minor Modification of permit |

e. For amendments or modifications, describe the proposed changes: N/A

f. For existing permits: WQ0014309001

EPA I.D. (TPDES only): TX N/A

Expiration Date: 09/01/2024

Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 26)

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

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

Hays County Municipal Utility District No. 4

(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 <http://www15.tceq.texas.gov/crpub/>

CN: 602690661

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

Last Name, First Name: McColloch, Craig

Title: Board President

Credential: P.E

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: N/A

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: N/A

Last Name, First Name: N/A

Title: N/A

Credential: 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: 1

Section 4. Application Contact Information (Instructions Page 27)

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.

Last Name, First Name: Valentien, Jacob

B. Title: Senior Project Manager

Credential: P.E

Organization Name: Westwood Professional Services

Mailing Address: 8701 N Mopac Expressway, Suite 320

City, State, Zip Code: Austin, TX 78759

Phone No.: c
both: ☐

E-mail Address: Jacob.valentien@westwoodps.com
Administrative Contact ☒

Check one or

Technical Contact ☐

C. Prefix: Mr.

Last Name, First Name: Kutac, Matthew

Title: Attorney

Credential: Click to enter text.

Organization Name: Law Office of Matthew B. Kutac

Mailing Address: 3321 Bee Caves Rd, Suite 203

City, State, Zip Code: Austin, TX 78746

Phone No.: 512-615-0503

E-mail Address: MKutac@mbkfirm.com

Check one or both:

☒

Administrative Contact

☐

Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

Provide the names and contact information for two individuals that can be contacted throughout the permit term.

A. Prefix: Mr.

Last Name, First Name: Valentien, Jacob

Title: Senior Project Manager

Credential: P.E

Organization Name: Westwood Professional Services

Mailing Address: 8701 N. Mopac Expressway Suite 320

City, State, Zip Code: Austin, TX, 78759

Phone No.: 512-485-0831

E-mail Address: Jacob.valentien@westwoodps.com

B. Prefix: Mr. Last Name, First Name: McColloch, Craig
Title: Board President Credential: P.E.
Organization Name: Hays County MUD No. 4
Mailing Address: 3321 Bee Caves Rd City, State, Zip Code: Austin, Texas 78746
Phone No.: (512) 615-0503 E-mail Address: N/A

Section 6. Billing Contact Information (Instructions Page 27)

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: Mrs. Last Name, First Name: Carden, Tiffany
Title: District Bookkeeper Credential: Click to enter text.
Organization Name: L&S District Services, LLC
Mailing Address: 305 Peach St City, State, Zip Code: Tomball, TX, 77375
Phone No.: 281-356-7542 E-mail Address: tiffany.n.loggins@gmail.com

Section 7. DMR/MER Contact Information (Instructions Page 27)

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

Prefix: Mr. Last Name, First Name: Wright, Lonnie
Title: District Operator Credential: Click to enter text.
Organization Name: Municipal Operations & Consultants, LLC
Mailing Address: 20141 Schiel Road City, State, Zip Code: Cypress, TX, 77433
Phone No.: 281-367-5511 E-mail Address: lwright@municipalops.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Valentien, Jacob
Title: Senior Project Manager Credential: P.E.
Organization Name: Westwood Professional Services
Mailing Address: 8701 N Mopac Expressway, Suite 320 City, State, Zip Code: Austin, Tx 78759
Phone No.: 512-485-0831 E-mail Address: Jacob.valentien@westwoodps.com

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 permit to be listed in the Notices

Prefix: Mr. Last Name, First Name: Valentien, Jacob

Title: Senior Project Manager Credential: P.E

Organization Name: Westwood Professional Services

Mailing Address: 8701 N Mopac Expressway, Suite 320 City, State, Zip Code: Austin, Tx 78759

Phone No.: 512-485-0831 E-mail Address: Jacob.valentien@westwoodps.com

D. Public Viewing Information

If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: Dripping Springs City Hall

Location within the building: Front Desk

Physical Address of Building: 511 Mercer St

City: Dripping Springs County: Hays

Contact (Last Name, First Name): Click to enter text.

Phone No.: 512-858-4725 Ext.: Click to enter text.

E. Bilingual Notice Requirements

This information **is required** for **new, major amendment, minor amendment or minor modification, and renewal** applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

☒ Yes ☐ No

If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

☒ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?

☒ Yes ☐ 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 are required. Which language is required by the bilingual program? Spanish.

F. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

Attachment: 2

G. Public Involvement Plan Form

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

Attachment: N/A

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN RN103897567

Search the TCEQ's Central Registry at <http://www15.tceq.texas.gov/crpub/> to determine if the site is currently regulated by TCEQ.

B. Name of project or site (the name known by the community where located):

Hays County Mud No.4 WWTP

C. Owner of treatment facility: Hays County MUD No. 4

Ownership of Facility: ☒ Public ☐ Private ☐ Both ☐ Federal

D. Owner of land where treatment facility is or will be:

Prefix: N/A

Last Name, First Name: Hays County MUD No. 4

Title: Owner

Credential: N/A

Organization Name: Hays County MUD No. 4

Mailing Address: 3321 Bee Caves Road, Suite 203 City, State, Zip Code: Austin, TX, 78746

Phone No.: 512-615-0503

E-mail Address: mkutac@mbkfirm.com

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: N/A

E. Owner of effluent disposal site:

Prefix: N/A

Last Name, First Name: N/A

Title: District

Credential:

Organization Name: Hays County MUD No. 4

Mailing Address: 3321 Bee Caves Rd, Suite 203

City, State, Zip Code: Austin, TX, 78746

Phone No.: (512) 615-0503

E-mail Address: Mkutac@mbkfirm.com

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: 3

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant):

Prefix: N/A

Last Name, First Name: N/A

Title: N/A

Credential: Click to enter text.

Organization Name: N/A

Mailing Address: N/A

City, State, Zip Code: N/A

E-mail Address: N/A

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: N/A

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☒

Yes

☐

No

If **no**, or a new permit application, please give an accurate description:

N/A

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☐

Yes

☐

No

If **no**, or a new or amendment permit application, 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:

N/A

City nearest the outfall(s): Click to enter text.

County in which the outfalls(s) is/are located: Click to enter text.

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 **yes**, indicate by a check mark if:

☐ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: N/A

- 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: N/A

Section 11. TLAP Disposal Information (Instructions Page 32)

- A. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☒ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the disposal site location:

N/A

- B. City nearest the disposal site: City of Dripping Springs ETJ

- C. County in which the disposal site is located: Hays

- D. Disposal Site Latitude: N 30.21024 Longitude: W 97.98285

- E. For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

Treated effluent flows to a storage tank located at the WWTP and is then pumped to adjacent disposal areas. The effluent subsurface drip irrigation disposal site is located around the existing WWTP, and at beneficial reuse sites within the Ledge Stone subdivision/ Hays County MUD No. 4.

- F. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: An unnamed tributary of Long Branch.

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

- B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

N/A

C. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

☐ Yes ☒ No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: N/A

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account number: N/A

Amount past due: N/A

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

Enforcement order number: N/A

Amount past due: N/A

Section 13. Attachments (Instructions Page 33)

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: Core Data Form and USGS Topographic Map

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0014309001

Applicant: Hays County MUD No. 4

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.

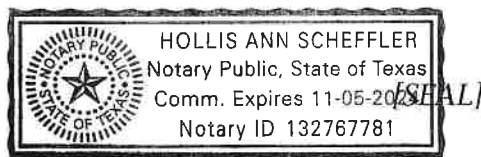
Signatory name (typed or printed): Craig McColloch

Signatory title: Board President

Signature:  Date: 8/26/24
(Use blue ink)

Subscribed and Sworn to before me by the said Craig McColloch
on this 26th day of August, 20 24.
My commission expires on the 5th day of November, 20 24.


Notary Public



Travis
County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES permit applications only. Complete and attach the Supplemental Permit information Form (SPIF) (TCEQ Form 20971).

Attachment: N/A

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 41)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

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

Full legal name (Last Name, First Name, Middle Initial): N/A

Driver's License or State Identification Number: N/A

Date of Birth: N/A

Mailing Address: N/A

City, State, and Zip Code: N/A

Phone Number: N/A Fax Number: N/A

E-mail Address: N/A

CN: N/A

For Commission Use Only:

Customer Number:

Regulated Entity Number:

Permit Number:

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of domestic wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate by checking Yes that each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until the items below have been addressed.

Core Data Form (TCEQ Form No. 10400) ☒ Yes
(Required for all application types. Must be completed in its entirety and signed.
Note: Form may be signed by applicant representative.)

Correct and Current Industrial Wastewater Permit Application Forms ☒ Yes
(TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)

Water Quality Permit Payment Submittal Form (Page 19) ☒ Yes
(Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)

7.5 Minute USGS Quadrangle Topographic Map Attached ☒ Yes
(Full-size map if seeking "New" permit.
8 ½ x 11 acceptable for Renewals and Amendments)

Current/Non-Expired, Executed Lease Agreement or Easement ☒ N/A ☐ Yes

Landowners Map ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

Landowners Cross Reference List ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Landowners Labels or USB Drive attached ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Original signature per 30 TAC § 305.44 - Blue Ink Preferred ☒ Yes
(If signature page is not signed by an elected official or principle executive officer,
a copy of signature authority/delegation letter must be attached)

Plain Language Summary ☒ Yes



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

Section 1. Permitted or Proposed Flows (Instructions Page 43)

A. Existing/Interim I Phase

Design Flow (MGD): 0.075 MGD

2-Hr Peak Flow (MGD): 0.3 MGD

Estimated construction start date: CONSTRUCTED

Estimated waste disposal start date: ON-GOING

B. Interim II Phase

Design Flow (MGD): .100 MGD

2-Hr Peak Flow (MGD): 0.4 MGD

Estimated construction start date: CONSTRUCTED

Estimated waste disposal start date: ON-GOING

C. Final Phase

Design Flow (MGD): 0.150 MGD

2-Hr Peak Flow (MGD): 0.6 MGD

Estimated construction start date: August 2025

Estimated waste disposal start date: August 2026

D. Current Operating Phase : Interim II Phase

Provide the startup date of the facility: September 9, 2009

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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, a description of *each phase* must be provided.**

Attachment 6

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.

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Attachment 7		

C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction.

Attachment: 8

Section 3. Site Information and Drawing (Instructions Page 44)

Provide the TPDES discharge outfall latitude and longitude. Enter N/A if not applicable.

- Latitude: N/A
- Longitude: N/A

Provide the TLAP disposal site latitude and longitude. Enter N/A if not applicable.

- Latitude: 30.21024
- Longitude: 97.98285

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: 9

Provide the name **and** a description of the area served by the treatment facility.

The sewer service area includes a mixture of single family, multifamily and commercial buildings located within the Hays County MUD No. 4 district boundaries, located NW of the intersection of Highway 290 and Nutty Brown Rd.

Section 4. Unbuilt Phases (Instructions Page 45)

Is the application for a renewal of a permit that contains an unbuilt phase or phases?

☒ Yes ☐ No

If yes, does the existing permit contain a phase that has not been constructed **within five years** of being authorized by the TCEQ?

☒ Yes ☐ No

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.**

The District is currently reviewing potential sites for drip field expansion within the District that will require a major permit amendment and to enter the final phase of the Permit at 0.150 MGD. After this current permit is renewed, the District will submit a major permit amendment to expand the drip field areas to obtain 0.150 MGD capacity and upon approval of that major permit amendment, the District will submit a project summary transmittal letter to the TCEQ for additional drip field expansion to accommodate necessary wastewater demand.

Section 5. Closure Plans (Instructions Page 45)

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 ☒ No

If yes, was a closure plan submitted to the TCEQ?

☐ Yes ☐ No

If yes, provide a brief description of the closure and the date of plan approval.

N/A

Section 6. Permit Specific Requirements (Instructions Page 45)

For applicants with an existing permit, check the Other Requirements or Special Provisions of the permit.

A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

☒ Yes ☐ No

If yes, provide the date(s) of approval for each phase: 12/20/2006 and 12/3/2020

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 10 and 11 for TCEQ approval letters.

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.

See Attachment #9 for site layout that indicates the current buffer zone area. At the construction of the WWTP, nuisance odor controlled was installed and the treatment facility is located 150 ft away from any habitable properties.

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*.

Soil monitoring requirements have been met and buffer zone for odor abatement has been approved by TCEQ.

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.

N/A

3. *Grit disposal*

Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?

☐ Yes ☒ No

If **No**, contact the TCEQ Municipal Solid Waste team at 512-239-2335. 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.

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 512-239-2335.

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

If no to both of the above, then skip to Subsection F, Other Wastes Received.

2. MSGP coverage

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

☐ Yes ☒ No

If yes, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:

TXR05 [Click to enter text.](#) or TXRNE

If no, do you intend to seek coverage under TXR050000?

☐ Yes ☐ No

3. Conditional exclusion

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

☐ Yes ☒ No

If yes, please explain below then proceed to Subsection F, Other Wastes Received:

N/A

4. Existing coverage in individual permit

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

☐ Yes ☒ No

If yes, provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.

N/A

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.

[Click to enter text.](#)

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 ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.

[Click to enter text.](#)

G. Other wastes received including sludge from other WWTPs and septic waste

1. Acceptance of sludge from other WWTPs

Does or will the facility accept sludge from other treatment plants at the facility site?

☐ Yes ☒ No

If yes, attach sewage sludge solids management plan. See Example 5 of instructions.

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the sludge, and the design BOD₅ 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. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

If yes, does the facility have a Type V processing unit?

☐ Yes ☐ No

If yes, does the unit have a Municipal Solid Waste permit?

☐ Yes ☐ No

If **yes to any of the above**, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the septic waste, and the design BOD₅ 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.

3. Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)

Is or will the facility 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.

N/A

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 50)

Is the facility in operation?

☒ Yes ☐ No

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). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

Note: The sample date must be within 1 year of application submission.

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	<3.00		1	grab	1/26/2024 10:18 A.M.
Total Suspended Solids, mg/l	11.2		1	grab	1/26/2024 10:18 A.M.
Ammonia Nitrogen, mg/l	.0611		1	grab	1/26/2024 10:18 A.M.
Nitrate Nitrogen, mg/l	14.0		1	grab	1/26/2024 10:18 A.M.
Total Kjeldahl Nitrogen, mg/l	<1.00		1	Grab	1/26/2024 10:18 A.M.
Sulfate, mg/l	40.5		1	Grab	1/26/2024 10:18 A.M.
Chloride, mg/l	129		1	Grab	1/26/2024 10:18 A.M.
Total Phosphorus, mg/l	4.05		1	Grab	1/26/2024 10:18 A.M.
pH, standard units	7.00		1	Grab	1/26/2024 10:18 A.M.
Dissolved Oxygen*, mg/l	7.46		1	Grab	
Chlorine Residual, mg/l	1.06		1	grab	1/26/2024 10:18 A.M.
<i>E.coli</i> (CFU/100ml) freshwater	4.10		1	Grab	1/26/2024 10:18 A.M.
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l	452		1	Grab	1/26/2024 10:18 A.M.
Electrical Conductivity, µmohs/cm, †	894		1	Grab	1/26/2024 10:18 A.M.
Oil & Grease, mg/l	<5.0		1	Grab	1/26/2024 10:18 A.M.
Alkalinity (CaCO ₃)*, mg/l	109		1	Grab	1/26/2024 10:18 A.M.

*TPDES permits only

†TLAP permits only

Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO ₃), mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Christopher Sanchez

Facility Operator's License Classification and Level: Wastewater Treatment operator B

Facility Operator's License Number: WW0059670

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 51)

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☐ Design flow \geq 1 MGD
- ☐ Serves \geq 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☐ Biosolids generator
- ☐ Biosolids end user - land application (onsite)
- ☐ Biosolids end user - surface disposal (onsite)
- ☐ Biosolids end user - incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☐ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)

- ☐ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (>= 2 years)
- ☐ Methane or Biogas Recovery
- ☒ Other Treatment Process: Sludge dewatering box

C. Biosolids Management

Provide information on the *intended* biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the permit will authorize all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Disposal in Landfill	Off-site Third-Party Handler or Preparer	Bulk	3.71	Class B: PSRP Lime Stabilization	Option 4: SOUR <=1.5 mg O ₂ /hr/g total solids at 20C (<2% solids)
Disposal in Landfill	Off-site Third-Party Handler or Preparer	Bulk	125.3	Class B: PSRP Lime Stabilization	Option 4: SOUR <=1.5 mg O ₂ /hr/g total solids at 20C (<2% solids)

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): N/A

D. Disposal site

Disposal site name: Wastewater Residuals Management, LLC

TCEQ permit or registration number: 2384

County where disposal site is located: Travis

Disposal site name: J-V Dirt & Loam

TCEQ permit or registration number: 2310

County where disposal site is located: Travis

E. Transportation method

Method of transportation (truck, train, pipe, other): Truck

Name of the hauler: Wastewater Transport & Sheridan Environmental

Hauler registration number: 24343

Sludge is transported as a:

Liquid ☐ semi-liquid ☒ semi-solid ☐ solid ☐

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

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 processing, storage or disposal options?

Sludge Composting	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Marketing and Distribution of sludge	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Sludge Surface Disposal or Sludge Monofill	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Temporary storage in sludge lagoons	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

If **yes** to any of the above sludge options and the applicant is requesting to continue this authorization, is the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)** attached to this permit application?

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

If yes, complete the remainder of this section. If no, proceed to Section 12.

A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

- Original General Highway (County) Map:

Attachment: N/A

- USDA Natural Resources Conservation Service Soil Map:

Attachment: N/A

- Federal Emergency Management Map:

Attachment: N/A

- Site map:

Attachment: N/A

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

- ☐ Overlap a designated 100-year frequency flood plain
- ☐ Soils with flooding classification
- ☐ Overlap an unstable area
- ☐ Wetlands
- ☐ Located less than 60 meters from a fault
- ☐ None of the above

Attachment: N/A

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

N/A

B. Temporary storage information

Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in *Section 7 of Technical Report 1.0*.

Nitrate Nitrogen, mg/kg: Click to enter text.

Total Kjeldahl Nitrogen, mg/kg: Click to enter text.

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: Click to enter text.

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: Click to enter text.

pH, standard units: Click to enter text.

Ammonia Nitrogen mg/kg: Click to enter text.

Arsenic: Click to enter text.

Cadmium: Click to enter text.

Chromium: Click to enter text.

Copper: Click to enter text.

Lead: [Click to enter text.](#)

Mercury: [Click to enter text.](#)

Molybdenum: [Click to enter text.](#)

Nickel: [Click to enter text.](#)

Selenium: [Click to enter text.](#)

Zinc: [Click to enter text.](#)

Total PCBs: [Click to enter text.](#)

Provide the following information:

Volume and frequency of sludge to the lagoon(s): [Click to enter text.](#)

Total dry tons stored in the lagoons(s) per 365-day period: [Click to enter text.](#)

Total dry tons stored in the lagoons(s) over the life of the unit: [Click to enter text.](#)

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec?

☐ Yes ☐ No

If **yes**, describe the liner below. Please note that a liner is required.

[Click to enter text.](#)

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the lagoon(s):

[Click to enter text.](#)

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)

Attachment: [Click to enter text.](#)

- Copy of the closure plan

Attachment: [Click to enter text.](#)

- Copy of deed recordation for the site

Attachment: [Click to enter text.](#)

- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

Attachment: [Click to enter text.](#)

- Description of the method of controlling infiltration of groundwater and surface water from entering the site

Attachment: [Click to enter text.](#)

- Procedures to prevent the occurrence of nuisance conditions

Attachment: [Click to enter text.](#)

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 ☐ No

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 to enter text.](#)

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 55)

A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

☒ Yes ☐ No

If yes, provide the TCEQ authorization number and description of the authorization:

R14309-001, 210 Beneficial reuse for irrigation and water quality pond make up water. See Attachment 14

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

If yes to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

Click to enter text.

Section 13. RCRA/CERCLA Wastes (Instructions Page 55)

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 to enter text.](#)

Section 14. Laboratory Accreditation (Instructions Page 56)

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:
 - periodically inspected by the TCEQ; or
 - located in another state and is accredited or inspected by that state; or
 - performing work for another company with a unit located in the same site; or
 - 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: Craig McColloch

Title: District Director

Signature: 

Date: 8/26/24

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

The following is required for renewal, new, and amendment permit applications.

Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

- | | |
|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Surface application | <input type="checkbox"/> Subsurface application |
| <input type="checkbox"/> Irrigation | <input type="checkbox"/> Subsurface soils absorption |
| <input type="checkbox"/> Drip irrigation system | <input checked="" type="checkbox"/> Subsurface area drip dispersal system |
| <input type="checkbox"/> Evaporation | <input type="checkbox"/> Evapotranspiration beds |
| <input type="checkbox"/> Other (describe in detail): Click to enter text. | |

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

For existing authorizations, provide Registration Number: 103897567

Section 2. Land Application Site(s) (Instructions Page 68)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

Table 3.0(1) – Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N
Bermuda and Rye Grass	27.2	119,566	Y

Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 68)

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
Tank		1.022	333,000	Bolted Steel

Attach a copy of a liner certification that was prepared, signed, and sealed by a Texas licensed professional engineer for each pond.

Attachment: No ponds planned. Tank is provided to accommodate two days of storage at design flow for final phase.

Section 4. Flood and Runoff Protection (Instructions Page 68)

Is the land application site within the 100-year frequency flood level?

☐ Yes ☒ No

If yes, describe how the site will be protected from inundation.

N/A

Provide the source used to determine the 100-year frequency flood level:

FEMA Flood Insurance Rate Map Number 48209C0128F Dated September 2, 2005

Provide a description of tailwater controls and rainfall run-on controls used for the land application site.

Irrigation management and visual observation of the irrigation system will be performed to reduce tailwater, and irrigation will not take place during rainfall events. Tailwater is not anticipated for subsurface drip irrigation facilities.

Section 5. Annual Cropping Plan (Instructions Page 68)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why. **Attachment:** 15

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

Section 6. Well and Map Information (Instructions Page 69)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. **Attachment:** 4

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)
- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1-mile radius of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells located within a half-mile radius of the disposal site or property boundaries shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

Table 3.0(3) – Water Well Data

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
			Choose an item.	

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	

If water quality data or well log information is available please include the information in an attachment listed by Well ID.

Attachment: N/A

Section 7. Groundwater Quality (Instructions Page 69)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners. Indicate by a check mark that this report is provided.

Attachment: N/A – This is an existing permit

Are groundwater monitoring wells available onsite? ☐ Yes ☒ No

Do you plan to install ground water monitoring wells or lysimeters around the land application site? ☐ Yes ☒ No

If yes, provide the proposed location of the monitoring wells or lysimeters on a site map.

Attachment: N/A

Section 8. Soil Map and Soil Analyses (Instructions Page 70)

A. Soil map

Attach a USDA Soil Survey map that shows the area to be used for effluent disposal.

Attachment: 16

B. Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note:** for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

Attachment: 17

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

Table 3.0(4) – Soil Data

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number
Brackett - BtD	0-18"	0.2-0.6 in/hr	0.1-0.2	85
Brackett - BtG	0-18"	0.2-0.6 in/hr	0.1-0.2	85

Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

☒ Yes ☐ No

If **no**, this section is not applicable and the worksheet is complete.

If **yes**, provide the effluent monitoring data for the parameters regulated in the existing permit. If a parameter is not regulated in the existing permit, enter N/A.

Table 3.0(5) – Effluent Monitoring Data

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
See	Attachment	12				

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated

Provide a discussion of all persistent excursions above the permitted limits and any corrective actions taken.

See Attachment 18.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

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.

If there are no users, enter 0 (zero).

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: Click to enter text.

Significant IUs - non-categorical:

Number of IUs: Click to enter text.

Average Daily Flows, in MGD: Click to enter text.

Other IUs:

Number of IUs: Click to enter text.

Average Daily Flows, in MGD: Click to enter text.

B. Treatment plant interference

In the past three years, has your POTW experienced treatment plant interference (see instructions)?

☐ Yes ☒ No

If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

Click to enter text.

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.

Click to enter text.

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 90)

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.

Click to enter text.

B. Non-substantial modifications

Have there been any **non-substantial modifications** 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 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

If yes, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

Click to enter text.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 90)

A. General information

Company Name: N/A

SIC Code: Click to enter text.

Contact name: Click to enter text.

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Telephone number: Click to enter text.

Email address: Click to enter text.

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).

Click to enter text.

C. Product and service information

Provide a description of the principal product(s) or services performed.

Click to enter text.

D. Flow rate information

See the Instructions for definitions of “process” and “non-process wastewater.”

Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the instructions?

☐ Yes ☐ No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

☐ Yes ☐ No

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category: Subcategories: [Click to enter text.](#)

[Click or tap here to enter text.](#) [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

Category: [Click to enter text.](#)

Subcategories: [Click to enter text.](#)

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

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

[Click to enter text.](#)

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

TCEQ
IUC Permits Team
Radioactive Materials Division
MC-233
PO Box 13087
Austin, Texas 78711-3087
512-239-6466

For TCEQ Use Only
Reg. No. _____
Date Received _____
Date Authorized _____

Section 1. General Information (Instructions Page 92)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): SADDS
Program ID: Municipal Wastewater Permitting
Contact Name: Firoj Vahora
Phone Number: 512-239-4540

2. Agent/Consultant Contact Information

Contact Name: Jacob Valentien, PE
Address: 8701 N Mopac Exp Suite 320
City, State, and Zip Code: Austin, TX 78759
Phone Number: 512-485-0831

3. Owner/Operator Contact Information

☐ Owner ☒ Operator

Owner/Operator Name: Municipal Operations Company, Inc
Contact Name: Lonnie Wright
Address: 20141 Schiel Road
City, State, and Zip Code: Cypress, TX 77433
Phone Number: 281-367-5511

4. Facility Contact Information

Facility Name: Hays County MUD No. 4 WWTP
Address: Click to enter text.
City, State, and Zip Code: Click to enter text.
Location description (if no address is available): Bush Ranch Phase 1, Block A, Lot 63
Facility Contact Person: Christopher Sanchez
Phone Number: 281-367-5511

5. **Latitude and Longitude, in degrees-minutes-seconds**

Latitude: 30.21024

Longitude: 97.98285

Method of determination (GPS, TOPO, etc.): GPS See Attachment 4

Attach topographic quadrangle map as attachment A.

6. **Well Information**

Type of Well Construction, select one:

- ☐ Vertical Injection
- ☒ Subsurface Fluid Distribution System
- ☐ Infiltration Gallery
- ☐ Temporary Injection Points
- ☐ Other, Specify: Click to enter text.

Number of Injection Wells: Click to enter text.

7. **Purpose**

Detailed Description regarding purpose of Injection System:

Disposal of treated effluent to irrigate drip fields.

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

8. **Water Well Driller/Installer**

Water Well Driller/Installer Name: N/A

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text.

License Number: Click to enter text.

Section 2. Proposed Down Hole Design

Attach a diagram signed and sealed by a licensed engineer as Attachment C.

Table 7.0(1) – Down Hole Design Table

Name of String	Size	Setting Depth	Sacks Cement/Grout – Slurry Volume – Top of Cement	Hole Size	Weight (lbs/ft) PVC/Steel
Casing			N/A		
Tubing					
Screen					

Section 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

Attach a diagram signed and sealed by a licensed engineer as Attachment D.

System(s) Dimensions: N/A

System(s) Construction: N/A

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: N/A
2. Receiving Formation Name of Injection Zone: N/A
3. Well/Trench Total Depth: 6"
4. Surface Elevation: Varies
5. Depth to Ground Water: >300'
6. Injection Zone Depth: N/A
7. Injection Zone vertically isolated geologically? ☐ Yes ☒ No
Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:
Name: Click to enter text.
Thickness: Click to enter text.
8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer
Attach as Attachment E.
9. Horizontal and Vertical extent of contamination and injection plume
Attach as Attachment F.
10. Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.
Attach as Attachment G.
11. Injection Fluid Chemistry in PPM at point of injection
Attach as Attachment H.
12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: N/A
13. Maximum injection Rate/Volume/Pressure: 0.61 gph per emitter @ 60 psi
14. Water wells within 1/4 mile radius (attach map as Attachment I): N/A
15. Injection wells within 1/4 mile radius (attach map as Attachment J): N/A
16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): N/A
17. Sampling frequency: N/A
18. Known hazardous components in injection fluid: N/A

Section 5. Site History

1. Type of Facility: N/A
2. Contamination Dates: Click to enter text.
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): Click to enter text.
4. Previous Remediation (attach results of any previous remediation as attachment M): Click to enter text.

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

Class V Injection Well Designations

- 5A07 Heat Pump/AC return (IW used for groundwater to heat and/or cool buildings)
- 5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)
- 5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)
- 5D02 Storm Water Drainage (IW designed for the disposal of rain water)
- 5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)
- 5F01 Agricultural Drainage (IW that receive agricultural runoff)
- 5R21 Aquifer Recharge (IW used to inject fluids to recharge an aquifer)
- 5S23 Subsidence Control Wells (IW used to control land subsidence caused by ground water withdrawal)
- 5W09 Untreated Sewage
- 5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)
- 5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)
- 5W12 WTP disposal
- 5W20 Industrial Process Waste Disposal Wells
- 5W31 Septic System (Well Disposal method)
- 5W32 Septic System Drainfield Disposal
- 5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, and/or fill sections of a mine)
- 5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
- 5X26 Aquifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW)
- 5X27 Other Wells
- 5X28 Motor Vehicle Waste Disposal Wells (IW used to dispose of waste from a motor vehicle site - These are currently banned)
- 5X29 Abandoned Drinking Water Wells (waste disposal)

Hays County Municipal Utility District No. 4
TCEQ Domestic Wastewater Permit Renewal Application
List of Attachments

Attachment #1 — TCEQ Core Data Form
Attachment #2 — Plain Language Summary Template
Attachment #3 — Effluent Disposal Site Owners
Attachment #4 — USGS Map
Attachment #5 — Proposed Flows by Phase
Attachment #6 — Treatment Process Description
Attachment #7 — Treatment Units
Attachment #8 — Process Flow Diagrams
Attachment #9 — Site Drawing
Attachment #10 — TCEQ Approval Letter for Drip Field Expansion
Attachment #11 — TCEQ Approval Letters
Attachment #12 — Pollutant Analysis of Treated Effluent
Attachment #13 — Sludge Acceptance Agreement
Attachment #14 — TCEQ Approval Letters for 210 Beneficial Reuse
Attachment #15 — Annual Cropping Plan
Attachment #16 — Soil Map
Attachment #17 — Soil Analysis
Attachment #18 — Excursions Details
Attachment #19 — Wind Rose

ATTACHMENT #1 – CORE DATA FORM



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other	
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 602690661		RN 103897567

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)					
<input type="checkbox"/> New Customer		<input checked="" type="checkbox"/> Update to Customer Information					
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)		<input type="checkbox"/> Change in Regulated Entity Ownership					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>							
6. Customer Legal Name (If an individual, print last name first; eg: Doe, John) <i>If new Customer, enter previous Customer below:</i>							
Hays County Municipal Utility District No. 4							
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)				
11. Type of Customer:		Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited					
<input type="checkbox"/> Corporation		<input type="checkbox"/> Individual					
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input checked="" type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Other:					
12. Number of Employees		13. Independently Owned and Operated?					
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input type="checkbox"/> Yes <input type="checkbox"/> No					
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following							
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator <input type="checkbox"/> Other:							
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant							
15. Mailing Address:	3321 Bee Caves Road, Suite 203						
	City	Austin	State	TX	ZIP	78746	ZIP + 4
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)			
				Mkutac@mbkfirm.com			
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)			
(512) 615- 0503				() -			

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If "New Regulated Entity" is selected, a new permit application is also required.)	
<input type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input checked="" type="checkbox"/> Update to Regulated Entity Information	
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
Hays County Municipal Utility District No. 4	

23. Street Address of the Regulated Entity: (No PO Boxes)							
	City		State		ZIP		ZIP + 4
24. County							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	Approximately 2,050 feet north of HWY 290 and Approximately 7.2 miles west of the intersection of US 290 with TX HWY 71 (the Y in Oak Hill)						
26. Nearest City		State			Nearest ZIP Code		
Dripping Springs		TX			78737		
Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).							
27. Latitude (N) In Decimal:		30.21024		28. Longitude (W) In Decimal:		97.98285	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
30	12	36.87	97	58	58.26		
29. Primary SIC Code (4 digits)		30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)	
4952				22132			
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)							
34. Mailing Address:	3321 Bee Caves, Suite 203						
	City	Austin	State	TX	ZIP	78746	ZIP + 4
35. E-Mail Address:		MKutac@mbkfirm.com					
36. Telephone Number		37. Extension or Code		38. Fax Number (if applicable)			
(512) 615- 0503				() -			

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.


<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input checked="" type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:
WQ0014309001				

SECTION IV: Preparer Information

40. Name:	Jacob Valentien, PE	41. Title:	Senior Project Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 485-0831		() -	jacob.valentien@westwoodps.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Hays County MUD No. 4	Job Title:	District Engineer
Name (In Print):	Jacob Valentien, PE	Phone:	(512) 485-0831
Signature:		Date:	08/28/2024

ATTACHMENT #2 – PLAIN LANGUAGE SUMMARY



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by [Title 30, Texas Administrative Code \(30 TAC\), Chapter 39, Subchapter H](#). Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in [30 TAC Section 39.426](#), **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS DOMESTIC WASTEWATER/STORMWATER

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 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Hays County MUD No. 4 (C6026906612) operates Hays County MUD No. 4 Wastewater Treatment Plant (RN103897567), a public wastewater treatment facility. The facility is located at Ledge Stone subdivision, in Austin, Hays County, Texas 78737. This application will apply for the renewal of the existing permit for land application of treated wastewater effluent onto defined areas within the district's boundaries. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain no significant amount of pollutants. Wastewater is discharged in the form of treated effluent for irrigation or stored in a sludge dewatering box and hauled to a license facility and is treated by aeration, clarification, chlorination and chlorine contact.

**PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE
TPDES o TLAP**

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas 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 es una representación ejecutiva fedérale de la solicitud de permiso.

Hays County MUD No. 4 (C6026906612)) opera la Planta de Tratamiento de Aguas Residuales Hays County MUD No. 4 RN103897567), una instalación pública de tratamiento de aguas residuales.. La instalación está ubicada en la subdivisión Ledge Stone, en Austin, Condado de Hays, Texas 78737. Esta solicitud se aplicará para la renovación del permiso existente para la aplicación de tierra del efluente de aguas residuales tratadas en áreas definidas dentro de los límites del distrito.. Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

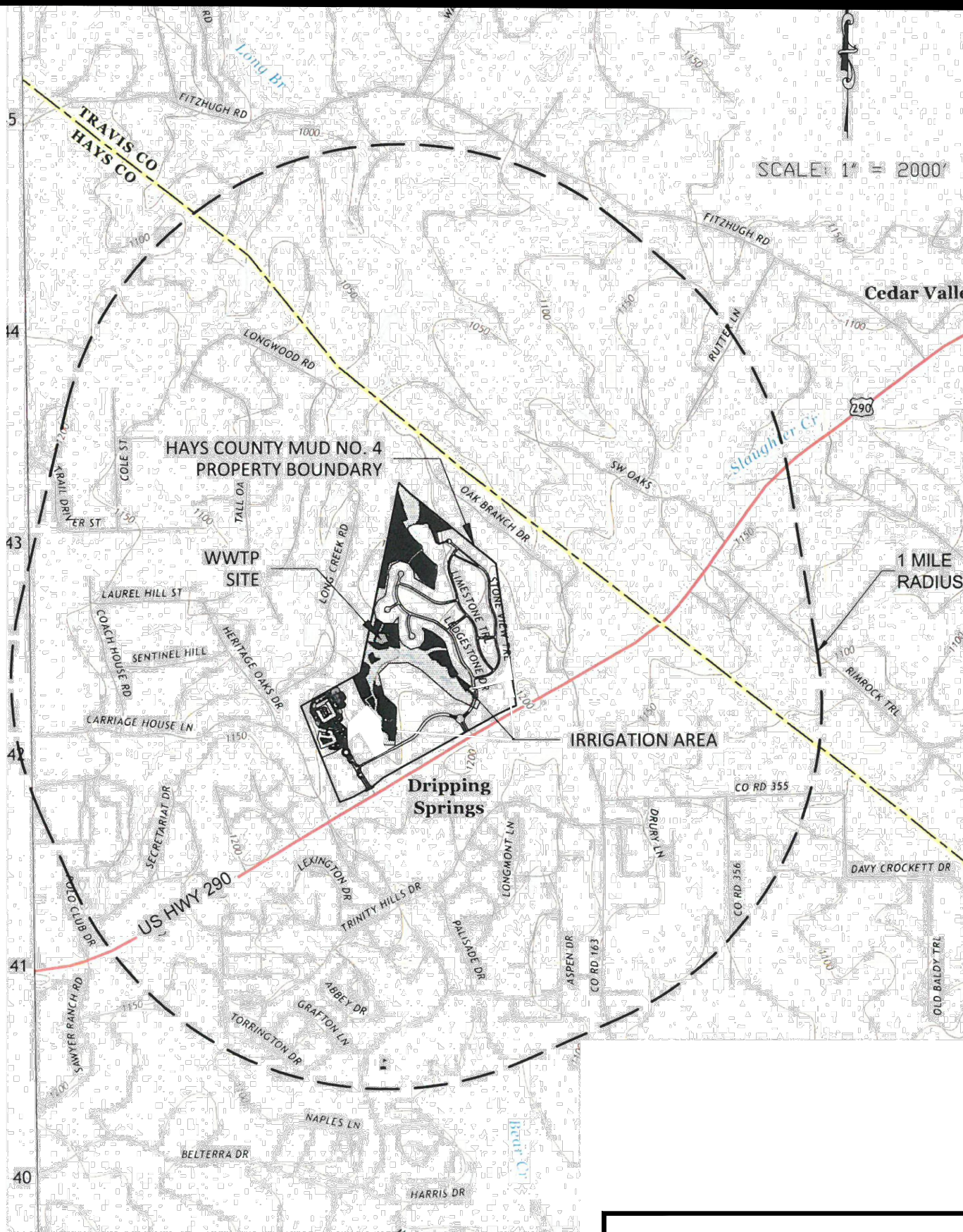
Se espera que las descargas de la instalación contengan se espera que no contenga una cantidad significativa de contaminantes. Las aguas residuales se descargan en forma de efluente. está tratado por riego o se almacenan en una caja de deshidratación de lodos y se transportan a una instalación con licencia y se tratan mediante aireación, clarificación, cloración y contacto con cloro.

ATTACHMENT #3 – EFFLUENT DISPOSAL SITE OWNERS

Attachment 3
Effluent Disposal Site Owners

Hays County Municipal Utility District No. 4
3321 Bee Caves Road, Suite 203
West Lake Hills, Texas 78746
(512) 615 - 0503

ATTACHMENT #4 – USGS MAP



Westwood

Westwood Professional Services, Inc.

Phone (512) 485-0831
Toll Free (888) 937-5150
8701 N. Mopac Expy, Suite 320
Austin, TX 78759

westwoodps.com

HAYS COUNTY MUD NO.4 ATTACHMENT 4 - SITE DRAWING

TPBE FIRM REGISTRATION NO. F-11756
TBPLS FIRM REGISTRATION NO. LS-10074301

DRAWN BY	CHECKED BY	SCALE	DATE	JOB NUMBER
EMD	JWV	1"=2000'	08/07/2024	R0052766

ATTACHMENT #5 – Proposed Flows by Phase

Hays County MUD No. 4
WQ0014309-001
Domestic Wastewater Permit Renewal Application

Attachment #5
Proposed Flows by Phase

Permit Phase	<i>WWTP Phasing (GPD)</i>	Outfall 1 Subsurface Irrigation Phase (GPD)	Total Irrigation (GPD)
Interim Phase II	100,000	100,000	100,000
Final Phase	150,000		

ATTACHMENT #6 – TREATMENT PROCESS DESCRIPTION

Hays County MUD No. 4

WQ0014309-001

Domestic Wastewater Permit Renewal Application

Attachment #6 Treatment Process Description

Two train packaged, single stage nitrification, activated sludge process including headworks (bar screening/ flow splitting), aeration, clarification, chlorination, chlorine contact, and sludge dewatering box. Treated effluent will be stored in holding tanks prior to disposal, using subsurface drip irrigation near the treatment plant on land owned and leased by the applicant. Sludge will be disposed by hauling off-site, by a licensed hauler, to a permitted wastewater treatment plant or sludge processing facility.

ATTACHMENT #7 – TREATMENT UNITS

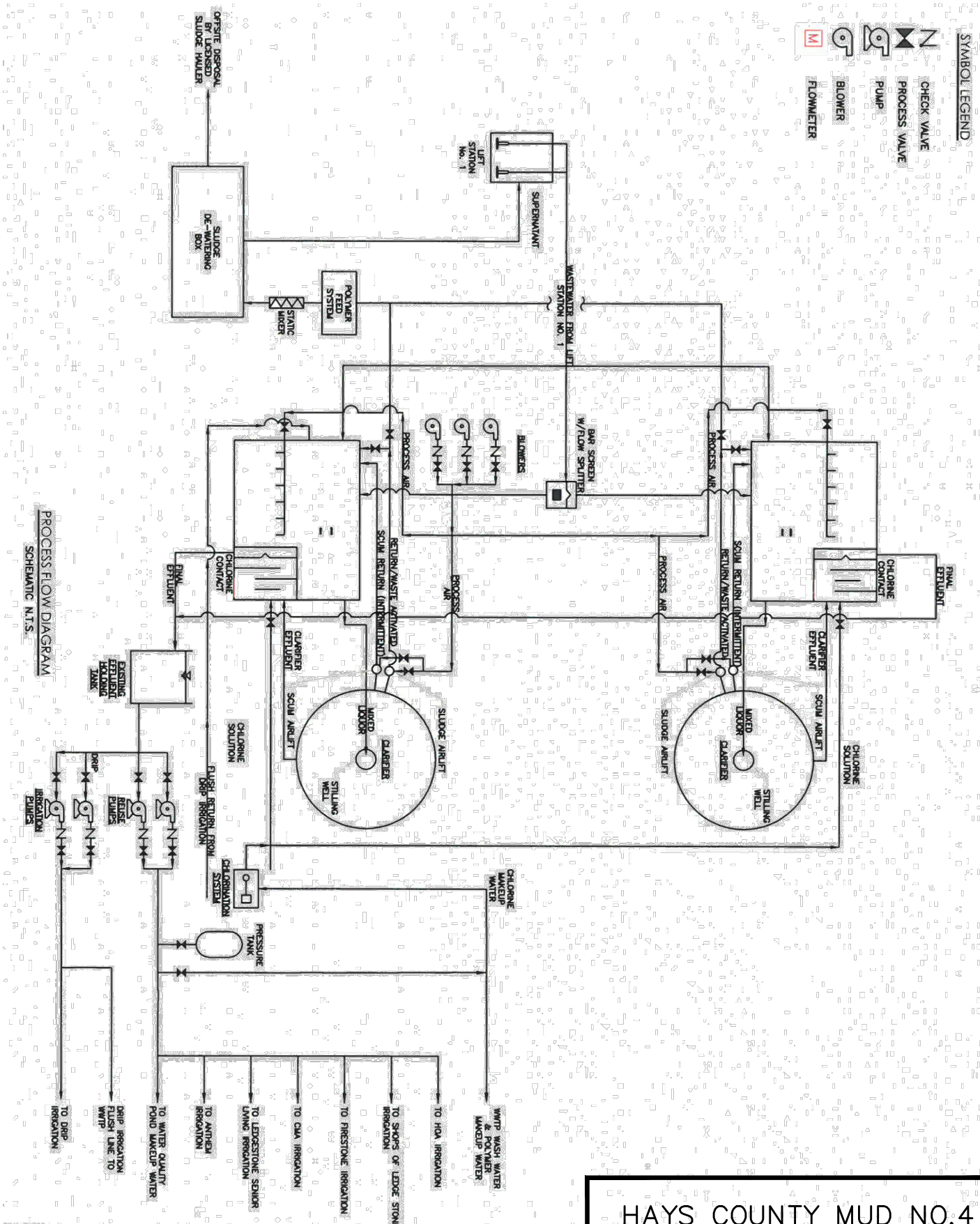
Hays County MUD No. 4
WQ0014309-001
Domestic Wastewater Permit Amendment Application
With Major Amendment
Technical Report 1.0

Attachment 10
Dimensions of Treatment Units

All Phases

Treatment Unit	Units	Dimensions
Manual Screen/ Flow Splitter	1	1/4" Bars w/ 1" Spacers
Aeration Basin	2	12' x 28' x 10.5'
Clarification	2	18' Diameter x 10.5' Deep
Chlorine Contact	2	12' x 5' x 9'
Sludge Dewatering Box	1	23.42' x 8.5' x 7.33'

ATTACHMENT #8 – FLOW PROCESS DIAGRAMS



HAYS COUNTY MUD NO.4 ATTACHMENT 8 – SITE DRAWING

TPBE FIRM REGISTRATION NO. F-11756
TBPLS FIRM REGISTRATION NO. LS-10074301

Westwood

Westwood Professional Services, Inc.

Phone (512) 485-0831
Toll Free (888) 937-5150
8701 N. Mopac Expy, Suite 320
Austin, TX 78759 **westwo**

westwoodps.com

DRAWN BY

CHECKED BY

SCALE

DATE _____

JOB NUMBER

EMD

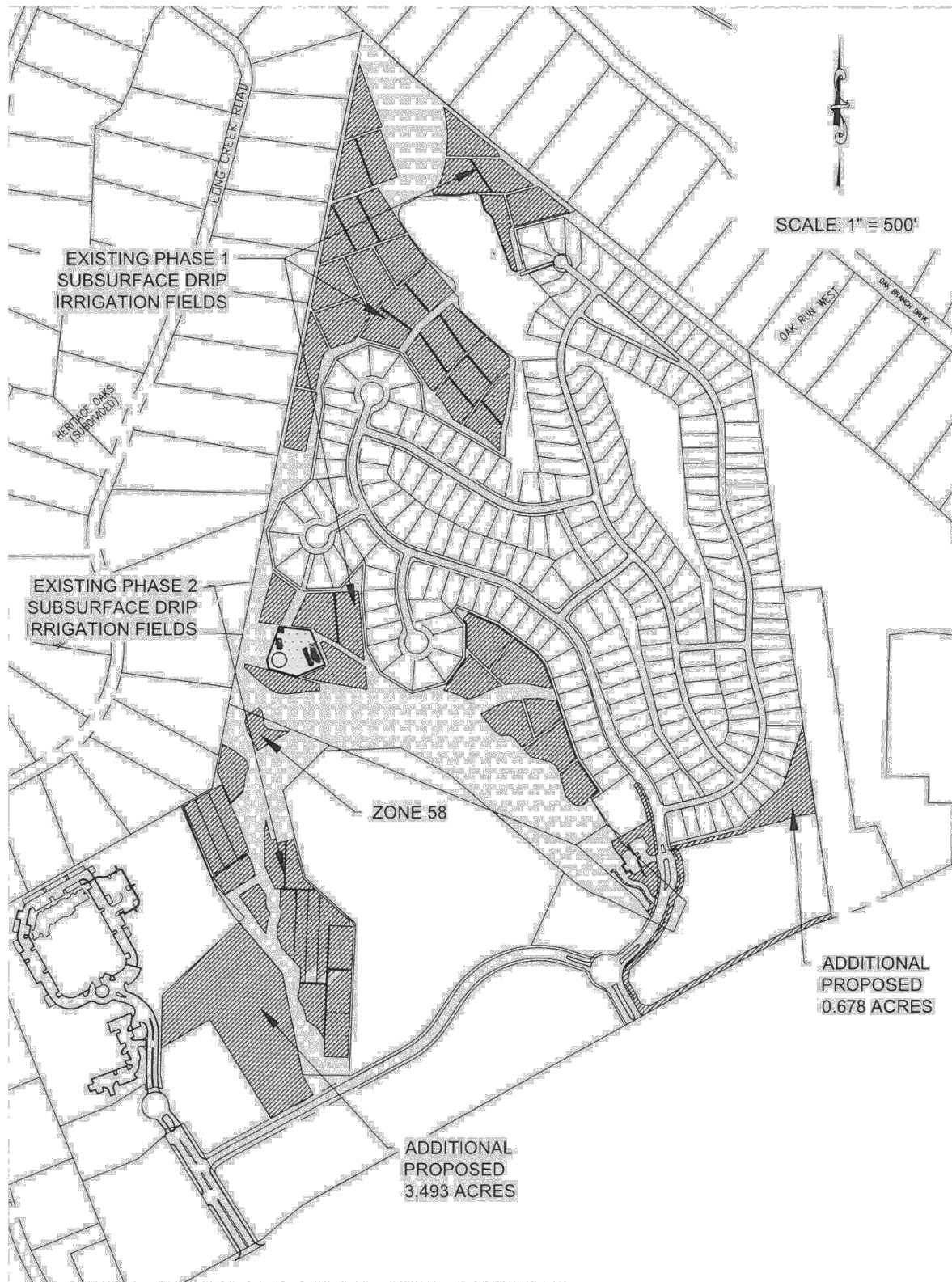
JWV

1"=2000'

08/07/2024

R0052766

ATTACHMENT #9 – SITE DRAWING



Westwood

Westwood Professional Services, Inc.

Phone (512) 485-0831
Toll Free (888) 937-5150
8701 N. Mopac Expy, Suite 320
Austin, TX 78759 westwoodps.com

HAYS COUNTY MUD NO.4
ATTACHMENT 9 – SITE
DRAWING

TPBE FIRM REGISTRATION NO. F-11756
TBPLS FIRM REGISTRATION NO. LS-10074301

DRAWN BY	CHECKED BY	SCALE	DATE	JOB NUMBER
EMD	JWV	1"=2000'	08/07/2024	R0052766

**ATTACHMENT #10 – TCEQ APPROVAL FOR
DRIP FIELD EXPANSION**

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

September 21, 2022

James F. Prochaska, M.S., P.E.
Lighthouse Water Resource Engineering, LLC
P.O. Box 5667
Bryan, Tx 77805

Re: Hays County MUD 4
Phase II Drip Irrigation System Expansion To 100,000 Gpd
Permit No. Wq0014309-001
WWPR Log No. 0622/026
Cn602690661, Rn103897567
Hays County

Dear Mr. Prochaska:

We have received the project summary transmittal letter dated June 5, 2022. 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, Design Criteria for Wastewater Systems.

The project consists of adding seventeen new drip irrigation zone for a total of 252,084 square feet on 5.786 acres. This will expand the treatment/disposal capacity of the treatment plant to 100,000 gallons per day. Based on our review the expand is approved.

Below are provisions of the Chapter 217 regulations, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

- 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.

James F. Prochaska, M.S., P.E.

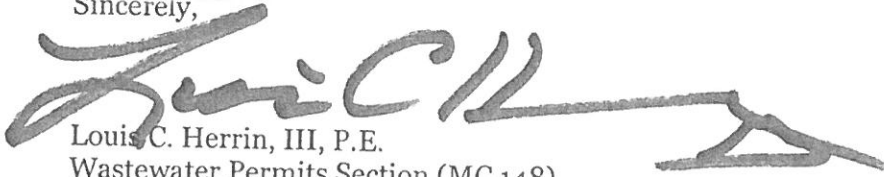
Page 2

September 21, 2022

- 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.

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4552.

Sincerely,

A handwritten signature in dark ink, appearing to read "Louis C. Herrin, III", with a long horizontal flourish extending to the right.

Louis C. Herrin, III, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

LCHIII/tc

cc: TCEQ, Region 11 Office

Jon Niermann, Chairman
Emily Lindley, Commissioner
Bobby Janicka, Commissioner
Toby Baker, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 3, 2020

Robert P. Callegari, P.E.
CMA ENGINEERING INC.
235 Ledge Stone Drive
Austin, TX 78737

Re: Hays County MUD 4
Phase II Drip Irrigation System Expansion to 100,000 GPD
Permit No. WQ0014309-001
WWPR Log No. 1220/015
CN602690661, RN103897567
Hays County

Dear Mr. Callegari:

We have received the project summary transmittal letter dated 11/19/2020.

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, Design Criteria for Wastewater Systems.

Section 217.6(d), relating to case-by-case reviews, states in part that upon submittal of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of §217.6(c) a technical review of complete plans and specifications is not required. **However, the project proposed in the summary transmittal letter is approved for construction. 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.** Below are provisions of the Chapter 217 regulations, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

- 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(c). Additionally, the engineering report must include all constants, graphs,

Robert P. Callegari, P.E.

Page 2

December 3, 2020

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(c)(1)-(10).

- Any deviations from Chapter 217 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.
- Any variance from a Chapter 217 requirement disclosed in your summary transmittal letter is approved. If in the future, additional 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 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.

This approval does not mean that future projects will be approved without a complete plans and specifications review. 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) 239-4552.

Sincerely,



Louis C. Herrin, III, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

LCHIII/tc

cc: TCEQ, Region 11 Office

ATTACHMENT #11 – TCEQ APPROVAL LETTERS

Kathleen Hartnett White, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 27, 2006

Mr. Robert P. Callegari, P.E.
CMA Engineering, Inc.
14101 West Highway 290, Bldg. 600
Austin, Texas 78737

Re: 194 Bush, Ltd.
TCEQ Permit No. WQ0014309001
(CN601457716, RN103897567)

Dear Mr. Callegari:

We acknowledge receipt of your letter dated March 10, 2006 with attachments proposing to revise the permitted drip irrigation area alignment within the permittee's property without change in acreage or location.

Your letter indicates that the vegetation, soil type and depth and topography will remain the same. Mr. Mike Chadwick of the TCEQ Water Quality Assessment Team evaluated your request and does not pose any objection to the proposed revision. Hence, the irrigation area for the subject permit shall be as shown in Attachment A of this letter.

If you have any questions regarding this matter, please do not hesitate to contact me at (512) 239-4540 or if by correspondence include MC 148 in the letterhead address following my name.

Sincerely,

A handwritten signature in dark ink, reading "Firoj Vahora", with a long horizontal flourish extending to the right.

Firoj Vahora, Team Leader
Municipal Permits Team
Wastewater Permitting Section
Water Quality Division

FV/ms

Enclosure

ccs: Mr. Michael Chadwick, TCEQ Water Quality Assessment Section, (MC 150)
TCEQ, Region 11

Kathleen Hartnett White, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 27, 2006

Mr. Robert P. Callegari, P.E.
CMA Engineering, Inc.
14101 West Highway 290, Bldg. 600
Austin, Texas 78737

Re: 194 Bush, Ltd.
TCEQ Permit No. WQ0014309001
(CN601457716, RN103897567)

Dear Mr. Callegari:

We acknowledge receipt of your letter dated March 10, 2006 with attachments proposing to revise the permitted drip irrigation area alignment within the permittee's property without change in acreage or location.

Your letter indicates that the vegetation, soil type and depth and topography will remain the same. Mr. Mike Chadwick of the TCEQ Water Quality Assessment Team evaluated your request and does not pose any objection to the proposed revision. Hence, the irrigation area for the subject permit shall be as shown in Attachment A of this letter.

If you have any questions regarding this matter, please do not hesitate to contact me at (512) 239-4540 or if by correspondence include MC 148 in the letterhead address following my name.

Sincerely,

A handwritten signature in black ink that reads "Firoj Vahora".

Firoj Vahora, Team Leader
Municipal Permits Team
Wastewater Permitting Section
Water Quality Division

FV/ms

Enclosure

ccs: Mr. Michael Chadwick, TCEQ Water Quality Assessment Section, (MC 150)
TCEQ, Region 11



JOB No. 1177-EX03-Revised Att A

CMA ENGINEERING, INC.
14101 WEST HIGHWAY 290
BUILDING 600
AUSTIN, TEXAS 78737
(512) 894-3230 Fax: (512) 894-3225

HAYS COUNTY MUD NO. 4
REVISED IRRIGATION AREA

CMA Engineering, Inc.

MWD/14309-001/PH
0806, 207

Robert P. Callegari, P.E.
Felix J. Manka, P.E.

June 22, 2006

Louis C. Herrin, III, P.E.
Texas Commission on Environmental Quality
Wastewater Permitting Section
Plans and Specifications Review
MC-148
P.O. Box 13087
Austin, Texas 78711-3087

RECEIVED
JUN 26 2006
WASTEWATER PLANS
AND SPECIFICATIONS

Re: 194 Bush, Ltd.
Ledge Stone Development (Formerly Bush Ranch)
TCEQ Permit No. 14309-001
Proposed Wastewater System Improvements
Phase 1 - 75,000 GPD Extended Aeration WWTP, 333,000 Gallon Effluent Holding Tank, 75,000 GPD Subsurface Drip Irrigation System, and Lift Stations 1 and 2
CMA Job Number 1177-001

Dear Plans and Specifications Reviewer:

Below is the information requested in Chapter 317.1(a)(3)(D) regarding submittal requirements for new domestic sewage collection, treatment, and disposal systems. Please note that an Engineering Report has been previously submitted as part of the permit application.

- (i) Name and address of the design firm: CMA Engineering, Inc., 14101 West Highway 290, Building 600, Austin, Texas 78737.
- (ii) Name, phone number and facsimile number of the design engineer:

75,000 GPD wastewater treatment plant, 333,000 gallon effluent holding tank, Lift Stations 1 and 2, and force mains: Robert P. Callegari, P.E. (Texas Registration Number 68913), phone number 512/894-3230, facsimile 512/894-3225.
- (iii) County in which the project will be located with an identifying name for the project: Hays County, 294 Ranch, Ltd., 75,000 GPD Extended Aeration WWTP, 333,000 gallon effluent holding tank, 75,000 GPD Subsurface Drip Irrigation System, and Lift Stations 1 and 2.
- (iv) Name of the entity which proposes to own, operate, and maintain the project through its design life: The facility is owned by 294 Bush, Ltd. and will serve Hays County MUD No. 4. The owner has not selected a operator for the facilities to perform contract operations of the wastewater facilities.

Louis C. Herrin, III, P.E.
Texas Commission on Environmental Quality
Wastewater Permitting Section
Plans and Specifications Review
June 22, 2006
Page 2

- (v) Permit name and permit number of the relevant wastewater treatment facility: 194 Bush, Ltd., TCEQ Permit No. 14309-001.
- (vi) CMA verifies that the plans and specifications are in substantial compliance with all the requirements of Chapter 317.
- (vii) The purpose of the proposed wastewater system improvements is to provide wastewater service to the Ledge Stone development (formerly the Bush Ranch) within the boundaries of Hays County MUD No. 4. This project will consist of constructing a wastewater treatment plant, effluent holding tank, subsurface drip irrigation system, and two lift stations. TCEQ Permit Number 14309-001 allows for a two phase approach to wastewater treatment and disposal with the initial phase being 75,000 gallon per day (GPD) and the final phase being 150,000 GPD. More specifically, the project consists of the following:
 - 1. A 75,000 GPD extended aeration WWTP
 - 2. A 75,000 GPD subsurface drip irrigation system
 - 3. One 333,000 gallon effluent holding tank
 - 4. One duplex lift station (Lift Station No. 1) with a pumping capacity of approximately 68,750 GPD
 - 5. One duplex lift station (Lift Station No. 2) with a pumping capacity of approximately 34,000 GPD

It is anticipated that construction for new WWTP and collection facilities will begin in August 2006. If you have any questions or comments please call me at 894-3230.

Very truly yours,

Robert P. Callegari, P.E.
Principal



6-22-06

Xc: Phil Haag, Attorney for Hays County MUD No. 4
Mike Schoenfeld, 290 Ranch, Ltd.
Ed McCarthy, Jackson, Sjoberg, McCarthy, & Wilson, L.L.P.
TCEQ Region 11 Office

Kathleen Hartnett White, *Chairman*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*



MWD/14309-001/PA

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 31, 2006

Mr. Robert P. Callegari, P.E.
CMA Engineering, Inc.
14101 West Hwy 290, Bldg. 600
Austin, Texas 78737

RECEIVED

SEP 07 2006

TCEQ
CENTRAL FILE ROOM

Re: 194 Bush, Ltd.
Proposed Wastewater System Improvements
Texas Commission on Environmental Quality Permit No. 14309-001
WWPR Log No. 0806/207
CN601457716 RN103897567
Hays County

Dear Mr. Callegari:

We have received the project summary transmittal letter dated June 22, 2006.

The rules which regulate the design, installation and testing of domestic wastewater projects are found in 30 TAC, Chapter 317, of the Texas Commission on Environmental Quality (TCEQ) rules titled, Design Criteria for Sewerage Systems.

Section 317.1(a)(3)(D), relating to case-by-case reviews, states in part that upon submittal of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of §317.1(a)(3)(D) a technical review of complete plans and specifications is not required. **However, the project proposed in the summary transmittal letter is approved for construction. 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.** Below are provisions of the Chapter 317 regulations, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

1. 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 317. 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 §317.1(c)-(d). Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 317. The items which shall be included in the summary transmittal letter are addressed in §317.1(a)(3)(D).

Mr. Robert P. Callegari, P.E.

Page 2

August 31, 2006

2. Any deviations from Chapter 317 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 317 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.
3. Any variance from a Chapter 317 requirement disclosed in your summary transmittal letter is approved. If in the future, additional variances from the Chapter 317 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.
4. 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.

This approval does not mean that future projects will be approved without a complete plans and specifications review. 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 §317.1(a)(2) of the rules which states, "Approval given by the executive director...shall not relieve the sewerage system owner or the design engineer of any liabilities or responsibilities with respect to the proper design, construction, or authorized operation of the project in accordance with applicable commission rules."

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4552.

Sincerely,



Louis C. Herrin, III, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

LCH/ms

cc: TCEQ, Region 11 Office

CMA Engineering, Inc.

Via facsimile (512)239-4430

October 6, 2006

Firoj Vahora
Wastewater Permitting Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: 194 Bush, Ltd.
Ledge Stone Development (Formerly Bush Ranch)
TCEQ Permit No. 14309-001
Request for WWTP Process Change
CMA Job Number 1177-001

Dear Firoj:

We are proposing to change the wastewater treatment plant (WWTP) process for the above referenced facility. The General Description of permit states that "The wastewater treatment facilities consist of an activated sludge process plant using the extended aeration mode in the interim and final phases. Treatment units in the interim phase will include a 0.075 millions gallons per day (MGD) module consisting of an aeration basin, a final clarifier, and aerobic digester and a chlorine contact chamber. Treatment units in the final phase will include and additional 0.075 MGD module."

We are proposing to change the process from the extended aeration mode of the activated sludge process to single stage nitrification. Treatment unit will still consist of a bar screen, an aeration basin, final clarifier, aerobic digester, and a chlorine contact chamber, but the mode of operation will change. The WWTP will be designed with a peaking factor of 4.0. Attached are the unit sizing calculations for the single stage nitrification WWTP. The plant will be designed so that the effluent requirements of 20 mg/L BOD and 20 mg/L TSS will be met.

The location of the WWTP will be as originally permitted and all TCEQ buffers will be met. Attached are exhibits A & B of the WWTP site layout. Exhibit A shows the permitted WWTP buffer zone map and Exhibit B shows the buffer zone map of the proposed single stage nitrification WWTP.

It was previously planned that an emergency generator would supply auxiliary power to the wastewater plant and onsite lift station; however, we are now requesting an acceptable alternative to auxiliary power for the WWTP. As of April 2006, the longest outage in the last 2 years has been 128 minutes which occurred in August 2004. In the initial phase, the influent wet well at

RECEIVED
OCT 11 2006
MUNICIPAL PERMITS

Robert P. Callegari, P.E.
Felix J. Manka, P.E.

FAXED
10-6-06

Firoj Vahora
TCEQ Municipal Permits Team
TCEQ Permit No. 14309-001
October 6, 2006
Page 2 of 2

the WWTP site will be sized so that there will be no discharge of untreated wastewater during the longest outage in the past 24 months. In addition, this wastewater treatment facility utilizes subsurface drip irrigation for the disposal of treated effluent, and utilizes an effluent holding tank with a minimum two days of storage at the maximum permitted flow. In the event of an outage, raw wastewater would not be pumped to the WWTP from the onsite lift station. In addition, air would not be supplied to the WWTP. For the duration of the outage, the plant would sit idle. The lack of air to the WWTP during such an outage would not greatly affect treatment. When power is restored and the WWTP is back in service, any wastewater that will be pumped to the WWTP during an outage will go directly to the aeration basin, which would flow through the clarifier, to the chlorine contact chamber, and then to the effluent holding tank. Any effluent leaving the chlorine contact chamber will have been treated.

Please note that this facility was approved for construction on August 31, 2006 (see attached letter).

Thank you for attention to this matter. It is anticipated that construction for new WWTP and collection facilities will be completed in April of 2006. If you have any questions or comments, please call me at 894-3230.

Very truly yours,



Robert P. Callegari, P.E.
Principal

Attachments

Xc: Phil Haag, Attorney for Hays County MUD No. 4
Mike Schoenfeld, 290 Ranch, Ltd.
Ed McCarthy, Jackson, Sjoberg, McCarthy, & Wilson, L.L.P.
TCEQ Region 11 Office

LEDGESTONE SUBDIVISION

Hays County MUD No. 4

WWTP Design Calculations

Final Phase - 0.075 MGD WASTEWATER TREATMENT PLANT DESIGN
SINGLE STAGE NITRIFICATION



10-6-06

BASIC DESIGN PARAMETERS:

Final Phase:

Design Flow:	0.0750 MGD	
2-Hour Peak Flow (4 x Design Flow):	0.300 MGD	
	208 GPM	
BOD ₅ :	200 mg/l	125 lbs/day
TSS:	200 mg/l	125 lbs/day

PRELIMINARY TREATMENT:

Manually cleaned bar screen.

SINGLE STAGE NITRIFICATION:

Essential TNRCC Requirements:

Maximum Aerator Organic Loading = 35 lbs. BOD₅/ 1000cf/day 35 lbs.BOD₅/1000cf/day
Minimum Aerator Depth for Diffused Aeration = 8 ft.

Final Phase:

Required Aeration Volume (@35 lb influent BOD₅/1,000 cf): 3,571 cf
Volume Provided 3,584 cf

ENHANCED SECONDARY CLARIFICATION:

Essential TNRCC Requirements:

Weir Loading for peak flows of 1.0 MGD or less: < 20,000 g/ft/day
Weir Loading for peak flows > 1.0 MGD: < 30,000 g/ft/day
Solids Loading of floor: < 50 lbs. SS/ft²/day
Minimum Clarifier Side Water Depth (SWD) = 8 ft. - Use 10 ft for Design
When Diameter ≥ 40 ft., Minimum Clarifier Side Water Depth (SWD) = 10 ft
For Secondary with Clarifiers Having SWD ≥ 10 ft.:
Maximum Surface Loading Rate @ Peak 2-Hr Flow = 1200 g/day/sf
Maximum Surface Loading Rate @ Design Flow = 600 g/ft/day
Minimum Detention Time @ Peak 2-Hr Flow = 1.5 hours
Minimum Detention Time @ Design Flow = 3 hours

Final Phase:

Required Volume (@ 1.5 Hr. D.T. for 2-Hr Peak Flow): 18,750 gal. 2,507 cf
Required Surface Area (overflow rate of 1200 g/sf/day @ peak 250 sf
Required Volume (@ 1200 g/sf/day @ peak flow w/ 10' SWD) 2,500 cf
Required Volume (@ min detention time @ design flow): 9,375 gal
1,253 cf
Minimum diameter (Volume x 4 ÷ 10 x π)^{0.5} 17.84 ft.
Minimum Weir Length Required 15 ft
Volume Provided: 2,545 cf
Diameter Provided: 18 ft.

DISINFECTION USING CHLORINE:**Essential TNRCC Requirements:**

Minimum Detention Time @ Peak 2-Hr Flow = 20 Minutes
 Rapid Mixing with $G > 500/\text{sec.}$ & with Detention Time of 3 to 15
 Seconds or the Contact Chamber Must Have a Flow Length to Width
 Ratio ≥ 40 and a Flow Depth to Width Ratio of ≤ 1 .

Final Phase:

Required Volume @ 20 Min. D. T. For Peak 2-Hr. Flow:	4,167 gal.	557 cf
Volume Provided:		620 cf

CHLORINE FEEDER CAPACITY**Probable Chlorine Dose**

7 to 9 mg/l

Final Phase:

Chlorine Feed Rate (Use 9 mg/l to Average Flow of 0.162 MGD):	5.6 PPD
Chlorine Feed Rate (Use 9 mg/l to Peak Flow of 0.648 MGD):	0.9 PPH

WASTE SLUDGE PRODUCTION:

Assume 97.5% BOD ₅ Removal & 97.5% SS Removal ¹ :	0.9	0.9
Assume 35% of BOD ₅ is Removed with SS Removal ² :	0.35	0.65
Assume 0.5 lbs SS Produced per lb BOD ₅ Removed ² :		0.5
Assume 80% of Secondary SS are Volatile ² :		0.8
Assume 65% of Primary SS are Volatile ² :		0.65
Assume 30% Reduction of Raw SS in Aeration	0.3	0.7
Assume 1.25% SS Concentration in Waste Sludge ² :		0.0125
Allow VSS loading of 0.055 lb/cf ² :		0.055

1. Based on Required Effluent Quality of 20/20 mg/l - BOD₅/SS.
2. A reasonable estimate of BOD₅ Removal from Wastewater Engineering by Metcalf & Eddy, Ten State Standards, and Others.

Final Phase:

	Percent of Interim Phase Flow			
	100%	75%	50%	25%
BOD Removed (lbs BOD/day)	113	84	56	28
Primary SS Removed (lb SS/day):	113	84	56	28
Primary VSS Removed (lb VSS/day):	73	55	37	18
Secondary SS Produced from BOD ₅ Removed (lb SS/day):	37	27	18	9
Secondary VSS Produced from BOD ₅ Removed (lb VSS/day):	29	22	15	7
Total SS Produced (lb SS/day):	115	86	58	29
Total VSS Produced (lb VSS/day):	102	77	51	26
Total SS Wasted (lb SS/day)	115	86	58	29
Total Volume SS Wasted (gal/day)	1,106	830	553	277

SLUDGE DIGESTION USING AEROBIC DIGESTION:**Essential TNRCC Requirements:**

- I. Minimum Volume = 20 cf/lb of BOD₅
- II. Minimum Retention Time = 15 days.

Other accepted Design Requirements:

- III. Volatile SS Loading (Wastewater Engineering by Metcalf & Eddy): 0.1 lbs/cf

Final Phase:

Required Volume (Based on 20 cf/lb. BOD ₅):	2,500 cf
Required Volume (Based on 15 Days Sludge D. T.)	2,218 cf
Required Volume (VSS Loading)	1,024 cf
Volume Provided:	2,560 cf

DIGESTER SLUDGE DETENTION TIME:**Final Phase:**

Hydraulic Retention Time:	17.31 Days
---------------------------	------------

DIGESTER SLUDGE REMOVAL SCHEDULE:

Based on 40% reduction of SS in Aerobic Digestion 0.6
 Assume Concentration of Sludge in Digester at 1.5%

	Percent of Phase Flow			
	100%	75%	50%	25%
<u>Final Phase:</u>				
Days between Sludge Removal:	34	46	69	138

AIR REQUIREMENTS:**AERATION USING COARSE-BUBBLE DIFFUSED AERATION:****Essential TNRCC Requirements for Nitrification:**

- ≥ 2.2 lbs. O₂/lb. BOD₅
- ≥ 3200 scf Air/lb. BOD₅ (Based on 4.0% O₂ T.E.)
- ≥ 2110 scf Air/lb. BOD₅ (By Ashbrook Certified Efficiency of 9.3% O₂ T.E. clean water at 13.75 ft Submergence)
 {(1lb. BOD₅ x 2.2 lbs. O₂/lb. BOD₅)/(0.01725 lbs. O₂/cf air x 0.093 x 0.65 transfer efficiency)=2110 scfm/lb BOD₅}

Final Phase:

Required Air Volume (@ 4.0% O ₂ T.E.):	278 scfm
Required Air Volume (@ 9.3% O ₂ T.E. @ 13.75 ft. submergence and 25 scfm, by Ashbrook):	183 scfm

AEROBIC DIGESTION:**Essential TNRCC Requirements:**

- ≥ 30 scfm/1,000 cf of Digester Volume 30 scfm/1000cf

Final Phase:

Required Air Volume:	77 scfm
----------------------	---------

AIR LIFT PUMPING (Manufacturer Recommendation):**Final Phase:**

Required Air Volume:	60 scfm
----------------------	---------

CHLORINE BASIN AGITATION:

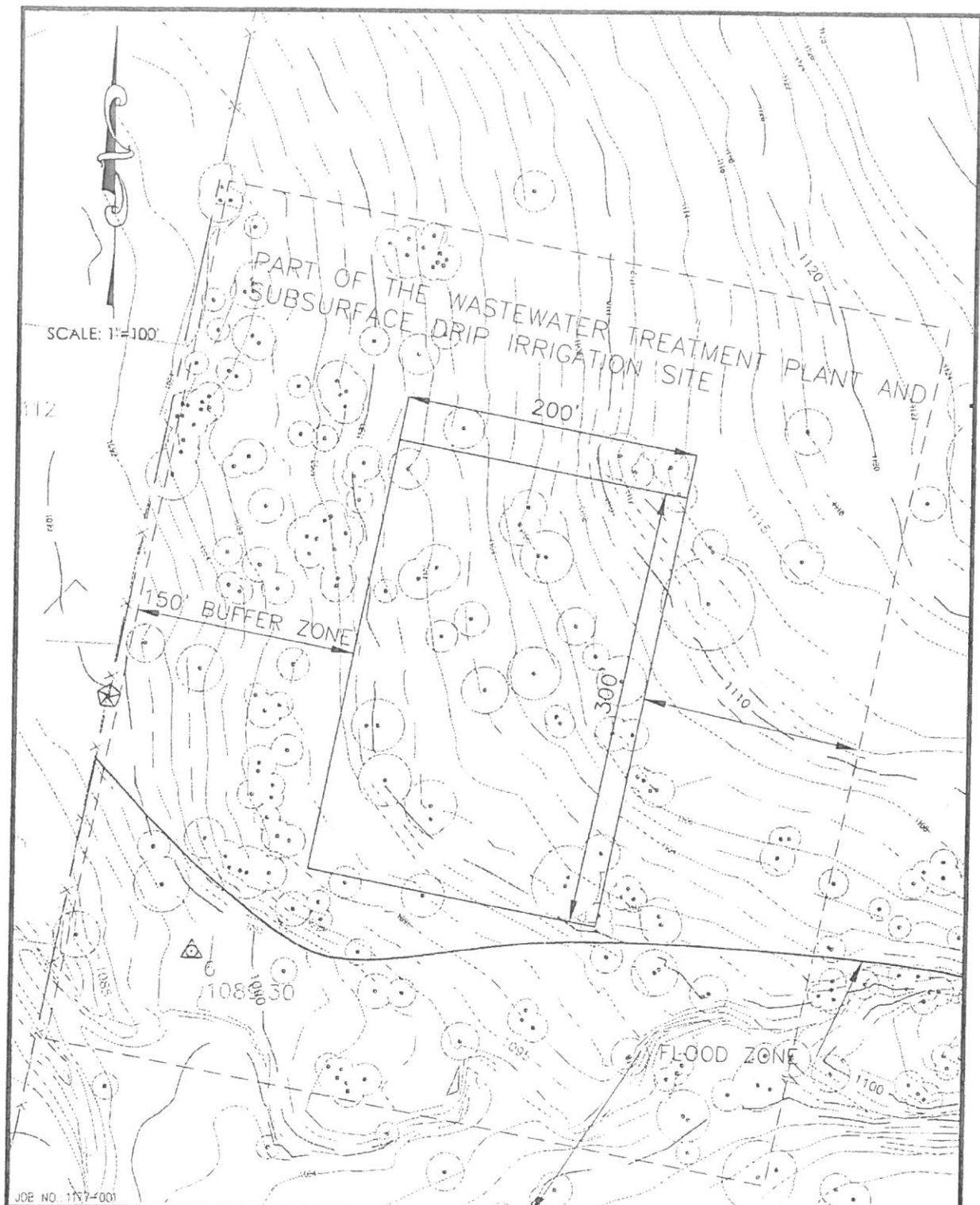
- = 5 scfm/1,000 cf of Basin Volume 5 scfm/1000cf

Final Phase:

Required Air Volume:	3 scfm
----------------------	--------

MINIMUM TOTAL AIR REQUIRED:

- Interim Phase: (Based on Manf. Certified 9.3% O₂ T.E.)** 323 scfm

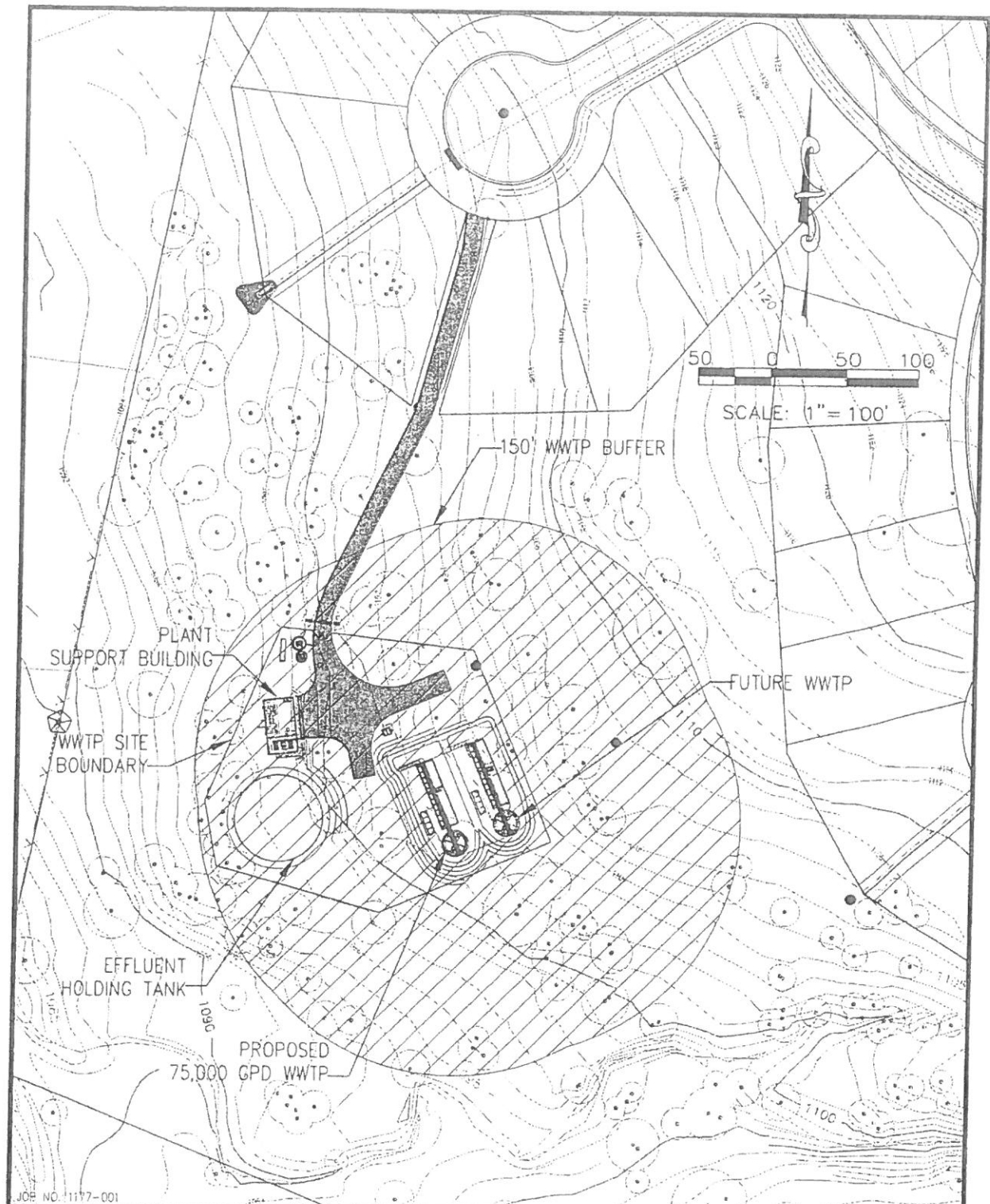


CMA ENGINEERING, INC.

14101 WEST HIGHWAY 290
BUILDING 600
AUSTIN, TEXAS 78737
(512) 894-3230 Fax: (512) 894-3225

HAYS COUNTY MUD No. 4
PERMITTED WWTP BUFFER

EXHIBIT
A



CMA ENGINEERING, INC.
14101 WEST HIGHWAY 290
BUILDING 600
AUSTIN, TEXAS 78737
(512) 894-3230 Fax: (512) 894-3225

HAYS COUNTY MUD No. 4 WWTP BUFFER ZONE MAP

EXHIBIT
B

Kathleen Hartnett White, *Chairman*
Larry R. Soward, *Commissioner*
Martin A. Hubert, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 10, 2006

Mr. Robert P. Callegari, P.E.
CMA Engineering, Inc.
14101 West Highway 290, Bldg. 600
Austin, Texas 78737

Re: 194 Bush, Ltd., TCEQ Permit No. WQ0014309001
(CN601457716, RN103897567)

Dear Mr. Callegari:

We acknowledge receipt of your letter dated October 6, 2006 proposing a change in the mode of operation of the activated sludge plant from extended aeration, as stated in the permit, to a single stage nitrification. We understand that there are no other changes in the permit. We pose no objection to the proposed change.

When an application for permit renewal is filed, please make a note in the application that a renewal with changes is being requested and refer to your letter of October 6, 2006 and this letter as supporting documents. Please provide a separate letter of notification of this change to Mr. Louis C. Herrin III, P.E., to amend your summary transmittal letter of June 22, 2006. As regards auxiliary power, we recommend that the on-site lift station and the wastewater treatment facility be wired to accept a generator in the event of power outages longer than anticipated.

We notice that your letter states that the construction of the new wastewater treatment facility and collection is expected to be completed by April of 2006. Craig Gonzales of your office verified that this should be April 2007. In this regard, please be reminded of the notification requirements of the current permit and the approval letter dated August 31, 2006 for the proposed project described in the June 22, 2006 summary transmittal letter.

If you have any questions regarding this matter, please do not hesitate to contact me at (512) 239-4540 or if by correspondence include MC 148 in the letterhead address following my name.

Sincerely,

A handwritten signature in black ink that reads "Firoj Vahora".

Firoj Vahora, Team Leader
Municipal Permits Team
Water Quality Division

FV/JDC/sp

cc: Mr. Louis C. Herrin III, P.E., Wastewater Permitting Section (MC 148)
TCEQ Region 11

CMA Engineering, Inc.

11/14/07-001/11/14
11/14/07

Robert P. Callegari, P.E.
Felix J. Manka, P.E.

November 15, 2006

Louis C. Herrin, III, P.E.
Texas Commission on Environmental Quality
Wastewater Permitting Section
Plans and Specifications Review
MC-148
P.O. Box 13087
Austin, Texas 78711-3087

RECEIVED

NOV 21 2006

WASTEWATER PLANS
AND SPECIFICATIONS

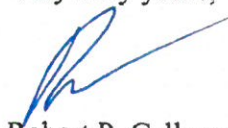
Re: 194 Bush, Ltd.
Ledge Stone Development (Formerly Bush Ranch)
TCEQ Permit No. 14309-001
Proposed Wastewater System Improvements
Phase 1 - 75,000 GPD Extended Aeration WWTP, 333,000 Gallon Effluent Holding
Tank, 75,000 GPD Subsurface Drip Irrigation System, and Lift Stations 1 and 2
CMA Job Number 1177-001

Dear Louis:

As requested by Mr. Firoj Vahora via his November 10, 2006 letter (attached), we are notifying you of the change in mode of operation of the above referenced WWTP from the extended aeration to single stage nitrification. Treatment units will still consist of a bar screen, an aeration basin, final clarifier, aerobic digester, and a chlorine contact chamber, but the mode of operation will change. Please accept this letter as an amendment to our June 2, 2006 summary transmittal letter (also attached).

Construction for new WWTP facilities will begin this month and are expected to be completed in April 2007. If you have any questions or comments please call me at 894-3230.

Very truly yours,


Robert P. Callegari, P.E.
Principal



Attachments

Xc: Phil Haag, Attorney for Hays County MUD No. 4
Mike Schoenfeld, 290 Ranch, Ltd.
Ed McCarthy, Jackson, Sjoberg, McCarthy, & Wilson, L.L.P.
TCEQ Region 11 Office

Kathleen Hartnett White, *Chairman*
Larry R. Soward, *Commissioner*
Martin A. Hubert, *Commissioner*
Glenn Shankle, *Executive Director*



MWD/14309-001/PA

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 20, 2006

Mr. Robert P. Callegari, P.E.
CMA Engineering, Inc.
14101 West Highway 290, Bldg. 600
Austin, Texas 78737

RECEIVED

JAN 12 2007

TCEQ
CENTRAL FILE ROOM

Re: Ledge Stone, Ltd.
Proposed Wastewater System Improvements
Texas Commission on Environmental Quality Permit No. 14309-001
WWPR Log No. 1206/017
CN601457716 RN103897567
Hays County

Dear Mr. Callegari:

We have received the project summary transmittal letter dated November 15, 2006.

The rules which regulate the design, installation and testing of domestic wastewater projects are found in 30 TAC, Chapter 317, of the Texas Commission on Environmental Quality (TCEQ) rules titled, Design Criteria for Sewerage Systems.

Section 317.1(a)(3)(D), relating to case-by-case reviews, states in part that upon submittal of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of §317.1(a)(3)(D) a technical review of complete plans and specifications is not required. **However, the project proposed in the summary transmittal letter is approved for construction. 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.** Below are provisions of the Chapter 317 regulations, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

1. 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 317. 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 §317.1(c)-(d). Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 317. The items which shall be included in the summary transmittal letter are addressed in §317.1(a)(3)(D).

Mr. Robert P. Callegari, P.E.

Page 2

December 20, 2006

2. Any deviations from Chapter 317 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 317 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.
3. Any variance from a Chapter 317 requirement disclosed in your summary transmittal letter is approved. If in the future, additional variances from the Chapter 317 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.
4. 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.

This approval does not mean that future projects will be approved without a complete plans and specifications review. 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 §317.1(a)(2) of the rules which states, "Approval given by the executive director...shall not relieve the sewerage system owner or the design engineer of any liabilities or responsibilities with respect to the proper design, construction, or authorized operation of the project in accordance with applicable commission rules."

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4552.

Sincerely,

A handwritten signature in dark ink, appearing to read "Louis C. Herrin, III", with a stylized flourish at the end.

Louis C. Herrin, III, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

LCH/ms

cc: TCEQ, Region 11 Office

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 12, 2012

ROBERT P. CALLEGARI, P.E.
CMA ENGINEERING INC.
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737

Re: HAYS COUNTY MUD NO. 4
NUISANCE ODOR PREVENTION AND NOISE ABATEMENT PLAN
PERMIT NO. WQ0014309-001
WWPR LOG NO. 0612/029
CN601457716 RRN103897567
HAYS COUNTY

Dear Mr. Callegari:

On June 14, 2012, the Texas Commission on Environmental Quality (TCEQ) received a Nuisance Odor Prevention and Noise Abatement Plan (Plan), dated June 13, 2012, for the Hays County Municipal District No. 4 Wastewater Treatment Plant (WWTP) in Hays County which included:

- Summary of WWTP operations and sources of odor;
- Discussions of climatic conditions and surrounding land uses;
- WWTP Buffer Zone map;
- Proposed 210 Reuse Areas map; and
- Wind Rose Data from nearby Austin Airport (Station 13958);

The review of this Plan identified a need for a variance from the buffer zones specifically: the 146-foot distance from the onsite lift station to the western property line which exceeds the 150-foot requirement [30 TAC §309.13(e)]. In order to mitigate the existing encroachment, the Plan proposes to use activated carbon canisters at the lift station's vent.

This review of the Plan grants conditional approval of this variance request. However; if the activated carbon canisters are ineffective in preventing odor or noise complaints the issue may be reopened.

Mr. Callegari, P.E.

Page 2

10/12/12

If you have any comments or questions, please contact me at (512) 239-0486, or email at ron.crane@tceq.texas.gov; or Louis C. Herrin III, P.E. at (512) 239-4552.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Crane". The signature is fluid and cursive, with the first name "Ron" and last name "Crane" clearly distinguishable.

Ron Crane, P.E.

Wastewater Permits Section (MC 148)

Water Quality Division

Texas Commission on Environmental Quality

RC/MC

cc: TCEQ, Region 11, Water Section

Bryan W. Shaw, Ph.D., P.E., *Chairman*

Toby Baker, *Commissioner*

Jon Niermann, *Commissioner*

Stephanie Bergeron Perdue, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 19, 2018

Mr. Robert P. Callegari, P.E.
CMA Engineering Inc.
235 Ledge Stone Drive
Austin, Texas 78737

Re: Hays County Municipal Utility District 4
Hays County MUD No. 4, Sludge Dewatering Box Installation
Permit No. WQ0014309001
WWPR Log No. 0318/067
CN602690661, RN103897567
Hays County

Dear Mr. Callegari:

TCEQ received the project summary transmittal letter dated March 13, 2018.

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, Design Criteria for Wastewater Systems.

Section 217.6(d), relating to case-by-case reviews, states in part that upon submittal of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of §217.6(e) a technical review of complete plans and specifications is not required. **However, the project proposed in the summary transmittal letter is approved for construction. 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.** Below are provisions of the Chapter 217 regulations, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

- 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(c). Additionally, the engineering report must include all constants, graphs,

Mr. Robert P. Callegari, P.E.

Page 2

April 19, 2018

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(c)(1)-(10).

- Any deviations from Chapter 217 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.
- Any variance from a Chapter 217 requirement disclosed in your summary transmittal letter is approved. If in the future, additional 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 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.

This approval does not mean that future projects will be approved without a complete plans and specifications review. 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.

Sincerely,



Paul A. Brochi, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

PAB/lb

cc: TCEQ, Region 11 Office

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Stephanie Bergeron Perdue, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 1, 2018

Mr. Robert P. Callegari, P.E.
CMA Engineering Inc.
235 Ledge Stone Drive
Austin, Texas 78737

Re: Hays County Municipal Utility District No. 4
Phase II WWTP Expansion to 150,000 GPD
Clarifier Side Water Depth Variance Request
Permit No. WQ0014309001
WWPR Log No. 0418/062
CN602690661, RN103897567
Hays County

Dear Mr. Callegari:

On April 13, 2018, TCEQ received the project summary transmittal letter dated April 12, 2018, for Phase II wastewater treatment plant expansion for Hays County Municipal Utility District No. 4. The project is to increase the treatment capacity from 75,000 gpd to 100,000 gpd. The Hays County MUD No. 4 plant is regulated by Water Quality permit WQ0014309001. The permit effluent concentration limits are 20 mg/l of BOD₅ and 20 mg/l of TSS with pH of between 6.0 and 9.0 inclusive. The specific work within the scope of this project is detailed 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, Design Criteria for Wastewater Systems.

The specific work being completed within the scope of this project is as follows:

- Converting the existing phase I digester to an aeration basin
- Increasing the size of the manual bar screen and adding a flow splitter box
- Installing a blower assembly
- Increasing the size of the impellers on the two influent submersible pumps
- Installing a previously approved sludge dewatering box (WWPR Project 0318/067)
- Installing various piping and airlift pumps
- Installing piping and electric additions as necessary

The summary transmittal letter also included a request for variance of 217.152(g)(2)(A) which requires a 10-ft. side water depth for a clarifier with a mechanical sludge collector. The engineer is proposing a 9.25 side water depth which will be identical to the existing clarifier designed under 30 TAC Chapter 317 requirements was designed with the 9.25 side water depth and the desire is to keep the hydraulics of the plants identical; and there have been no issues with the existing clarifier. This variance is granted.

Mr. Robert P. Callegari, P.E.

Page 2

May 1, 2018

The TCEQ review of this project seems to indicate that the project meets at least the minimum requirements of 30 TAC Chapter 217: Design Criteria for Wastewater Systems. This project is conditionally approved for completion based on all work being completed according to 30 TAC Chapter 217 requirements except for the variance granted.

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(c). 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(c)(1)-(10).

If in the future, additional 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 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.

This approval does not mean that future projects will be approved without a complete plans and specifications review. 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".

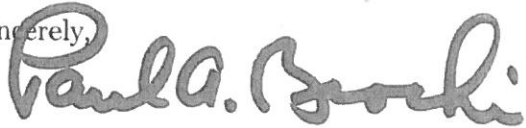
Mr. Robert P. Callegari, P.E.

Page 3

May 1, 2018

If you have any questions, or if we can be of any further assistance, please call me at (512) 239-1372.

Sincerely,

A handwritten signature in dark ink, reading "Paul A. Brochi". The signature is written in a cursive, flowing style with a large initial "P".

Paul A. Brochi, P.E.

Wastewater Permits Section (MC 148)

Water Quality Division

Texas Commission on Environmental Quality

PAB/lb

cc: TCEQ, Region 11 Office

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 9, 2019

Robert P. Callegari, P.E.
CMA Engineering Inc.
235 Ledge Stone Drive
Austin, Texas 78737-

Re: Hays County MUD 4
Phase II WWTP Expansion to 100,000 GPD
Permit No. WQ0014309-001 1780
WWPR Log No. 0819/004
CN602690661, RN103897567
Hays County

Dear Mr. Callegari:

On August 2, 2019 TCEQ received the project summary transmittal letter dated July 30, 2019 for the expansion of the Hays County MUD No. 4 to the 100,000 GPD Interim II phase and the construction of the tankage for the future 150,000 GPD final phase of the plant. The items being constructed within the scope of the project 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, Design Criteria for Wastewater Systems.

The items being constructed within the scope of the project are as follows:

- Expansion of the current capacity from a 75,000 GPD WWTP to a 100,000 GPD WWTP
- Tankage for the future 150,000 GPD WWTP final phase.
- Replacement of the current bar screen with a larger manual bar screen and a flow splitter box.
- Installation of an additional blower assembly for Interim II phase.
- Replacement of two influent submersible lift station pump impellers.
- Installation of piping, diffusers, and airlift pumps for the WWTP expansion.
- Piping and electrical additions as necessary.

Based on the results of the TCEQ review of the submitted information, the project is conditionally approved for construction. The condition being that the owner of the proposed wastewater treatment plant implements facilities to meet emergency power requirements set forth in 30 TAC Chapter 217.36 *Emergency Power Requirements* and Chapter 217.37 *Disinfection System Power Reliability*.

Robert P. Callegari, P.E.

Page 2

August 9, 2019

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)(1)-(9).

Any deviations from Chapter 217 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.

No variances of any Chapter 217 requirements were requested or permitted as part of this project review. If in the future, any variances from 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 written approval to the variance from the rules for the specific project and 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 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 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,



Eric Barnes,
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality



Baltazar Lucero-Ramirez, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

BLR/tc

cc: TCEQ, Region 11 Office

Kathleen Hartnett White, *Chairman*
Larry R. Soward, *Commissioner*
Martin A. Hubert, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 10, 2006

Mr. Robert P. Callegari, P.E.
CMA Engineering, Inc.
14101 West Highway 290, Bldg. 600
Austin, Texas 78737

Re: 194 Bush, Ltd., TCEQ Permit No. WQ0014309001
(CN601457716, RN103897567)

Dear Mr. Callegari:

We acknowledge receipt of your letter dated October 6, 2006 proposing a change in the mode of operation of the activated sludge plant from extended aeration, as stated in the permit, to a single stage nitrification. We understand that there are no other changes in the permit. We pose no objection to the proposed change.

When an application for permit renewal is filed, please make a note in the application that a renewal with changes is being requested and refer to your letter of October 6, 2006 and this letter as supporting documents. Please provide a separate letter of notification of this change to Mr. Louis C. Herrin III, P.E., to amend your summary transmittal letter of June 22, 2006. As regards auxiliary power, we recommend that the on-site lift station and the wastewater treatment facility be wired to accept a generator in the event of power outages longer than anticipated.

We notice that your letter states that the construction of the new wastewater treatment facility and collection is expected to be completed by April of 2006. Craig Gonzales of your office verified that this should be April 2007. In this regard, please be reminded of the notification requirements of the current permit and the approval letter dated August 31, 2006 for the proposed project described in the June 22, 2006 summary transmittal letter.

If you have any questions regarding this matter, please do not hesitate to contact me at (512) 239-4540 or if by correspondence include MC 148 in the letterhead address following my name.

Sincerely,

A handwritten signature in black ink, appearing to read "Firoj Vahora", with a long horizontal flourish extending to the right.

Firoj Vahora, Team Leader
Municipal Permits Team
Water Quality Division

FV/JDC/sp

cc: Mr. Louis C. Herrin III, P.E., Wastewater Permitting Section (MC 148)
TCEQ Region 11

**ATTACHMENT #12 – POLLUTANT ANALYSIS OF
TREATED EFFLUENT**



February 08, 2024

Laboratory Report

John Montgomery
Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Report ID: 20240208133253DLH

The following test results meet all NELAP requirements for analytes for which certification is available. Any deviations from our quality system will be noted in the case narrative. All analyses performed by North Water District Laboratory Services, Inc. unless noted.

For questions regarding this report, contact Monica Martin at 936-321-6060.

Sincerely,

Deena Higginbotham
Director of Client Services



Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Sample Results

Client Sample ID: Outfall 001
Lab Sample ID: 24A5702-01
Hays County 4 - Permit Renewal

[none]

Sample Matrix: Waste Water
Date Collected: 01/26/2024 10:18
Collected by: Cesar Guevara

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
--------	---------	---	----------	-------	----	-----	-----	-------	----------	---------

General Chemistry

SM 2320 B	Alkalinity as CaCO ₃	A	109	mg/L	1	10.0	10.0	BHA4553	01/29/2024 14:06	AKA
SM 5210 B	Biochemical Oxygen Demand (BOD)	A	<2.40U	mg/L	1.2	2.40	2.40	BHA4497	02/01/2024 10:16	AMM
SM 5210 B	Carbonaceous BOD (CBOD)	A	<3.00U	mg/L	1.5	3.00	3.00	BHA4498	02/01/2024 11:07	AMM
SM 2510 B	Conductivity	A	894	umhos/cm @ 25 °C	1	2.00	2.00	BHA4553	01/29/2024 14:06	AKA
EPA 350.1	Ammonia as N	A	0.0611	mg/L	1	0.0200	0.0500	BHA4683	01/30/2024 10:29	GJG
EPA 1664A	n-Hexane Extractable Material (O&G)	A	<5.00U	mg/L	1	5.00	5.00	BHB0505	02/03/2024 09:49	ARW
EPA 300.0	Sulfate	A	40.5	mg/L	1	0.0341	1.00	BHA4363	01/26/2024 23:19	ORP
SM 2540 C	Residue-filterable (TDS)	A	452B1	mg/L	1	10.0	10.0	BHA4560	01/31/2024 10:34	BP
SM 4500-NH3 C	Total Kjeldahl Nitrogen - (TKN)	A	<1.00U	mg/L	1	0.100	1.00	BHA4697	01/30/2024 09:00	GIW
EPA 365.1	Total Phosphorus	A	4.05	mg/L	1	0.117	0.200	BHA4621	01/31/2024 09:50	TBB
SM 2540 D	Residue-nonfilterable (TSS)	A	11.2	mg/L	1	1.00	1.00	BHA4584	01/29/2024 16:15	ENR

Microbiology

SM 9223 B (Collert Quanti-Tray)	Escherichia coli (E. coli)	A	4.10	MPN/100 mL	1	1.00	1.00	BHA4474	01/27/2024 16:14	ORP
---------------------------------------	----------------------------	---	------	---------------	---	------	------	---------	------------------	-----

Field

Hach 10360	DO Field	N	7.46	mg/L	1	1.00	1.00	BHA4599	01/26/2024 10:18	CGJ
Calc	Flow Field	N	0.0500	MGD	1	0.00	0.00	BHA4599	01/26/2024 10:18	CGJ
SM 4500-H+ B	pH	A	7.00	pH Units @ 25 °C	1	1.00	1.00	BHA4599	01/26/2024 10:18	CGJ
SM 4500-Cl G	Total Residual Chlorine	A	1.06	mg/L	1	0.25	0.25	BHA4599	01/26/2024 10:18	CGJ

* A = Accredited, N = Not Accredited or Accreditation not available



130 S. Trade Center Parkway, Conroe TX 77385
Tel: (936) 321-6060
Email: lab@nwdls.com
www. NWDLS.com
TCEQ T104704238-23-39

Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Sample Results
(Continued)

Client Sample ID: Outfall 001
Lab Sample ID: 24A5702-01RE1
Hays County 4 - Permit Renewal

[none]

Sample Matrix: Waste Water
Date Collected: 01/26/2024 10:18
Collected by: Cesar Guevara

Method	Analyte	*	Result Q	Units	DF	SDL	LRL	Batch	Analyzed	Analyst
--------	---------	---	----------	-------	----	-----	-----	-------	----------	---------

General Chemistry

EPA 300.0	Chloride (Rerun)	A	129	mg/L	5	0.172	5.00	BHA4499	01/27/2024 14:10	ORP
EPA 300.0	Nitrate as N (Rerun)	A	14.0	mg/L	5	0.0710	0.500	BHA4499	01/27/2024 14:10	ORP

* A = Accredited, N = Not Accredited or Accreditation not available



Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Quality Control

General Chemistry

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHA4363 - EPA 300.0										
Duplicate (BHA4363-DUP1)			Source: 24A0694-01		Prepared & Analyzed: 01/26/2024					
Sulfate	138		10.0	mg/L		138			0.507	15
Nitrate as N	0.610	U	1.00	mg/L		0.590			3.33	15
Chloride	95.8		10.0	mg/L		96.4			0.645	15
Duplicate (BHA4363-DUP2)			Source: 24A5569-01		Prepared & Analyzed: 01/26/2024					
Chloride	109		10.0	mg/L		110			1.57	15
Nitrate as N	12.3		1.00	mg/L		12.5			1.45	15
Sulfate	19.5		1.00	mg/L		19.5			0.354	15
MRL Check (BHA4363-MRL1)					Prepared & Analyzed: 01/26/2024					
Chloride	1.10		1.00	mg/L	1.00		110	50-150		
Sulfate	1.18		1.00	mg/L	1.00		118	50-150		
Nitrate as N	0.121		0.100	mg/L	0.100		121	50-150		
Matrix Spike (BHA4363-MS1)			Source: 24A0694-01		Prepared & Analyzed: 01/26/2024					
Sulfate	159		11.1	mg/L	22.2	138	92.8	80-120		
Nitrate as N	2.82		1.11	mg/L	2.22	0.590	100	80-120		
Chloride	110	J1	11.1	mg/L	11.1	96.4	121	80-120		
Matrix Spike (BHA4363-MS2)			Source: 24A5569-01		Prepared & Analyzed: 01/26/2024					
Chloride	129	J1	11.1	mg/L	11.1	110	167	80-120		
Sulfate	41.8		1.11	mg/L	22.2	19.5	100	80-120		
Nitrate as N	15.6	J1	1.11	mg/L	2.22	12.5	138	80-120		
Batch: BHA4497 - BOD-5210										
LCS (BHA4497-BS1)					Prepared: 01/27/2024 Analyzed: 02/01/2024					
Biochemical Oxygen Demand (BOD)	170			mg/L	198		85.7	85-115		

* A = Accredited, N = Not Accredited or Accreditation not available



Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Quality Control
(Continued)

General Chemistry (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHA4497 - BOD-5210 (Continued)										
Duplicate (BHA4497-DUP1)	Source: 24A5699-02		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	<2.40	U, J4	2.40	mg/L		<2.40				40
Duplicate (BHA4497-DUP2)	Source: 24A5530-02		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	4.09		2.40	mg/L		6.13			40.0	40
Duplicate (BHA4497-DUP3)	Source: 24A0555-01		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHA4497-DUP4)	Source: 24A0278-01		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	14.6		2.40	mg/L		17.1			16.2	20
Duplicate (BHA4497-DUP5)	Source: 24A5599-04		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	82.6		50.0	mg/L		85.8			3.76	20
Duplicate (BHA4497-DUP6)	Source: 24A5550-07		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	122		50.0	mg/L		143			15.9	20
Duplicate (BHA4497-DUP7)	Source: 24A5523-02		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	220		50.0	mg/L		229			4.12	20
Duplicate (BHA4497-DUP8)	Source: 24A0612-03		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	<50.0	U	50.0	mg/L		<50.0				20
Duplicate (BHA4497-DUP9)	Source: 24A4416-01		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	488		100	mg/L		481			1.45	20
Duplicate (BHA4497-DUPA)	Source: 24A4428-01		Prepared: 01/27/2024 Analyzed: 02/01/2024							
Biochemical Oxygen Demand (BOD)	968		100	mg/L		869			10.8	20

* A = Accredited, N = Not Accredited or Accreditation not available



Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Quality Control
(Continued)

General Chemistry (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHA4498 - CBOD-5210										
LCS (BHA4498-BS1)										
Carbonaceous BOD (CBOD)	164	J1		mg/L	198		82.7	85-115		
Duplicate (BHA4498-DUP1)										
Carbonaceous BOD (CBOD)	<2.40	J4, U	2.40	mg/L		<2.40				40
Duplicate (BHA4498-DUP2)										
Carbonaceous BOD (CBOD)	2.56		2.40	mg/L		<2.40			200	40
Duplicate (BHA4498-DUP3)										
Carbonaceous BOD (CBOD)	2.89		2.40	mg/L		3.93			30.5	40
Duplicate (BHA4498-DUP4)										
Carbonaceous BOD (CBOD)	<2.40	J4, U	2.40	mg/L		<2.40				40
Duplicate (BHA4498-DUP5)										
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHA4498-DUP6)										
Carbonaceous BOD (CBOD)	2.53		2.40	mg/L		<2.40			200	40
Duplicate (BHA4498-DUP7)										
Carbonaceous BOD (CBOD)	<2.40	U	2.40	mg/L		<2.40				40
Duplicate (BHA4498-DUP8)										
Carbonaceous BOD (CBOD)	159		50.0	mg/L		156			1.85	20
Batch: BHA4499 - EPA 300.0										
Duplicate (BHA4499-DUP1)										
Chloride	94.1		10.0	mg/L		97.1			3.19	15
Nitrate as N	14.7		1.00	mg/L		15.1			2.95	15

* A = Accredited, N = Not Accredited or Accreditation not available



Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Quality Control
(Continued)

General Chemistry (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHA4499 - EPA 300.0 (Continued)										
MRL Check (BHA4499-MRL1)					Prepared & Analyzed: 01/27/2024					
Nitrate as N	0.105		0.100	mg/L	0.100		105	50-150		
Chloride	1.11		1.00	mg/L	1.00		111	50-150		
Matrix Spike (BHA4499-MS1)					Source: 24A4906-02		Prepared & Analyzed: 01/27/2024			
Chloride	112	J1	11.1	mg/L	11.1	97.1	135	80-120		
Nitrate as N	16.6	J1	1.11	mg/L	2.22	15.1	65.7	80-120		
Batch: BHA4553 - Alkalinity										
Blank (BHA4553-BLK1)					Prepared & Analyzed: 01/29/2024					
Conductivity	<2.00	U	2.00	umhos/cm @ 25 °C						
LCS (BHA4553-BS1)					Prepared & Analyzed: 01/29/2024					
Conductivity	1420			umhos/cm @ 25 °C	1410		100	90-110		
QSC (BHA4553-BS2)					Prepared & Analyzed: 01/29/2024					
Conductivity	522			umhos/cm @ 25 °C	500		104	90-110		
LCS (BHA4553-BS4)					Prepared & Analyzed: 01/29/2024					
Alkalinity as CaCO ₃	101			mg/L	100		101	90-110		
Duplicate (BHA4553-DUP1)					Source: 24A4763-03		Prepared & Analyzed: 01/29/2024			
Alkalinity as CaCO ₃	254		10.0	mg/L		250			1.65	15
Conductivity	1210		2.00	umhos/cm @ 25 °C		1190			1.33	15
Duplicate (BHA4553-DUP2)					Source: 24A5579-01		Prepared & Analyzed: 01/29/2024			
Alkalinity as CaCO ₃	69.2		10.0	mg/L		70.4			1.72	15
Conductivity	629		2.00	umhos/cm @ 25 °C		626			0.478	15

* A = Accredited, N = Not Accredited or Accreditation not available



130 S. Trade Center Parkway, Conroe TX 77385
Tel: (936) 321-6060
Email: lab@nwdls.com
www. NWDLS.com
TCEQ T104704238-23-39

Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Quality Control
(Continued)

General Chemistry (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHA4560 - TDS										
Blank (BHA4560-BLK1)										
Residue-filterable (TDS)	<10.0	U	10.0	mg/L	Prepared: 01/29/2024 Analyzed: 01/31/2024					
LCS (BHA4560-BS1)										
Residue-filterable (TDS)	148		10.0	mg/L	150		98.7	90-110		
Duplicate (BHA4560-DUP1)										
Residue-filterable (TDS)	246		10.0	mg/L		248			0.810	10
Source: 24A0064-01										
Batch: BHA4584 - TSS										
Blank (BHA4584-BLK1)										
Residue-nonfilterable (TSS)	<1.00	U	1.00	mg/L	Prepared & Analyzed: 01/29/2024					
LCS (BHA4584-BS1)										
Residue-nonfilterable (TSS)	98.9		1.00	mg/L	100		98.9	85-115		
Duplicate (BHA4584-DUP1)										
Residue-nonfilterable (TSS)	2.32	J1	1.00	mg/L		1.89			20.0	10
Source: 24A5496-02										
Duplicate (BHA4584-DUP2)										
Residue-nonfilterable (TSS)	1.89		1.00	mg/L		1.89			0.00	10
Source: 24A5567-01										
Batch: BHA4621 - Phosphorus EPA 365.1										
LCS (BHA4621-BS1)										
Total Phosphorus	0.229		0.0100	mg/L	0.250		91.5	90-110		
Prepared: 01/29/2024 Analyzed: 01/31/2024										

* A = Accredited, N = Not Accredited or Accreditation not available



Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Quality Control
(Continued)

General Chemistry (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHA4621 - Phosphorus EPA 365.1 (Continued)										
Matrix Spike (BHA4621-MS1)		Source: 24A5432-02		Prepared: 01/29/2024 Analyzed: 01/31/2024						
Total Phosphorus	7.50		0.200	mg/L	5.00	2.72	95.5	80-120		
Matrix Spike (BHA4621-MS2)		Source: 24A5706-01		Prepared: 01/29/2024 Analyzed: 01/31/2024						
Total Phosphorus	7.83		0.200	mg/L	5.00	3.27	91.3	80-120		
Matrix Spike Dup (BHA4621-MSD1)		Source: 24A5432-02		Prepared: 01/29/2024 Analyzed: 01/31/2024						
Total Phosphorus	7.54		0.200	mg/L	5.00	2.72	96.3	80-120	0.532	20
Matrix Spike Dup (BHA4621-MSD2)		Source: 24A5706-01		Prepared: 01/29/2024 Analyzed: 01/31/2024						
Total Phosphorus	7.95		0.200	mg/L	5.00	3.27	93.8	80-120	1.55	20
Batch: BHA4683 - NH3-N SEAL-350.1										
Matrix Spike (BHA4683-MS1)		Source: 24A5706-01		Prepared & Analyzed: 01/30/2024						
Ammonia as N	0.459		0.0500	mg/L	0.400	0.0523	102	90-110		
Matrix Spike (BHA4683-MS2)		Source: 24A5478-01		Prepared & Analyzed: 01/30/2024						
Ammonia as N	0.450		0.0500	mg/L	0.400	0.0522	99.5	90-110		
Matrix Spike Dup (BHA4683-MSD1)		Source: 24A5706-01		Prepared & Analyzed: 01/30/2024						
Ammonia as N	0.464		0.0500	mg/L	0.400	0.0523	103	90-110	1.11	20
Matrix Spike Dup (BHA4683-MSD2)		Source: 24A5478-01		Prepared & Analyzed: 01/30/2024						
Ammonia as N	0.441		0.0500	mg/L	0.400	0.0522	97.2	90-110	2.02	20
Batch: BHA4697 - TKN T										
Blank (BHA4697-BLK1)		Prepared: 01/29/2024 Analyzed: 01/30/2024								
Total Kjeldahl Nitrogen - (TKN)	<1.00	U	1.00	mg/L						

* A = Accredited, N = Not Accredited or Accreditation not available



130 S. Trade Center Parkway, Conroe TX 77385
Tel: (936) 321-6060
Email: lab@nwdls.com
www. NWDLS.com
TCEQ T104704238-23-39

Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Quality Control
(Continued)

General Chemistry (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BHA4697 - TKN T (Continued)										
LCS (BHA4697-BS1)					Prepared: 01/29/2024 Analyzed: 01/30/2024					
Total Kjeldahl Nitrogen - (TKN)	1.79		1.00	mg/L	2.02		88.7	85-115		
Duplicate (BHA4697-DUP1)										
			Source: 24A0437-01		Prepared: 01/29/2024 Analyzed: 01/30/2024					
Total Kjeldahl Nitrogen - (TKN)	4.59		1.00	mg/L		5.38			15.7	20
Matrix Spike (BHA4697-MS1)										
			Source: 24A0437-01		Prepared: 01/29/2024 Analyzed: 01/30/2024					
Total Kjeldahl Nitrogen - (TKN)	8.96		1.00	mg/L	4.00	5.38	89.6	85-115		
Batch: BHB0505 - EPA 1664										
Blank (BHB0505-BLK1)										
					Prepared & Analyzed: 02/03/2024					
n-Hexane Extractable Material (O&G)	<5.00	U		5.00	mg/L					
LCS (BHB0505-BS1)										
					Prepared & Analyzed: 02/03/2024					
n-Hexane Extractable Material (O&G)	43.1		5.00	mg/L	40.0		108	77.5-114.5		
LCS Dup (BHB0505-BSD1)										
					Prepared & Analyzed: 02/03/2024					
n-Hexane Extractable Material (O&G)	42.1		5.00	mg/L	40.0		105	77.5-114.5	2.43	20
Matrix Spike (BHB0505-MS1)										
			Source: 24A5339-01		Prepared & Analyzed: 02/03/2024					
n-Hexane Extractable Material (O&G)	23.4	J1	5.00	mg/L	40.0	<5.00	58.4	77.5-114.5		

* A = Accredited, N = Not Accredited or Accreditation not available



130 S. Trade Center Parkway, Conroe TX 77385
Tel: (936) 321-6060
Email: lab@nwdls.com
www. NWDLS.com
TCEQ T104704238-23-39

Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Quality Control
(Continued)

Microbiology

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit
Batch: BHA4474 - TC EC Quantitray									
Blank (BHA4474-BLK1)									
					Prepared: 01/26/2024 Analyzed: 01/27/2024				
Escherichia coli (E. coli)	<1.00	U	1.00	MPN/100 mL					
Duplicate (BHA4474-DUP1)									
					Prepared: 01/26/2024 Analyzed: 01/27/2024				
Escherichia coli (E. coli)	<1.00	U	1.00	MPN/100 mL		<1.00			200

* A = Accredited, N = Not Accredited or Accreditation not available



130 S. Trade Center Parkway, Conroe TX 77385
Tel: (936) 321-6060
Email: lab@nwdls.com
www. NWDLS.com
TCEQ T104704238-23-39

Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Sample Condition Checklist

Work Order: 24A5702

Check Points

No	Custody Seals
Yes	Containers Intact
Yes	COC/Labels Agree
Yes	Received On Ice
Yes	Appropriate Containers
Yes	Appropriate Sample Volume
Yes	Coolers Intact
Yes	Samples Accepted

* A = Accredited, N = Not Accredited or Accreditation not available



Municipal Operations and Consulting
27316 Spectrum Way
Oak Ridge, TX 77385

Reported:
02/08/2024 13:32

Term and Qualifier Definitions

Item	Definition
B1	Associated method blank is lower than the established quality control criteria.
J1	Estimated value - The reported value is outside the established quality control criteria for accuracy and/or precision.
J4	Estimated value and sample is less than value - No dilution produced a depletion of 2 mg/L of DO or greater, oxygen demand of sample was less than anticipated.
U	Non-detected compound.
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated
*	A = Accredited, N = Not Accredited or Accreditation not available
DF	Dilution Factor - the factor applied to the reported data due to sample preparation, dilution, or moisture content
MDL	Method Detection Limit - The minimum concentration of a substance (or analyte) that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. Based on standard deviation of replicate spiked samples take through all steps of the analytical procedure following 40 CFR Part 136 Appendix B.
SDL	Sample Detection Limit - The minimum concentration of a substance (analyte) that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The SDL is an adjusted limit thus sample specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments. If there are no sample specific parameters, the MDL = SDL.
MRL	Method Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and without qualification (i.e. J-flagged). The MRL is at or above the lowest calibration standard.
LRL	Laboratory Reporting Limit - Analyte concentration that corresponds to the lowest level lab reports with confidence in accuracy of quantitation and without qualification (i.e. J-flagged). The LRL is an adjusted limit thus sample specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments. If there are no sample specific parameters, the MRL = LRL.

* A = Accredited, N = Not Accredited or Accreditation not available



CHAIN OF CUSTODY RECORD

North Water District Laboratory Services
130 S. Trade Center Pkwy, Conroe Tx 77385
(936) 321-6060 - lab@nwdls.com

TCEQ T104704238-23-39



Page 1 of 1

24A5702

Lab PM : Deena Higginbotham			Project Name : Hays County 4 - Permit Renewal			Schedule Comments:		
Municipal Operations and Consulting John Montgomery 27316 Spectrum Way Oak Ridge, TX 77385 Phone: (281) 367-5511			Project Comments: Driveway to plant is between 143 & 151 Terrace Ct - Austin 78737 Code: 0701 Call Chris Sanchez - 713-206-8652 30min before arrival DO must be recorded before 9am. If CL2 not between 1.0- 4.0 Call Office Mark out Duplicated Outfall samples on reg chain					
Sample ID	Collection Point	Date/Time Begin	Date/Time Sampled	Sample Type	Container	Analysis/Preservation	Field Results	
24A5702-01	Outfall 001		1/26/2024/1018	AQ Grab	A HDPE 250mL B HDPE 1L C HDPE 250mL H2SO4 D HDPE 250mL E Glass Wide 1L w/ Teflon-lined Lid F HDPE S250mL Na2S2O3 G HDPE 250mL H HDPE 250mL H2SO4 I HDPE 250mL H2SO4 J HDPE 1L	TC EC-9223 O&G-1664 Alkalinity-2320 BOD-5210 CBOD-5210 Chloride IC 300.0 Conductivity-2510 NH3-N SEAL-350.1 Nitrate as N IC 300.0 Sulfate IC 300.0 TDS-2540 TKN T-4500 C Total Phosphorus-365 1- H2SO4 4°C TSS-2540 4°C	DO Field 2.46 Flow MGD Field 0.05 pH Field 7.00 Total Chlorine 1.06 Residual WW Field	
Field Remarks:								
Sampler (Signature)		Relinquished By: (Signature)		Lab Preservation: H2SO4 (Circle and Write ID Below)		HNO3	NaOH	Other:
				Date/Time		Received By: (Signature)		Date/Time
Print Name		Relinquished By: (Signature)		Date/Time		Received By: (Signature)		Date/Time
Affiliation		Relinquished To Lab By: (Signature)		Date/Time		Received for Laboratory By: (Signature)		Date/Time
Custody Seal : Yes / No		COC Labels Agree: Yes / No		Appropriate Volume: Yes / No		Received on Ice: Yes / No		Temperature: °C
Container Intact : Yes / No		Appropriate Containers: Yes / No		Coolers Intact: Yes / No		Samples Accepted: Yes / No		Thermometer ID:
New Braunfels								

wko_NWDLs_COC_LS Revision 4.1 Effective: 2/17/2022

ATTACHMENT #13 – SLUDGE ACCEPTANCE AGREEMENT



Austin Wastewater Processing Facility
826 Linger Ln
Austin, Texas 78721
(512) 973-8484

Waste Stream Acceptance

01/03/2023

Wastewater Residuals Management, LLC, an affiliate of Wastewater Transport Services, LLC, owns and operates the Austin Wastewater Processing Facility. This facility has been permitted by the TCEQ and assigned permit number MSW 2384. The disposal facility is expected to be open for at least the next 5 years.

The facility has been permitted as a Centralized Waste Treatment Facility able to receive the following categorical and non-categorical waste streams:

- Wastewater Treatment Plant Sludge
- Water Treatment Plant Sludge
- Leachate
- Septic
- Sanitary Sewer
- Storm Water
- Food Service Grease
- Car Wash Grit Trap
- Other Class II Non-Hazardous Liquid Waste

***Please note that analytical may be required before the waste stream will be accepted.

Wastewater Residuals Management, LLC agrees to accept any of the above waste streams from the below listed generator.

Generator: Hays County MUD WWTP

Identifying Info: WQ0014309001

A handwritten signature in black ink, appearing to read "Cory R. Juby", with a date stamp "12/8/22" written over the signature.

Cory R. Juby
Environmental Compliance

Wastewater Residuals Management reserves the right to discontinue acceptance of the below mentioned waste at any time.

ATTACHMENT #14– TCEQ APPROVAL LETTERS FOR 210 REUSE

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 17, 2012

Mr. Robert P. Callegari, PE
CMA Engineering, Inc.
235 Ledge Stone Drive
Austin, Texas 78737

Re: Hays County MUD No. 4
Amendment to Hays County MUD No. 4
Reclaimed Authorization and Purple Pipe Variance
TCEQ Authorization No R14309-001
CN600688246 RN103897567
Hays County

Dear Mr. Callegari:

We have completed our review of your requests to add Type I uses to the authorization and for a variance to the purple pipe rule on the irrigation systems under the commission reclaimed water program (30 TAC Chapter 210). You are requesting that the commission grandfather a portion of the existing irrigation system that was built before the purple pipe requirements.

The variance request is granted with the following conditions:

1. The district must certify that the irrigation system does not have any cross-connection with a potable water supply.
2. Any repairs, replacements or realignment of this portion of the irrigation system shall meet the purple pipe requirements.

Thank you for your cooperation during this review process. If you have any questions, please contact Louis C. Herrin, III of my staff at louis.herrin@tceq.texas.gov or (512) 239-4552.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Linendoll".

Chris Linendoll, E.I.T., Manager
Wastewater Permitting Section
Water Quality Division

CL/LCH/sp

AUTHORIZATION FOR RECLAIMED WATER



Authorization No. R14309001

*This authorization supersedes and replaces
Authorization No. R14309001 approved March 23, 2010*

Producer: Hays County Municipal Utility District No. 4
600 Congress Street, Suite 2100
Austin, Texas 78701-2986

Provider: Hays County Municipal Utility District No. 4
600 Congress Street, Suite 2100
Austin, Texas 78701-2986

User: Any user within the service area authorized by the provider

Location: The wastewater treatment facility is located approximately 2,960 feet west-northwest of the intersection of U.S. Highway 290 and County Road 163 (Nutt Brown Road); approximately 640 feet southwest of the intersection of Terrace Court and Ledge Stone Drive, Hays County, Texas.

Authorization: Type I and Type II reclaimed water from the Hays County MUD No. 4's Wastewater Treatment Facility (TPDES Permit No. WQ0014309001) to be used for: irrigation of open space/greenbelt areas, parks, landscape areas, and right-of-ways within the Ledge Stone Development; for make-up water in off-channel water quality ponds, and potentially for commercial process and cooling tower makeup water in the future within the Ledge Stone Development. The reclaimed water will also be used for construction water, soil compaction and dust control, and for re-vegetation of disturbed areas both inside and outside the Ledge Stone Development/Hays County MUD No. 4 boundaries. The service area is as shown in Section XI, Service Area Map.

This authorization contains the conditions that apply for the use of reclaimed water. The approval of reclaimed water use under Chapter 210 does not affect any existing water rights. If applicable, a reclaimed water use authorization in no way affects the need of a producer, provider, or user to obtain a separate water right authorization from the commission. This authorization does not allow irrigation of any area authorized for irrigation under a Texas Land Application Permit.

Issue Date: October 17, 2012


Zak Covar, Executive Director

I. General Requirements

- A. No producer or provider may transfer reclaimed water to a user without first notifying the commission.
- B. Reuse of untreated wastewater is prohibited.
- C. Food crops that may be consumed raw by humans must not be spray irrigated. Food crops including orchard crops that will be substantially processed prior to human consumption may be spray irrigated. Other types of irrigation that avoid contact of reclaimed water with edible portions of food crops are acceptable.
- D. There must be no nuisance conditions resulting from the distribution, the use, or storage of reclaimed water.
- E. Reclaimed water must not be used in a way that degrades groundwater quality to a degree adversely affecting its actual or potential uses.
- F. Reclaimed water stored in ponds must be prevented from discharging into waters in the state, except for discharges directly resulting from rainfall events or in accordance with a permit issued by the commission. All other discharges are unauthorized.
- G. If an overflow of a holding pond occurs causing discharge into or adjacent to water in the state, the user or provider, as appropriate, shall report the noncompliance. A written submission of pertinent information must be provided to the TCEQ Region 11 office in Austin and to the TCEQ Enforcement Division (MC-149) in Austin, within five (5) working days after becoming aware of the overflow. The submission must contain:
 - 1. a description of the noncompliance and its cause;
 - 2. the potential danger to human health or safety, or the environment;
 - 3. the period of noncompliance, including exact dates and times;
 - 4. if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - 5. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- H. Unless otherwise provided in this authorization, there must be no off-site discharge, either airborne or surface runoff of reclaimed water from the user's property except to a wastewater treatment collection system or wastewater treatment facility unless the reclaimed water user applies for and obtains a permit from the commission that authorizes discharge of the water.
- I. All reclaimed water piping must be separated from potable water piping when trenched by a distance of at least nine feet for Type II effluent and four feet for Type I. All buried pipe must be manufactured in purple, painted purple, taped with purple metallic tape or bagged in purple. All exposed piping, hose bibs and faucets must be painted purple, designed to prevent connection to a standard water hose, and stenciled with a warning reading "NON-POTABLE WATER."
- J. The design of any new distribution system that will convey reclaimed water to a user requires the approval of the executive director. Materials must be submitted to the executive director in accordance with the Texas Engineering Practice Act (Article 3271a, Vernon's Annotated Texas Statutes). The plans and specifications for any new

distribution system constructed pursuant to this authorization must be approved by the executive director. Failure to secure approval before commencing construction or making a transfer of reclaimed water is a violation of this authorization. Each day of a transfer is a separate violation until approval has been secured.

- K. Nothing in this authorization modifies any requirements in 30 TAC Chapter 290, Public Drinking Water.
- L. A major change from a prior notification for use of reclaimed water must be approved by the executive director before it can be implemented. A major change includes:
 - 1. a change in the boundary of the approved service area, not including the conversion of individual lots within a subdivision to reclaimed water use;
 - 2. the addition of a new provider;
 - 3. a major change in the intended use, such as conversion from irrigation of a golf course to residential irrigation; or
 - 4. a change from either Type I or Type II use to the other.
- M. The reclaimed water producer, provider, and user shall maintain current operation and maintenance plans on the sites over which they have operational control. The operation and maintenance plan must contain the following, as a minimum:
 - 1. a copy of the signed contract between the user and provider and a copy of the signed contract between the provider and the producer, as applicable;
 - 2. a labeling and separation plan for the prevention of cross connections between reclaimed water distribution lines and potable water lines;
 - 3. the measures that will be implemented to prevent unauthorized access to reclaimed water facilities (e.g., secured valves);
 - 4. procedures for monitoring reclaimed water;
 - 5. a plan for how reclaimed water use will be scheduled to minimize the risk of inadvertent human exposure;
 - 6. schedules for routine maintenance;
 - 7. a plan for worker training and safety; and
 - 8. contingency plan for system failure or upsets.
- N. One of the following requirements must be met by the user or provider, for any area where reclaimed water is stored or where there are hose bibs or faucets:
 - 1. Signs having a minimum size of eight inches by eight inches must be posted at all storage areas and on all hose bibs and faucets reading, in both English and Spanish, "Reclaimed Water, Do Not Drink" or similar warning.
 - 2. The area must be secured to prevent access by the public.
- O. Where a reclaimed water line parallels a sewer line, the reclaimed water line must be constructed in accordance with subsection (p) or (q) of this section. The horizontal separation distance must be three feet (outside to outside) with the reclaimed water line at the level of or above the sewer line. Reclaimed water lines that parallel sewer lines may be placed in the same benched trench. Where a reclaimed water line crosses a sewer line,

the requirement of 30 TAC §290.44(e)(4)(B), Water Line Installation—crossing lines, must be followed with the reclaimed water line substituted for the water line.

P. Reclaimed water pipes must meet the following requirements:

1. Lines that transport reclaimed water under pressure must be sized according to acceptable engineering practices for the needs of the reclaimed water users.
2. Reclaimed water force mains must have an expected life of at least as long as that of the associated lift station and must be suitable for the reclaimed water being pumped and operating pressure to which it will be subjected.
3. Pipes must be identified in the technical specifications with appropriate American Society for Testing and Materials, American National Standard Institute, or American Water Works Association standard numbers for both quality control (dimensions, tolerance, and installation such as bedding or backfill).
4. Pipes and fittings must have a minimum working pressure rating of 150 pounds per square inch.
5. Final plans and specifications must describe required pressure testing for all installed reclaimed water force mains.
6. Minimum test pressure must be 1.5 times the maximum design pressure. Allowable leakage rates must be determined as described in 30 TAC §217.97, Pressure Sewer Systems.
7. Gravity flow reclaimed water lines must meet the requirements of 30 TAC Chapter 217, Subchapter C, Conventional Collection Systems. The provider shall prevent high velocity scouring and maintain adequate fluid velocity to prevent the deposition of solids in the lines.

Q. All exposed piping and piping within a building must be either purple pipe or painted purple. All exposed piping should be stenciled in white with a warning reading "NON-POTABLE WATER". All exposed or buried reclaimed water piping constructed at a wastewater treatment facility is exempt from the color-coding requirement of this section.

R. When applicable, in accordance with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems, the design of the distribution systems that will convey reclaimed water to a user must be submitted to the executive director and must receive an approval before the distribution system may be constructed. The design of the distribution systems must meet the criteria of 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. When a municipality is the plan review authority for certain sewer systems that transport primarily domestic waste, in lieu of the commission, design submittal will not be subject to submittal to the commission and instead must be approved by the municipality.

S. All ground level and elevated storage tanks must be designed, installed, and constructed in accordance with current AWWA standards with reference to materials to be used and construction practices to be followed, except for health-based standards strictly related to potable water storage and contact practices, where appropriately less restrictive standards may be applied.

II. Storage Requirements for Reclaimed Water

- A. Storage facilities for retaining reclaimed water prior to use must not be located within a floodway.
- B. Storage ponds must be hydraulically separated from waters in the state.
- C. Any holding pond designed to contain Type I effluent or Type II effluent that is located within a DRASTIC Pollution Potential Index Zone of less than 110, shall conform to the following requirements:
 - 1. Ponds with an earthen liner must meet the following requirements
 - a. A permeability of less than 1×10^{-4} cm/sec;
 - b. The ponds must be designed and constructed to prevent groundwater contamination;
 - c. Soils used for pond lining must be free from foreign material such as paper, brush, trees, and large rocks; and
 - d. All soil liners must be of compacted material, at least 24 inches thick, compacted in lifts no greater than 6 inches thick and compacted to 95% of Standard Proctor Density;
 - e. Soil liners must meet the following particle size gradation and Atterberg limits:
 - i. 30% or more passing a number 200 mesh sieve; and
 - ii. a liquid limit of 30% or greater; and
 - iii. a plasticity index of 15 or greater;
 - f. In situ liners at least 24 inches thick meeting a permeability less than or equal to 1×10^{-4} cm/sec are acceptable alternatives; In-situ clay soils meeting the soils liner requirements must be excavated and re-compacted a minimum of 6 inches below planned grade to assure a uniformly compacted finished surface.
- D. Any holding pond containing reclaimed water located within the recharge zone of the Edward Aquifer or designed to contain Type II effluent and that is located within a DRASTIC Pollution Potential Index Zone of 110 or greater, shall conform to the following requirements:
 - 1. Ponds with an earthen liner must meet the following requirements
 - a. A permeability of less than 1×10^{-7} cm/sec;
 - b. The ponds must be designed and constructed to prevent groundwater contamination;
 - c. Soils used for pond lining must be free from foreign material such as paper, brush, trees, and large rocks; and
 - d. All soil liners must be of compacted material, at least 24 inches thick, compacted in lifts no greater than 6 inches thick and compacted to 95% of Standard Proctor Density;
 - e. Soil liners must meet the following particle size gradation and Atterberg limits:
 - i. 30% or more passing a number 200 mesh sieve; and
 - ii. a liquid limit of 30% or greater; and
 - iii. a plasticity index of 15 or greater;

- f. In situ liners at least 24 inches thick meeting a permeability less than or equal to 1×10^{-7} cm/sec are acceptable alternatives; In-situ clay soils meeting the soils liner requirements must be excavated and re-compacted a minimum of 6 inches below planned grade to assure a uniformly compacted finished surface.
- E. Synthetic membrane linings must have a minimum thickness of 40 mils and have a leak detection system;
- F. Certification by a Texas licensed professional engineer must be furnished stating that the pond liner meets the appropriate criteria prior to use of the facilities;
- G. Soil embankment walls must have a top width of at least five feet. The interior and exterior slopes of soil embankment walls must be no steeper than one foot vertical to three feet horizontal unless alternate methods of slope stabilization are used. All soil embankment walls must be protected by a vegetative cover or other stabilizing material to prevent erosion. Erosion stops and water seals must be installed on all pipe penetrating the embankments; and
- H. An alternative method of pond lining that provides equivalent or better water quality protection than provided under this section may be utilized with the prior approval of the executive director; and
- I. Reclaimed water may be stored in leak-proof, fabricated tanks;
- J. Subsequent holding ponds utilized for the receipt and storage of reclaimed water of a quality that could cause or causes a violation of a surface water quality standard or impairment of groundwater for its actual or intended use will be also subject to the storage requirements of this section.

III. Specific Uses and Quality Standards for Reclaimed Water

- A. Numerical parameter limits pertaining to specific reclaimed water use categories are contained in this section. These limits apply to reclaimed water before discharge to initial holding ponds or a reclaimed water distribution system.
- B. The reclaimed water producer shall establish that the reclaimed water meets the quality limits at the sample point for the intended use in accordance with the monitoring requirements identified in Section IV, Sampling and Analysis.
- C. Types and quality standards for reclaimed water.
 - 1. Type I Reclaimed Water Use. The use of Type I reclaimed water is for situations where the public may come in contact with the reclaimed water. The uses allowed by this authorization are:
 - a. Irrigation of right-of-ways, parks, open space/greenbelt areas, parks, landscape areas.
 - b. Make up water in off-channel water quality ponds.
 - c. Type I reclaimed water may also be used for any of the Type II.
 - 2. The following conditions apply to Type I use of reclaimed water. At a minimum, the reclaimed water producer shall transfer only reclaimed water of the following quality

as described for Type I reclaimed water use. Type I reclaimed water on a 30-day average must have a quality of no more than:

Table 1. Type I Quality Requirements

Parameter	Limit	Limit Type
Turbidity	3 NTUs	30-day average
CBOD ₅	5 mg/l	30-day average
Fecal coliform or <i>E. coli</i>	20/100 ml	30-day geometric mean (MPN or CFU)
Fecal coliform or <i>E. coli</i>	75/100 ml	maximum single grab sample (MPN or CFU)

3. Type II Reclaimed Water Use. The use of Type II reclaimed water is for situations where the public will not be exposed to the reclaimed water. The uses allowed by this authorization are:
 - a. Irrigation of right-of-ways, parks, open space/greenbelt areas, landscape areas where human access is restricted or unlikely to occur, or when the sites are not used by the public when times of irrigation operations are in progress
 - b. Make up water in water quality ponds where direct human contact is not likely
 - c. Commercial process and cooling tower makeup water
 - d. Construction water, soil compaction and dust control where application procedures minimize aerosol drift to public areas
 - e. Re-vegetation of disturbed areas where application procedures minimize aerosol drift to public areas.
4. The following conditions apply to Type II use of reclaimed water. At a minimum, the reclaimed water producer shall transfer only reclaimed water of the following quality. Type II reclaimed water on a 30-day average must have a quality of no more than:

Table 2. Type II Quality Requirements

Parameter	Limit	Limit Type
CBOD ₅	15, mg/l	30-day average
Fecal coliform or <i>E. coli</i>	200/100 ml	30-day geometric mean (MPN or CFU)
Fecal coliform or <i>E. coli</i>	800/100 ml	maximum single grab sample (MPN or CFU)

D. Test Procedures

1. Test procedures for the analysis of pollutants must comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations must accurately represent the reclaimed water.
2. All laboratory tests submitted to demonstrate compliance with this authorization must meet the requirements of 30 TAC Chapter 25, *Environmental Testing Laboratory Accreditation and Certification*.

IV. Sampling and Analysis

- A. The reclaimed water producer shall sample the reclaimed water prior to distribution to the entity that first received the reclaimed water after it leaves the wastewater treatment facility (provider or user) to assure that the water quality meets the standard for the contracted use.
- B. Analytical methods must be in compliance with 30 TAC Chapter 319, *Monitoring and*

Reporting.

- C. The minimum sampling and analysis frequency for Type I reclaimed water is twice per week when reclaimed water is being produced and shall be reported as outfall 800.
- D. The minimum sampling and analysis frequency for Type II reclaimed water is once per week when reclaimed water is being produced and shall be reported as outfall 900.
- E. The monitoring must be done after the final treatment unit.
- F. The records of the monitoring must be kept on a monthly basis and be available at the facility site for inspection by representatives of the Commission for at least five years.

V. Record Keeping and Reporting

- A. The reclaimed water provider and user shall maintain records on site for a period of at least five years.
- B. The producer shall maintain the following records:
 - 1. copies of notifications made to the commission concerning reclaimed water projects;
 - 2. as applicable, copies of contracts with each reclaimed water user (this requirement does not include reclaimed water users at residences that have separate distribution lines for potable water);
 - 3. records of the volume of water delivered to each reclaimed water user per delivery (this requirement does not apply to reclaimed water users at residences that have separate distribution lines for potable water); and
 - 4. reclaimed water quality analyses.
- C. The reclaimed water producer shall report to the commission on a monthly basis the following information on forms furnished by the executive director. The reports are due by the 20th day of the month following the reporting period.
 - 1. volume of reclaimed water delivered to each user; and
 - 2. quality of reclaimed water delivered to a user or provider reported as a monthly average for each quality criteria, except those listed as "not to exceed" that must be reported as individual analyses..

VI. Transfer of Reclaimed Water

- A. Reclaimed water must be transferred from a provider to a user on a demand only basis. A reclaimed water user may refuse delivery of reclaimed water at any time.
- B. All reclaimed water transferred to a user must be of at least the quality specified in Section IV, *Sampling and Analysis*.
- C. Transfer must be by pipes or tank trucks.
- D. The transfer of reclaimed water must be terminated immediately if a provider becomes aware of the misuse of the reclaimed water by the user, regardless of contract provisions.

VII. Restrictions

- A. This authorization does not convey any property right and does not grant any exclusive privilege.
- B. This authorization does not allow the use of reclaimed water on land that is authorize as a disposal site under either a Texas Pollutant Discharge Elimination System (TPDES) permit or a Texas Land Application Permit (TLAP).

VIII. Responsibilities and Contracts

- A. The producer of reclaimed water is not liable for misapplication of reclaimed water by users, except as provided in this section. Both the reclaimed water provider and user have at least but are not limited to the following responsibilities:
 - 1. The reclaimed water producer shall:
 - a. transfer reclaimed water of at least the minimum quality required by this chapter at the point of delivery to the user;
 - b. sample and analyze the reclaimed water and report the analyses in accordance with Section IV, Sampling and Analysis, and Section V, Recordkeeping and Reporting; and
 - c. notify the executive director in writing within five (5) days after obtaining knowledge of reclaimed water use not authorized by the executive director.
 - 2. The reclaimed water provider shall:
 - a. ensure construction of reclaimed water distribution systems in accordance with 30 TAC Chapter 217, Design of Domestic Wastewater Systems, and in accordance with approved plans and specifications;
 - b. transfer reclaimed water of at least the minimum quality required by this authorization at the point of delivery to the user;
 - c. notify the executive director in writing within five (5) days after obtaining knowledge of reclaimed water use not authorized by the executive director; and
 - d. not be found in violation of this chapter for the misuse of the reclaimed water by the user if transfer of such water is shut off promptly upon knowledge of misuse regardless of contract provisions.
 - 3. The reclaimed water user shall:
 - a. use the reclaimed water in accordance with this authorization; and
 - b. maintain and provide records as required by Section V, Record Keeping and Reporting.

IX. Enforcement

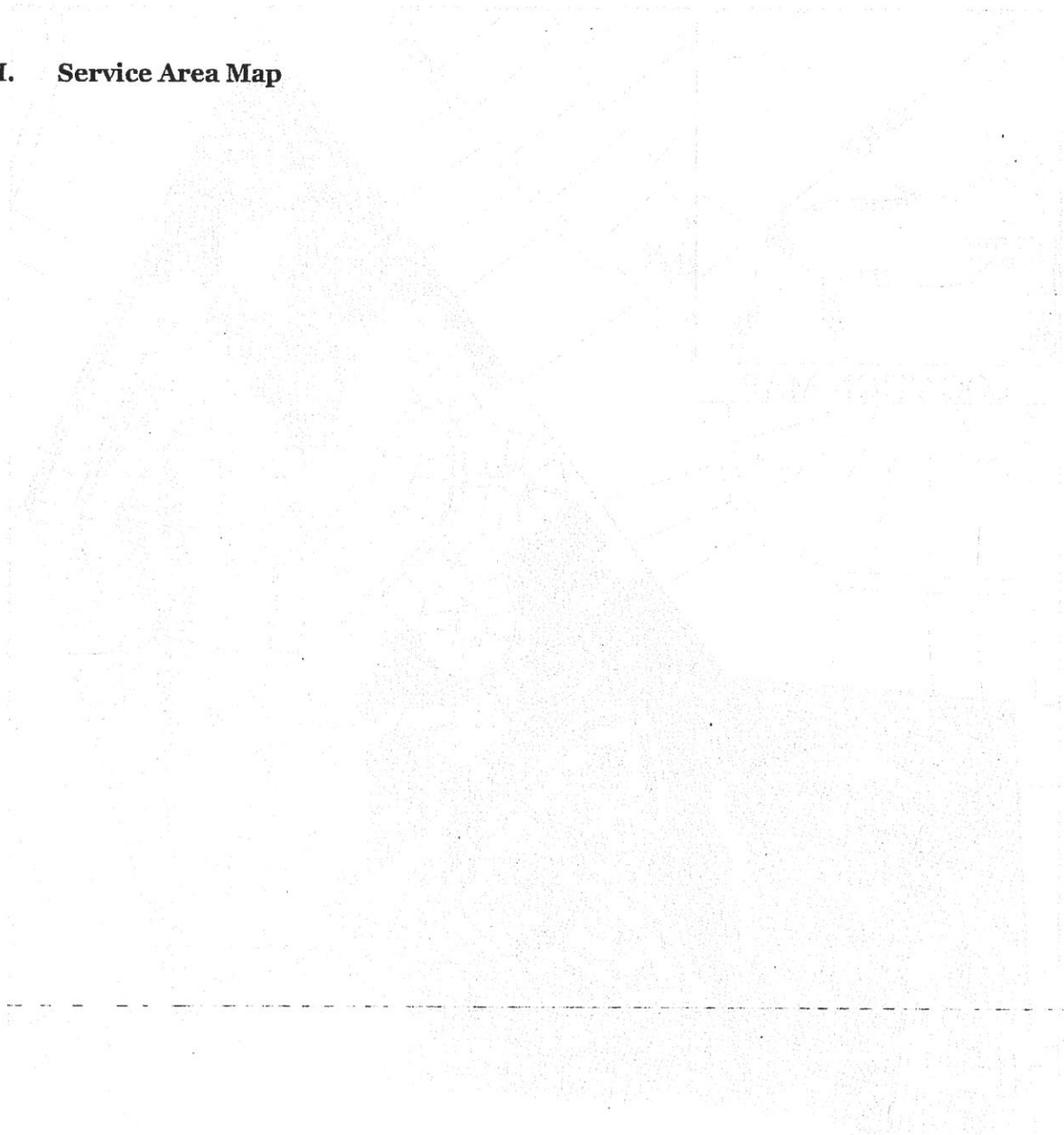
If the producer, provider, or user fail to comply with the terms of this authorization, the executive director may take enforcement action provided by the Texas Water Code §26.019 and §26.0136.

X. Standard Provisions

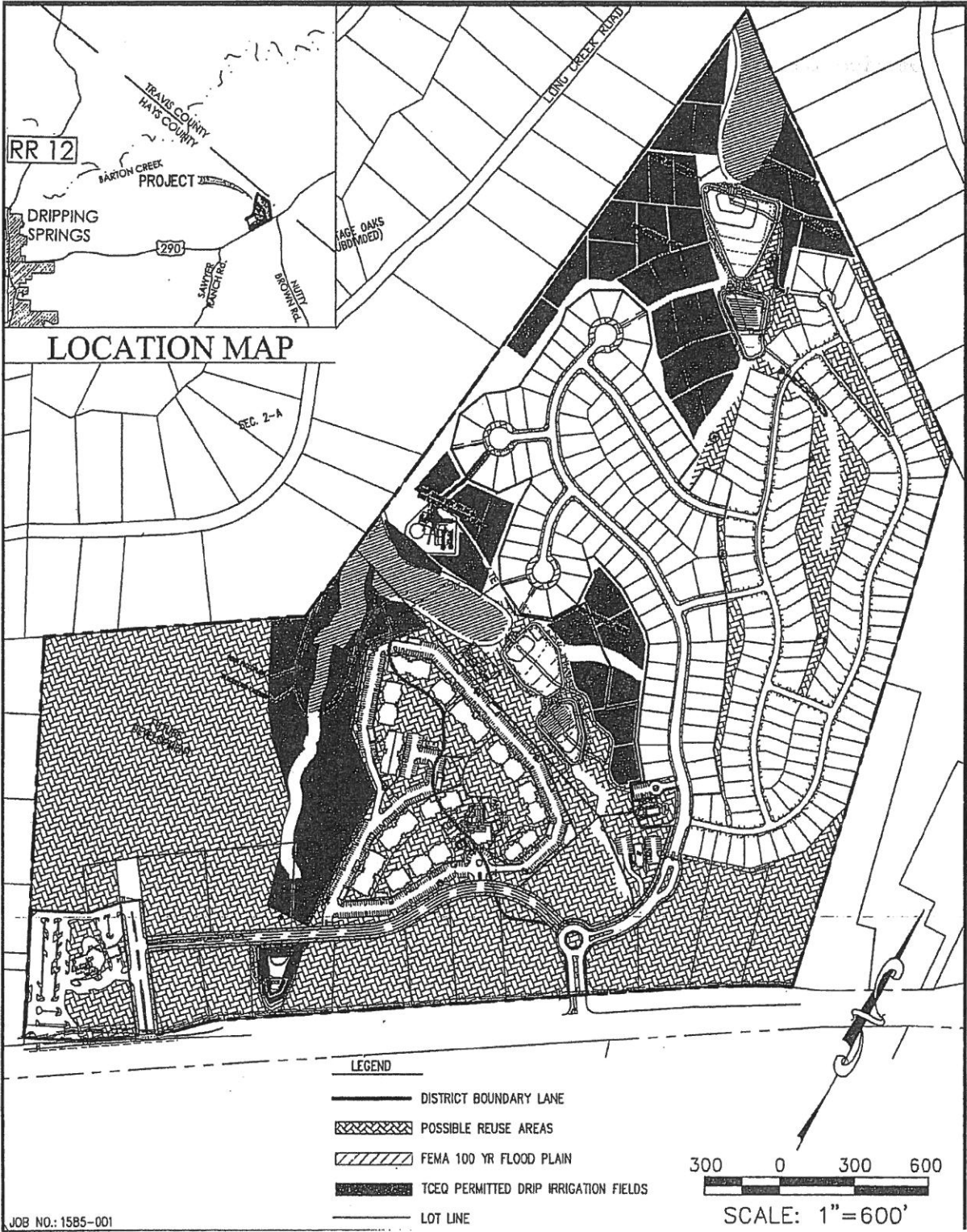
Hays County Municipal Utility District No 4
Reclaimed Authorization No. R14309-001

- A. This authorization is granted in accordance with the rules and orders of the commission and the laws of the state of Texas.**
- B. Acceptance of this authorization constitutes an acknowledgment and agreement that the producer, provider and user will comply with all the terms, provisions, conditions, limitations and restrictions embodied in this authorization and with the rules and other orders of the commission and the laws of the state of Texas. Agreement is a condition precedent to the granting of this authorization.**

XI. Service Area Map



Hays County Municipal Utility District No 4
Reclaimed Authorization No. R14309-001



Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 9, 2012

MR ROBERT P CALLEGARI PE
CMA ENGINEERING INC
235 LEDGE STONE DRIVE
AUSTIN, TEXAS 78737

Re: HAYS COUNTY MUD NO 4
LEDGE STONE SUBDIVISION RECLAIMED WATER PUMP STATION
PERMIT NO 14309-001
WWPR LOG NO 0712/015
CN602690661 RN103897567
HAYS COUNTY

Dear Mr. Callegari:

We have received the project summary transmittal letter date July 6, 2012.

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, Design Criteria for Wastewater Systems.

Section 217.6(d), relating to case-by-case reviews, states in part that upon submittal of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of §217.6(e) a technical review of complete plans and specifications is not required. **However, the project proposed in the summary transmittal letter is approved for construction. 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.** Below are provisions of the Chapter 217 regulations, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

1. 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

MR Robert P Callegari PE

Page 2

July 9, 2012

are discussed in §217.6(c). 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(c)(1)-(10).

2. Any deviations from Chapter 217 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.
3. Any variance from a Chapter 217 requirement disclosed in your summary transmittal letter is approved. If in the future, additional 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.
4. 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.

This approval does not mean that future projects will be approved without a complete plans and specifications review. 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 §217.5 of the rules which states, "Approval given by the executive director...shall not relieve the sewerage system owner or the design engineer of any liabilities or responsibilities with respect to the proper design, construction, or authorized operation of the project in accordance with applicable commission rules."

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4552.

Sincerely,



Louis C. Herrin, III, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

LCH/mac

cc: TCEQ, Region 11 Office

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 23, 2010

Ms. Christina McCutchin, President
Hays County Municipal Utility District 4
600 Congress Street, Suite 2100
Austin, Texas 78701-2986

Re: Hays County Municipal Utility District 4
Reuse Authorization No. R14309001
CN602690661, RN1103897567
Hays County

Dear Ms. McCutchin:

The Texas Commission on Environmental Quality has completed its review of the application for the above referenced authorization. The authorization allows the reuse of Type II wastewater effluent from Hays County MUD 4 wastewater treatment facility.

Notify this office and the appropriate regional office at least 30 days before reclaimed water from this facility is distributed. If the plans and specifications for the project have been approved, the authorization will be activated and the facility will be issued monthly effluent report (MER) forms for reporting quality and quantity of reclaimed water used. See Requirement V(b) on page 9 of the attached authorization.

Thank you for your cooperation during this review process. If you have any questions, please contact Sherry Smith of my staff at shesmith@tceq.state.tx.us or (512) 239-0571.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Linendoll".

Chris Linendoll, Manager
Wastewater Permitting Section
Water Quality Division

CL/SS/ms



Authorization No. R14309001

AUTHORIZATION FOR RECLAIMED WATER

Producer: Hays County Municipal Utility District 4
600 Congress Street, Suite 2100
Austin, Texas 78701-2986
CN602690661

Provider: Hays County Municipal Utility District 4
600 Congress Street, Suite 2100
Austin, Texas 78701-2986
RN103897567

User: Hays County Municipal Utility District 4
600 Congress Street, Suite 2100
Austin, Texas 78701-2986

Location: The wastewater treatment facilities and disposal site are located approximately 2,050 feet north of U.S. Highway 290 and approximately 7.2 miles west of the intersection of U.S. Highway 290 with Texas Highway 71 in Hays County, Texas.

Authorization: Type II reclaimed water from the Hays County MUD 4's Wastewater Treatment Facility (TPDES Permit No. WQ0014309001) to be used for irrigation and industrial process water. The service area is Ledge Stone development as shown in Attachment A.

This authorization contains the conditions that apply for the use of reclaimed water. The approval of a reclaimed water use project under Chapter 210 does not affect any existing water rights. If applicable, a reclaimed water use authorization in no way affects the need of a producer, provider, or user to obtain a separate water right authorization from the commission. This authorization does not allow irrigation of any area authorized for irrigation under a Texas Land Application Permit.

This action is taken under authority of the Executive Director of the Texas Commission on Environmental Quality.

Issue Date: March 23, 2010


Mark Vickery, Executive Director

The authorization is subject to the following requirements:

I. General Requirements

- (a) No producer or provider may begin transferring reclaimed water to a user without first notifying the commission.
- (b) Reuse of untreated wastewater is prohibited.
- (c) Food crops that may be consumed raw by humans must not be spray irrigated. Food crops including orchard crops that will be substantially processed prior to human consumption may be spray irrigated. Other types of irrigation that avoid contact of reclaimed water with edible portions of food crops are acceptable.
- (d) There must be no nuisance conditions resulting from the distribution, the use, and/or storage of reclaimed water.
- (e) Reclaimed water must not be used in a way that degrades groundwater quality to a degree adversely affecting its actual or potential uses.
- (f) Reclaimed water stored in ponds must be prevented from discharging into waters in the state, except for discharges directly resulting from rainfall events, in accordance with a permit issued by the commission, or as authorized under the Hays County MUD 4 wastewater treatment facility (TPDES No. WQ0014309001). All other discharges are unauthorized. If an overflow of a holding pond occurs causing discharge into or adjacent to waters in the state, the user or provider, as appropriate, shall report the noncompliance. A written submission of pertinent information must be provided to the TCEQ Region 11 office in Austin and to the TCEQ Enforcement Division (MC-149) in Austin, within five (5) working days after becoming aware of the overflow. The written submission must 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 anticipated 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.
- (g) Unless otherwise provided in this authorization, there must be no off-site discharge, either airborne or surface runoff, of reclaimed water from the user's property except to a wastewater treatment collection system or wastewater treatment facility unless the reclaimed water user applies for and obtains a permit from the commission that authorizes discharge of the water.
- (h) All reclaimed water piping must be separated from potable water piping when trenched by a distance of at least nine feet. All buried pipe must be manufactured in purple, painted purple, taped with purple metallic tape or bagged in purple. All exposed piping, hose bibs and faucets must be painted purple, designed to prevent connection to a standard water hose, and stenciled with a warning reading **"NON-POTABLE WATER."**

- (i) The design of any new distribution system that will convey reclaimed water to a user requires the approval of the executive director. Materials must be submitted to the executive director in accordance with the Texas Engineering Practice Act (Article 3271a, Vernon's Annotated Texas Statutes). The plans and specifications for any new distribution system constructed pursuant to this authorization must be approved by the executive director. Failure to secure approval before commencing construction or making a transfer of reclaimed water is a violation of this authorization. Each day of a transfer is a separate violation until approval has been secured.
- (j) Nothing in this authorization modifies any requirements in 30 TAC Chapter 290, *Public Drinking Water*.
- (k) A major change from a prior notification for use of reclaimed water must be approved by the executive director before it can be implemented. A major change includes:
 - (1) a change in the boundary of the approved service area, not including the conversion of individual lots within a subdivision to reclaimed water use;
 - (2) the addition of a new producer;
 - (3) a major change in the intended use, such as conversion from irrigation of a golf course to residential irrigation; or
 - (4) a change from either Type I or Type II use to the other.
- (l) The reclaimed water producer, provider, and user shall maintain current operation and maintenance plans on the sites over which they have operational control. The operation and maintenance plan must contain the following, as a minimum:
 - (1) a copy of the signed contract between the user and provider and/or a copy of the signed contract between the provider and the producer;
 - (2) a labeling and separation plan for the prevention of cross connections between reclaimed water distribution lines and potable water lines;
 - (3) the measures that will be implemented to prevent unauthorized access to reclaimed water facilities (e.g., secured valves);
 - (4) procedures for monitoring reclaimed water;
 - (5) a plan for how reclaimed water use will be scheduled to minimize the risk of inadvertent human exposure;
 - (6) schedules for routine maintenance;
 - (7) a plan for worker training and safety; and
 - (8) contingency plan for system failure or upsets.

- (m) One of the following requirements must be met by the user or provider, for any area where reclaimed water is stored or where there are hose bibs or faucets:
 - (1) Signs having a minimum size of eight inches by eight inches must be posted at all storage areas and on all hose bibs and faucets reading, in both English and Spanish, **"Reclaimed Water, Do Not Drink"** or similar warning.
 - (2) The area must be secured to prevent access by the public.
- (n) Where a reclaimed water line parallels a sewer line, the reclaimed water line must be constructed in accordance with subsection (p) or (q) of this section. The horizontal separation distance must be three feet (outside to outside) with the reclaimed water line at the level of or above the sewer line. Reclaimed water lines that parallel sewer lines may be placed in the same benched trench. Where a reclaimed water line crosses a sewer line, the requirement of 30 TAC §290.44(e)(4)(B), *Water Line Installation—crossing lines*, must be followed with the reclaimed water line substituted for the water line.
- (o) Reclaimed water lines that transport reclaimed water under pressure must be sized according to acceptable engineering practices for the needs of the reclaimed water users. The provider shall prevent high velocity scouring and maintain adequate fluid velocity to prevent the deposition of solids in the lines. Pipe specified for reclaimed water force mains must have an expected life of at least as long as that of the associated lift station and must be suitable for the reclaimed water being pumped and operating pressure to which it will be subjected. All pipe must be identified in the technical specifications with appropriate American Society for Testing and Materials, American National Standard Institute, or American Water Works Association standard numbers for both quality control (dimensions, tolerance, and installation such as bedding or backfill). All pipes and fittings must have a minimum working pressure rating of 150 pounds per square inch. Final plans and specifications must describe required pressure testing for all installed reclaimed water force mains. Minimum test pressure must be 1.5 times the maximum design pressure. Allowable leakage rates must be determined as described in 30 TAC §217.97, *Pressure Sewer Systems*.
- (p) Gravity flow reclaimed water lines must meet the requirements of 30 TAC Chapter 217, Subchapter C, *Conventional Collection Systems*. The provider shall prevent high velocity scouring and maintain adequate fluid velocity to prevent the deposition of solids in the lines.
- (q) All exposed piping and piping within a building must be either purple pipe or painted purple. All exposed piping should be stenciled in white with a warning reading **"NON-POTABLE WATER."** All exposed or buried reclaimed water piping constructed at a wastewater treatment facility is exempt from the color-coding requirement of this section.
- (r) When applicable, in accordance with 30 TAC Chapter 217, *Design Criteria for Domestic Wastewater Systems*, the design of the distribution systems that will convey reclaimed water to a user must be submitted to the executive director and must receive an approval before the distribution system may be constructed. The design of the distribution systems must meet the criteria of 30 TAC Chapter 217, *Design Criteria for Domestic Wastewater Systems*. When a municipality is the plan review authority for certain sewer systems that transport primarily

domestic waste, in lieu of the commission, design submittal will not be subject to submittal to the commission and instead must be approved by the municipality.

- (s) All ground level and elevated storage tanks must be designed, installed, and constructed in accordance with current AWWA standards with reference to materials to be used and construction practices to be followed, except for health-based standards strictly related to potable water storage and contact practices, where appropriately less restrictive standards may be applied.

II. Storage Requirements for Reclaimed Water

- (a) Storage facilities for retaining reclaimed water prior to use must not be located within a floodway.
- (b) Outside the Edwards Aquifer Recharge Zone and the DRASTIC Zone
 - (1) Any holding pond designed to contain Type I or Type II effluent must have a lining with a permeability of no more than 1×10^{-4} cm/sc and conform to the following requirements:
 - (A) The ponds must be designed and constructed to prevent groundwater contamination;
 - (B) Soils used for pond lining must be free from foreign material such as paper, brush, trees, and large rocks; and
 - (C) All soil liners must be of compacted material, at least 24 inches thick, compacted in lifts no greater than 6 inches thick and compacted to 95% of Standard Proctor Density. In-situ clay soils meeting the soils liner requirements must be excavated and re-compacted a minimum of 6 inches below planned grade to assure a uniformly compacted finished surface.
 - (D) Soil liners must meet the following particle size gradation and Atterberg limits:
 - (i) 30% or more passing a number 200 mesh sieve; and
 - (ii) a liquid limit of 30% or greater; and a plasticity index of 15 or greater and have a permeability less than or equal to 1×10^{-4} cm/sec;
 - (E) Synthetic membrane linings must have a minimum thickness of 40 mils and have a leak detection system. In situ liners at least 24 inches thick meeting a permeability less than or equal to 1×10^{-4} cm/sec are acceptable alternatives;

- (F) Certification by a Texas licensed professional engineer must be furnished stating that the pond liner meets the appropriate criteria prior to use of the facilities;
 - (G) Soil embankment walls must have a top width of at least five feet. The interior and exterior slopes of soil embankment walls must be no steeper than one foot vertical to three feet horizontal unless alternate methods of slope stabilization are used. All soil embankment walls must be protected by a vegetative cover or other stabilizing material to prevent erosion. Erosion stops and water seals must be installed on all pipe penetrating the embankments; and
 - (H) An alternative method of pond lining that provides equivalent or better water quality protection than provided under this section may be used with the prior approval of the executive director.
- (2) Reclaimed water may be stored in leak-proof, fabricated tanks.
 - (3) Subsequent holding ponds used for the receipt and storage of reclaimed water of a quality that could cause or causes a violation of a surface water quality standard or impairment of groundwater for its actual or intended use will be also subject to the storage requirements of this section.

III. Specific Uses and Quality Standards for Reclaimed Water

- (a) Numerical parameter limits pertaining to specific reclaimed water use categories are contained in this section. These limits apply to reclaimed water before discharge to initial holding ponds or a reclaimed water distribution system.
- (b) The reclaimed water producer shall establish that the reclaimed water meets the quality limits at the sample point for the intended use in accordance with the monitoring requirements identified in Section IV, *Sampling and Analysis*.
- (c) Types and quality standards for reclaimed water.
 - (1) Type II Reclaimed Water Use. The use of Type II reclaimed water is for situations where the public will not come in contact with the reclaimed water. The uses allowed by this authorization are:
 - Irrigation of sod farms, silviculture, limited access highway rights of way, and other areas where human access is restricted or unlikely to occur. The methods of restricting access to areas under irrigation with reclaimed water could include the following:
 - The irrigation site is considered to be remote.

- The irrigation site is bordered by walls or fences and access to the site is controlled by the owner/operator of the irrigation site.
 - The irrigation site is not used by the public during the times when irrigation operations are in progress. Such sites may include golf courses, cemeteries, and landscaped areas surrounding commercial or industrial complexes. The "syringing" or "wetting" of greens and tees on golf courses is allowable under Type II so long as the "syringing" is done with hand-held hoses as opposed to automatic irrigation equipment. The public need not be excluded from areas where irrigation is not taking place. For example, irrigation of golf course fairways at night would not prohibit the use of club house or other facilities located a sufficient distance from the irrigation.
 - The irrigation site is restricted from public access by local ordinance or law with specific standards to achieve such a purpose.
- Irrigation of food crops if the reclaimed water is not likely to have direct contact with the edible part of the crop, or if the food crop undergoes pasteurization prior to distribution for consumption.
 - Irrigation of animal feed crops other than pasture for milking animals.
 - Maintenance of impoundments or natural water bodies where direct human contact is not likely.
 - Soil compaction or dust control in construction areas where application procedures minimize aerosol drift to public areas.
 - Cooling tower makeup water. Use for cooling towers that produce significant aerosols adjacent to public access areas may have special requirements.
 - Irrigation or other non-potable uses of reclaimed water at a wastewater treatment facility.
 - Type I reclaimed water may also be used for any of the Type II uses identified in 30 TAC §210.32.
- (2) The following conditions apply to Type II use of reclaimed water. At a minimum, the reclaimed water producer shall transfer only reclaimed water of the following quality. Type II reclaimed water on a 30-day average must have a quality of no more than:

CBOD ₅	20 mg/l
Fecal coliform or <i>E. coli</i>	200 CFU/100 ml*
Fecal coliform or <i>E. coli</i>	800 CFU/100 ml**

* 30-day geometric mean

** maximum single grab sample

(d) Test Procedures

- (1) Test procedures for the analysis of pollutants must comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations must accurately represent the reclaimed water.
- (2) All laboratory tests submitted to demonstrate compliance with this authorization must meet the requirements of 30 TAC Chapter 25, *Environmental Testing Laboratory Accreditation and Certification*.

IV. Sampling and Analysis

- (a) The reclaimed water producer shall sample the reclaimed water prior to distribution to the entity that first received the reclaimed water after it leaves the wastewater treatment facility (provider or user) to assure that the water quality meets the standard for the contracted use.
- (b) Analytical methods must be in compliance with 30 TAC Chapter 319, *Monitoring and Reporting*.
- (c) The minimum sampling and analysis frequency for Type II reclaimed water is once per week.
- (d) The monitoring must be done after the final treatment unit.
- (e) The records of the monitoring must be kept on a monthly basis and be available at the facility site for inspection by representatives of the Commission for at least five years.

V. Record Keeping and Reporting

- (a) The reclaimed water provider and user shall maintain records on site for a period of at least five years.
- (b) Records to be maintained by the provider include:
 - (1) copies of notifications made to the commission concerning reclaimed water projects;

- (2) as applicable, copies of contracts with each reclaimed water user (this requirement does not include reclaimed water users at residences that have separate distribution lines for potable water);
 - (3) records of the volume of water delivered to each reclaimed water user per delivery (this requirement does not apply to reclaimed water users at residences that have separate distribution lines for potable water); and
 - (4) reclaimed water quality analyses.
- (c) The reclaimed water provider or producer shall report to the commission on a monthly basis the following information on forms furnished by the executive director. The reports are due by the 20th day of the month following the reporting period.
 - (1) volume of reclaimed water delivered to provider; and
 - (2) quality of reclaimed water delivered to a user or provider reported as a monthly average for each quality criteria, except those listed as "not to exceed" that must be reported as individual analyses.
- (d) The provider shall provide written notice to the Water Quality Application Team (MC 148) and the appropriate TCEQ regional office at least thirty (30) days prior to transfer of reclaimed water.

VI. Transfer of Reclaimed Water

- (a) Reclaimed water transferred from a provider to a user must be done on a demand only basis. A reclaimed water user may refuse delivery of reclaimed water at any time.
- (b) All reclaimed water transferred to a user must be of at least the quality specified in Section IV, *Sampling and Analysis*.
- (c) Transfer must be accomplished by pipes or tank trucks.
- (d) The transfer of reclaimed water must be terminated immediately if a provider becomes aware of the misuse of the reclaimed water by the user, regardless of contract provisions.

VII. Restrictions

- (a) This authorization does not convey any property right and does not grant any exclusive privilege.
- (b) This authorization does not allow the use of reclaimed water on a land that is authorized as a disposal site under either a Texas Discharge Pollutant Elimination System (TPDES) permit or a Texas Land Application Permit (TLAP).

VIII. Responsibilities and Contracts

- (a) The producer of reclaimed water is not liable for misapplication of reclaimed water by users, except as provided in this section. Both the reclaimed water provider and user have at least but are not limited to the following responsibilities:
 - (1) The reclaimed water producer shall:
 - (A) transfer reclaimed water of at least the minimum quality required by this chapter at the point of delivery to the user;
 - (B) sample and analyze the reclaimed water and report the analyses in accordance with Section IV, *Sampling and Analysis*, and Section V, *Recordkeeping and Reporting*; and
 - (C) notify the executive director in writing within five (5) days after obtaining knowledge of reclaimed water use not authorized by the executive director.
 - (2) The reclaimed water provider shall:
 - (A) ensure construction of reclaimed water distribution lines/systems in accordance with 30 TAC Chapter 217, *Design of Domestic Wastewater Systems*, and in accordance with approved plans and specifications;
 - (B) transfer reclaimed water of at least the minimum quality required by this authorization at the point of delivery to the user;
 - (C) notify the executive director in writing within five (5) days after obtaining knowledge of reclaimed water use not authorized by the executive director; and
 - (D) not be found in violation of this chapter for the misuse of the reclaimed water by the user if transfer of such water is shut off promptly upon knowledge of misuse regardless of contract provisions.
 - (3) The reclaimed water user shall:
 - (A) use the reclaimed water in accordance with this authorization; and
 - (B) maintain and provide records as required by Section V, *Record Keeping and Reporting*.

IX. Enforcement

If the producer, provider, or user fail to comply with the terms of this authorization, the executive director may take enforcement action provided by the Texas Water Code §26.019 and §26.136.

X. Standard Provisions

- (a) This authorization is granted in accordance with the rules and orders of the commission and the laws of the state of Texas.
- (b) Acceptance of this authorization constitutes an acknowledgment and agreement that the provider and user will comply with all the terms, provisions, conditions, limitations and restrictions embodied in this authorization and with the rules and other orders of the commission and the laws of the state of Texas. Agreement is a condition precedent to the granting of this authorization.

ATTACHMENT #15 – ANNUAL CROPPING PLAN

Annual Cropping Plan

The proposed cropping and maintenance plan for the wastewater application areas (subsurface area drip disposal system) is to remove any small trees in the field area, smooth the fields, install the dripper lines, place soil if needed, and overseed with Bermuda grass. The fields will be over seeded with winter rye grass during the cool season to ensure year round uptake of water and nutrients. The Bermuda grass will grow from March to October. The Rye grass will grow from November to February. The fields will be mowed regularly and maintain a vegetative height of approximately 3- 6 inches, to ensure that the grasses will be actively growing at all times. No supplemental irrigation will be needed.

There are no plans to fertilize the grasses other than natural germination. Fertility recommendations for the grasses to be used at this site are generally 100-150 lbs/acre of Nitrogen. The grasses will be fertilized for germination and it is not anticipated that future fertilization will be required.

Turf grasses are very salt tolerant and this site is not expected develop salinity problems.

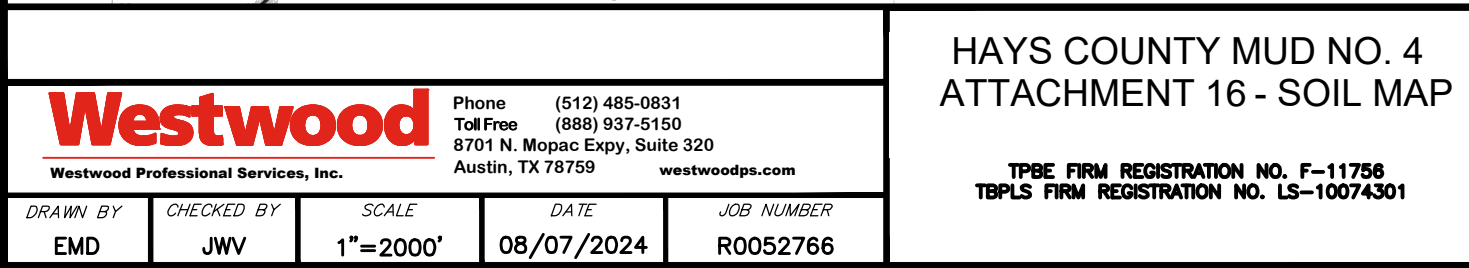
The grass will only be harvested to maintain vigorous growth in the fields. This will be done when the operator determines that there is stress on the fields.

Site Preparation Plan

The items below have been prepared in accordance with 30 TAC Chapter 222.75.

- (1) A site plan to minimize rainfall run-on and maximize rainfall runoff from the dispersal zones. **Berms or swales will be constructed upstream of the drip irrigation fields to avoid rainfall run-on. Subsurface drip irrigation lines will not be constructed in areas that evidence of rainfall channeling can be seen. Any grading changes necessary to prevent the drip irrigation areas from receiving and retaining stormwater runoff will be made.**
- (2) Design criteria to compensate for any restrictive horizons within the soil column. **A restrictive horizon was encountered in one soil profile hole. In these areas of shallow soils, soil will be imported to ensure that the soil column is of the appropriate depth.**
- (3) Soil importation with descriptions of the chemical and physical characteristics of the proposed import material. **Sandy Loam will be imported to the site.**
- (4) Any planned removal of existing vegetation. **There are minimal trees in the proposed drip disposal areas. In those areas that do contain trees, small trees will be removed from the site and the large trees will remain. The entire site will be overseeded with turf grass.**

ATTACHMENT #16 – SOIL MAP



ATTACHMENT #17– SOIL ANALYSIS



P.O. Box 1089 Coldspring Tx 77331
Website: eastexlabs.com
Email: eastexlab@eastex.net
Tel: 936 653 3249



Hays County MUD 4
Municipal Operations and Consulting
20141 Schiel Road
Cypress, TX 77433

LABORATORY ANALYTICAL REPORT

Project: Hay County MUD 4 Drip Fields

Sample Site:	Soil Depth 0-6	Sample Number:				Collector:	AG		
Sample Type:	Composite	4350695-01				Sampled:	08/27/2024	10:21	
Sample Matrix:	Waste					Received:	08/27/2024 15:50		
Client Matrix:	Soil								
Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Conductivity 2:1 Extract	398	10	µmhos/cm @25C	A	B4H4210	08/28/2024 19:41	ARB	EPA SW 846-9050A	
NH4-N mg/kg	4.04	0.0120	mg/Kg dry	N	B4H4133	08/29/2024 14:30	LAN	EPA 350.2 KCl extract	
Nitrate as N	49.9	0.6	mg/Kg dry	N	B4H4241	08/28/2024 19:50	OCR	SM 4500 NO3F KCl extract	94
Percent Solid	83.2	0.1	%	A	B4H4209	08/28/2024 16:06	ARB	SM 2540G	
pH Soil	7.2		std unit	A	B4H4437	08/29/2024 18:50	CNS	EPA SW 846-9045	
Phosphorus, Extract - mg/Kg	3.05	0.120	mg/Kg dry	A	B4H3645	08/28/2024 15:04	KJH	EPA SW 846-6010, 3050	
Potassium, Extract mg/Kg	293	0.601	mg/Kg dry	A	B4H3643	08/28/2024 13:19	KJH	EPA SW 846-6010, 3050	
TKN, soil	17.2	12.0	mg/Kg dry	N	B4H4193	08/29/2024 08:00	TDS	EPA 351.2	
Total Nitrogen	67.1		mg/Kg		B4H4435	08/30/2024 11:18	TMH	-	



P.O. Box 1089 Coldspring Tx 77331
Website: eastexlabs.com
Email: eastexlab@eastex.net
Tel: 936 653 3249



Hays County MUD 4
Municipal Operations and Consulting
20141 Schiel Road
Cypress, TX 77433

Sample Site:	Soil Depth 6-18	Sample Number:				Collector:	AG		
Sample Type:	Composite	4350695-02				Sampled:	08/27/2024 10:21		
Sample Matrix:	Waste					Received:	08/27/2024 15:50		
Client Matrix:	Soil								
Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Conductivity 2:1 Extract	336	10	µmhos/cm @25C	A	B4H4210	08/28/2024 19:41	ARB	EPA SW 846-9050A	94
NH4-N mg/kg	2.70	0.0121	mg/Kg dry	N	B4H4133	08/29/2024 14:30	LAN	EPA 350.2 KCl extract	
Nitrate as N	42.9	0.6	mg/Kg dry	N	B4H4241	08/28/2024 19:50	OCR	SM 4500 NO3F KCl extract	
Percent Solid	82.9	0.1	%	A	B4H4209	08/28/2024 16:06	ARB	SM 2540G	
pH Soil	7.4		std unit	A	B4H4437	08/29/2024 18:50	CNS	EPA SW 846-9045	
Phosphorus, Extract - mg/Kg	2.47	0.121	mg/Kg dry	A	B4H3645	08/28/2024 15:05	KJH	EPA SW 846-6010, 3050	
Potassium, Extract mg/Kg	234	0.603	mg/Kg dry	A	B4H3643	08/28/2024 13:23	KJH	EPA SW 846-6010, 3050	
TKN, soil	35.2	12.1	mg/Kg dry	N	B4H4193	08/29/2024 08:00	TDS	EPA 351.2	
Total Nitrogen	78.1		mg/Kg		B4H4435	08/30/2024 11:18	TMH	-	

Sample Site:	Soil Depth 18-30	Sample Number:				Collector:	AG		
Sample Type:	Composite	4350695-03				Sampled:	08/27/2024 10:21		
Sample Matrix:	Waste					Received:	08/27/2024 15:50		
Client Matrix:	Soil								
Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Conductivity 2:1 Extract	280	10	µmhos/cm @25C	A	B4H4210	08/28/2024 19:41	ARB	EPA SW 846-9050A	94
NH4-N mg/kg	2.71	0.0121	mg/Kg dry	N	B4H4133	08/29/2024 14:30	LAN	EPA 350.2 KCl extract	
Nitrate as N	60.6	0.6	mg/Kg dry	N	B4H4241	08/28/2024 19:50	OCR	SM 4500 NO3F KCl extract	
Percent Solid	82.6	0.1	%	A	B4H4209	08/28/2024 16:06	ARB	SM 2540G	
pH Soil	7.8		std unit	A	B4H4437	08/29/2024 18:50	CNS	EPA SW 846-9045	
Phosphorus, Extract - mg/Kg	0.982	0.121	mg/Kg dry	A	B4H3645	08/28/2024 15:07	KJH	EPA SW 846-6010, 3050	
Potassium, Extract mg/Kg	185	0.605	mg/Kg dry	A	B4H3643	08/28/2024 13:26	KJH	EPA SW 846-6010, 3050	
TKN, soil	22.6	12.1	mg/Kg dry	N	B4H4193	08/29/2024 08:00	TDS	EPA 351.2	
Total Nitrogen	83.2		mg/Kg		B4H4435	08/30/2024 11:18	TMH	-	



P.O. Box 1089 Coldspring Tx 77331
Website: eastexlabs.com
Email: eastexlab@eastex.net
Tel: 936 653 3249



Hays County MUD 4
Municipal Operations and Consulting
20141 Schiel Road
Cypress, TX 77433

EPA SW 846-6010, 3050 - Quality Control
Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H3643 - Mehlich Extraction										
Blank (B4H3643-BLK1)				Prepared: 08/27/24 Analyzed: 08/28/24						
Potassium, Extract mg/Kg	ND	0.500	mg/Kg wet							
LCS (B4H3643-BS1)				Prepared: 08/27/24 Analyzed: 08/28/24						
Potassium, Extract mg/Kg	24.3		mg/L	25.0		97.2	80-120			
LCS Dup (B4H3643-BSD1)				Prepared: 08/27/24 Analyzed: 08/28/24						
Potassium, Extract mg/Kg	24.7		mg/L	25.0		98.8	80-120	1.63	20	
Batch B4H3645 - Mehlich Extraction										
Blank (B4H3645-BLK1)				Prepared & Analyzed: 08/28/24						
Phosphorus, Extract - mg/Kg	ND	0.100	mg/Kg wet							
LCS (B4H3645-BS1)				Prepared & Analyzed: 08/28/24						
Phosphorus, Extract - mg/Kg	24.065	0.100	mg/Kg wet	25.2		95.5	80-120			
LCS Dup (B4H3645-BSD1)				Prepared & Analyzed: 08/28/24						
Phosphorus, Extract - mg/Kg	24.22	0.100	mg/Kg wet	25.2		96.1	80-120	0.642	20	
Batch B4H4133 - No Prep										
Blank (B4H4133-BLK1)				Prepared & Analyzed: 08/29/24						
NH4-N mg/kg	ND	0.0100	mg/Kg wet							
LCS (B4H4133-BS1)				Prepared & Analyzed: 08/29/24						
NH4-N mg/kg	9.97	0.0100	mg/Kg wet				80-120			
Matrix Spike (B4H4133-MS1)				Source: 4350695-01		Prepared & Analyzed: 08/29/24				
NH4-N mg/kg	106.3702	0.0120	mg/Kg dry		4.038462		80-120			
Matrix Spike Dup (B4H4133-MSD1)				Source: 4350695-01		Prepared & Analyzed: 08/29/24				
NH4-N mg/kg	118.5096	0.0120	mg/Kg dry		4.038462		80-120	10.8	20	



P.O. Box 1089 Coldspring Tx 77331
Website: eastexlabs.com
Email: eastexlab@eastex.net
Tel: 936 653 3249



Hays County MUD 4
Municipal Operations and Consulting
20141 Schiel Road
Cypress, TX 77433

EPA 351.2 - Quality Control
Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H4193 - SM 4500 Norg C										
Blank (B4H4193-BLK1)				Prepared & Analyzed: 08/29/24						
TKN, soil	ND	10.0	mg/Kg wet							
LCS (B4H4193-BS1)				Prepared & Analyzed: 08/29/24						
TKN, soil	10.6		mg/L	10.0		106	80-120			
Matrix Spike (B4H4193-MS1)				Source: 4350695-01 Prepared & Analyzed: 08/29/24						
TKN, soil	20.32452	12.0	mg/Kg dry	3.00	17.23558	103	80-120			
Matrix Spike Dup (B4H4193-MSD1)				Source: 4350695-01 Prepared & Analyzed: 08/29/24						
TKN, soil	20.19231	12.0	mg/Kg dry	3.00	17.23558	98.4	80-120	0.653	20	
Batch B4H4209 - No Prep										
Blank (B4H4209-BLK1)				Prepared & Analyzed: 08/28/24						
Percent Solid	ND	0.1	%							
Duplicate (B4H4209-DUP1)				Source: 4350695-01 Prepared & Analyzed: 08/28/24						
Percent Solid	84.6	0.1	%		83.2			1.67	20	
Batch B4H4210 - No Prep										
Blank (B4H4210-BLK1)				Prepared & Analyzed: 08/28/24						
Conductivity 2:1 Extract	ND	10	µmhos/cm @25C							
LCS (B4H4210-BS1)				Prepared & Analyzed: 08/28/24						
Conductivity 2:1 Extract	1000		µmhos/cm @25C	1000		100	80-120			
Duplicate (B4H4210-DUP1)				Source: 4350695-01 Prepared & Analyzed: 08/28/24						
Conductivity 2:1 Extract	398	10	µmhos/cm @25C		398			0.00	20	



P.O. Box 1089 Coldspring Tx 77331
Website: eastexlabs.com
Email: eastexlab@eastex.net
Tel: 936 653 3249



Hays County MUD 4
Municipal Operations and Consulting
20141 Schiel Road
Cypress, TX 77433

SM 4500 NO3F KCl extract - Quality Control
Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4H4241 - No Prep										
Blank (B4H4241-BLK1)				Prepared & Analyzed: 08/28/24						
Nitrate as N	ND	0.5	mg/Kg wet							
LCS (B4H4241-BS1)				Prepared & Analyzed: 08/28/24						
Nitrate as N	1.62		mg/L	1.50		108	80-120			
Matrix Spike (B4H4241-MS1)				Source: C4F8399-01 Prepared & Analyzed: 08/28/24						
Nitrate as N	675	41.7	mg/Kg dry	625	76.4	95.7	80-120			
Matrix Spike Dup (B4H4241-MSD1)				Source: C4F8399-01 Prepared & Analyzed: 08/28/24						
Nitrate as N	680	41.7	mg/Kg dry	625	76.4	96.5	80-120	0.727	20	
Batch B4H4437 - No Prep										
LCS (B4H4437-BS1)				Prepared & Analyzed: 08/29/24						
pH Soil	6.80		std unit	6.86		99.1	80-120			
Duplicate (B4H4437-DUP1)				Source: 4350695-01 Prepared & Analyzed: 08/29/24						
pH Soil	7.20		std unit		7.17			0.348	20	

Mark Bourgeois

Mark Bourgeois, Special Projects Manager

Qualifiers

94 Sample analyzed by equivalent method.



EASTEX ENVIRONMENTAL LABORATORY, INC.
P.O. Box 1089 * Coldspring, TX 77331
(936) 653-3249 * (800) 525-0508
P.O. Box 631375 * Nacogdoches, TX
(936) 569-8879 * FAX (936) 569-8951
www.eastexlabs.com

White Copy-Follows Samples
Yellow Copy-Laboratory
Pink Copy-Client Copy

REPORT TO:

INVOICE TO:

Company: MOC
Address: on file

Company: MOC
Address: on file

Remarks:

Attn:

Attn:

Phone#:

Phone#:

Email:

INSTRUCTIONS:

P.O. #:

C or G: C=Composite G=Grab
Matrix: DW=Drinking Water WW=Wastewater SO=Soil/Sludge OT=Other

Sampler's Name (print):

Container Size: 1=Gallon 2=1/2 Gallon 3=Quart/Liter 4=500mL 5=250mL
6=125mL (4oz) 7=60mL (2 oz) 8=40mL Vial 9=Other

Sampler's Signature:

Type: P=Plastic G=Glass T=Teflon S=Sterile
Preservatives: C=Chilled S=Sulfuric Acid N=Nitric Acid B=Base/Caustic Z=Zn Acetate
ST=Sodium Thiosulfate H=HCL O=Other

Project Name:

HAYS CO MUD 4

Field Data

Containers

Work Order ID

Sample ID

Date

Time

Matrix

C or G

DO

pH

Cl2

Flow

Temp

#

Size

Type

Pres

4350695

Soil 0-8

8-27

1021

SO

C

1

3

P

C

x

x

Soil 6-18

8-27

1021

SO

C

1

3

P

C

x

x

Soil 18-30

8-27

1021

SO

C

1

3

P

C

x

x

ANALYSIS REQUESTED

conductivity, NH3, % solid,
pH, Phos, extract, Potassium extract, TKN, TN

Relinquished By:

Received By:

Date

Time

Relinquished By:

Received By:

Date

Time

Relinquished By:

Received By and/or Checked in By:

Date

Time

LAB USE ONLY

Sample Condition Acceptable:

(YES) / NO

Temp °C

*Therm ID

Logged In By:

Date

Time

Alternate Check In:

Date

Time

1.2

15

8-27-24

1550

8-27-24

1634

*Thermometer has 0.0 factor and recorded temperature is actual temperature

Analytes Requested: "A" prefix indicates Austin, all others Bryan or Subcontracted, indicated by [SUB]. Name format: Analyst-Matrix-Technology-Method.		[NEL] = NELAP accredited parameter [SUB] = NELAP accredited subcontracted parameter		[CNRI] = No NELAP accreditation required or available [INF] = Informational only (not NELAC certified)		By relinquishing the samples listed below to Aqua-Tech laboratories, Inc. (ATL), the client agrees to the following terms. Samples will be analyzed by a method that is within ATL's NELAP fields of accreditation (FOA). Analytes requiring an accredited method that is not within ATL's FOA will be subcontracted to a NELAP lab that is accredited for that method. Clients will be notified of the subcontract lab's details. Other analytes not requiring accreditation will be analyzed by a compendial method. If a specific method is required, the client will note the method in the "Analytes Requested" column. The client approves all method modifications documented by ATL or the subcontracted lab.		A current list of ATL's NELAC fields of accreditation and other methods are available on request.		Comments:		
sign)	ATL Field	Received & sign)	Client	ATL Field	Date	iced / Refrig	CM / CTU	Rein-	ATL Field	Time	iced / Refrig	CM / CTU
KA	<input checked="" type="checkbox"/>	Kevin Andrews / Bryan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8/27/24	<input type="checkbox"/>	<input type="checkbox"/>	Suzanne Kudva	<input type="checkbox"/>	1105	<input type="checkbox"/>	<input type="checkbox"/>
KA	<input checked="" type="checkbox"/>	Kevin Andrews / Bryan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1105	<input type="checkbox"/>	<input type="checkbox"/>	Suzanne Kudva	<input checked="" type="checkbox"/>	1147	<input type="checkbox"/>	<input checked="" type="checkbox"/>

[illegible]

Field Sample ID	Start Date	End Date	Composite Type	Sample Matrix	Container (Checked box indicates bottle arrived in lab) (Volume - Type - Preservative)	Lab ID
Hays County MUD 4 WWTP Soil 0-6 Inches	8/27/24	8/27/24	Comp	S	<input checked="" type="checkbox"/> A 1 gal Plastic Bag	H028214-01
A TS SL Grav SM2540 G [NEL] N Total SL PKG TAMU [CNR] P TAMU Plant Available Mehlich 3 CNR [SUB] TKN SL AUTO SM4500 NH3 G [CNR] Y Billing Rental Fee Y Billing Fuel Fee Y Billing Route Stop >62 min -PER HR (Add Comment Y Billing N Total Calc Y Billing Sample Fee Nonroutine	Cond SL (1:2) Probe TAMU CNR [SUB] N Total TAMU CALC ENTRY [CNR] pH SL TAMU (1:2) CNR [SUB]	ME 7/17/24 K TAMU Plant Available Mehlich 3 CNR [SUB] NO3N TAMU Extractable Mehlich 3 CNR [SUB] Solids, Dry Weight				

Y Billing Second Sampler		Y Billing Ship to Sub-Contract Lab		
Hays County MUD 4 WWTP Soil 6-18				
Inches	8/27/24	856	8/27/24	1021
A TS SL Grav SM2540 G [NEL] N Total SL PKG TAMU [CNRI] P TAMU Plant Available Mehlich 3 CNR [SUBI] TKN SL AUTO SM4500 NH3 G [CNRI]		Cond SL (1:2) Probe TAMU CNR [SUBI] N Total TAMU CALC ENTRY [CNRI] pH SL TAMU (1:2) CNR [SUBI] Y Billing N Total Calc		K TAMU Plant Available Mehlich 3 CNR [SUBI] NO3N TAMU Extractable Mehlich 3 CNR [SUB] Solids, Dry Weight
Hays County MUD 4 WWTP Soil 18-30	8/27/24	856	8/27/24	1021
Inches				
<input checked="" type="checkbox"/> A 1 gal Plastic Bag		<input checked="" type="checkbox"/> A 1 gal Plastic Bag		
H028214-03		H028214-02		

A TS SL Grav SM2540 G [NEL] N Total SL PKG TAMU [CNR] P TAMU Plant Available Mehlich 3 CNR [SUB] TKN SL AUTO SMA500 NH3 G [CNR]	Cond SL (1:2) Probe TAMU CNR [SUB] N Total TAMU CALC ENTRY [CNR] pH SL TAMU (1:2) CNR [SUB] Y Billing N Total Calc	K TAMU Plant Available Mehlich 3 CNR [SUB] NO3N TAMU Extractable Mehlich 3 CNR [SUB] Solids, Dry Weight
------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------

ATTACHMENT #18 – EXCURSION DETAILS

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Hays County MUD 4

Telephone No: 512-461-5007

☒: Permittee

☐: Subscriber

TCEQ Region: 11

County: Hays

***Permit Number:** WQ0014309001

Noncompliance Summary

Description of Noncompliance: Exceeded daily average, daily max, and 7 day average on effluent TSS

Excursion: TSS, Date of Excursion: Month of August, Permit Parameter: Daily Average, Permit Value: 20 mg/l, Actual Value: 28 mg/l

Excursion: TSS, Date of Excursion: 8/02/2022, Permit Parameter: Daily Max, Permit Value: 45 mg/l, Actual Value: 53 mg/l

Excursion: TSS, Date of Excursion: Week of 8/01/2022, Permit Parameter: 7 day Average, Permit Value: 30 mg/l, Actual Value: 53 mg/l

Cause of Noncompliance: Treatment plant upset due to clarifier cleaning last month.

Duration: **Start Date and Time:** 8/1/2022 12:00 AM

End Date and Time: 8/31/2022 11:59 PM

Or Date Expected to be Corrected: [NSExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: No dangers identified at this time

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

No **Field Measurements**

Yes **Laboratory Samples**

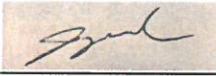
No **Fish Kill** If yes, estimated number killed: 0

Actions Taken to Mitigate Adverse Effects: N/A

Actions Taken to Correct the Problem and Prevent Recurrence: Reviewed operational changes made through the month and continuing to monitor effluent quality.

Verification Information

Information Reported By (Name/Title): Jeremy Weber –Sr. Operations Manager

Date Reported: 9/6/2022 **Signature:** 

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Big Sky MUD

Telephone No: 512-201-3595

☒: Permittee

☐: Subscriber

TCEQ Region: 4

County: Denton

*Permit Number: WQ0015479001

Noncompliance Summary

Description of Noncompliance: See table below.

Excursion: Ammonia- Daily Max, Date of Excursion: 2/02/2023, Permit Parameter: Permit Value:10 mg/L, Actual Value: 14.4 mg/L

Excursion: Ammonia- 7 day avg, Date of Excursion: Week of 2/02/2023, Permit Parameter: Permit Value: 6 mg/L, Actual Value: 14.4 mg/L

Excursion: Ammonia- Daily Max, Date of Excursion: 2/07/2023, Permit Parameter: Permit Value:10 mg/L, Actual Value: 14.5 mg/L

Excursion: Ammonia- 7 day avg, Date of Excursion: Week of 2/07/2023, Permit Parameter: Permit Value:6 mg/L, Actual Value: 14.5 mg/L

Excursion: Ammonia- Daily Max, Date of Excursion: Permit Parameter: Permit Value:10 mg/L, Actual Value: 13.9 mg/L

Excursion: Ammonia- 7 day avg, Date of Excursion: Permit Parameter: Permit Value:6 mg/L, Actual Value: 13.9 mg/L

Cause of Noncompliance: High solids in the treatment plant caused the ammonia levels to spike. Was not able to sufficiently empty digesters due to the road conditions to the facility not adequately accessible by haul trucks.

Duration: **Start Date and Time:** 2/2/2023 12:00 AM

End Date and Time: 2/14/2023 12:00 AM

Or Date Expected to be Corrected: [NExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: None anticipated at this time.

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

No **Field Measurements**

Yes **Laboratory Samples**

No **Fish Kill** If yes, estimated number killed: 0

Actions Taken to Mitigate Adverse Effects: District engineers has been notified the road to the facility needs repairs to be able to properly access the treatment plant.

Actions Taken to Correct the Problem and Prevent Recurrence: Roads have since been repaired and sludge hauls have been completed to be able to properly waste the sludge.

Verification Information

Information Reported By (Name/Title): Zachary Willeford –Operations Manager

Date Reported: 2/27/2023

Signature: _____

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Guidance - Water Quality Noncompliance Notification Form

Water Quality Noncompliance Notification

☐: Unauthorized Discharge ☒: Reportable Effluent Violation ☐: Other

General Information

Entity Name: Hays County MUD4

Telephone No: 512-461-5007

☒: Permittee

☐: Subscriber

TCEQ Region: 11

County: Hays

*Permit Number: WQ0014309001

Noncompliance Summary

Description of Noncompliance: [NSDescription]

Excursion: Flow-Daily Avg., Date of Excursion: Month of Oct. 2022, Permit Parameter: MGD, Permit Value: 0.75 MGD, Actual Value: 0.88 MGD

Cause of Noncompliance: [NSCause]

Duration: Start Date and Time: 10/1/2022 12:00 AM

End Date and Time: 10/31/2022 12:00 AM

Or Date Expected to be Corrected: [NSExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: No dangers identified at this time.

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

Yes Field Measurements

No Laboratory Samples

No Fish Kill If yes, estimated number killed: 0

Actions Taken to Mitigate Adverse Effects: .

Actions Taken to Correct the Problem and Prevent Recurrence: We are working with the District Engineer to increase the permitted capacity.

Verification Information

Information Reported By (Name/Title): Jesse Black -Operations Manager

Date Reported: 2/28/2023

Signature: _____



Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Hays County Mud 4

Telephone No: 512-461-5007 Telephone No: 512-461-5007

☒: Permittee

☐: Subscriber

TCEQ Region: 11 County: Hays

*Permit Number: WQ0014309001

Noncompliance Summary

Description of Noncompliance: [NSDescription]

Excursion: Flow-Daily Avg, Date of Excursion: Month of November 2022, Permit Parameter: MGD, Permit Value: 0.75 MGD, Actual Value: 0.82 MGD

Cause of Noncompliance: [NSCause]

Duration: Start Date and Time: 11/1/2022 12:00 AM
End Date and Time: 11/30/2022 12:00 AM

Or Date Expected to be Corrected: [NSExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: No dangers identified at this time.

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

Yes Field Measurements

No Laboratory Samples

No Fish Kill If yes, estimated number killed: 0

Actions Taken to Mitigate Adverse Effects: [ATMitigate]

Actions Taken to Correct the Problem and Prevent Recurrence: We are working with the District Engineer to increase the permitted capacity.

Verification Information

Information Reported By (Name/Title): Jesse Black -Operations Manager

Date Reported: 2/28/2023

Signature: 

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

☐ Unauthorized Discharge ☒ Reportable Effluent Violation ☐ Other

General Information

Entity Name: Hays County MUD 4

Telephone No: (512) 201-3595

☒ Permittee

☐ Subscriber

TCEQ Region: Region 11

County: Hays

*Permit Number: WQ0014309001

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

Parameter	Type	Date	Permitted Value	Reported Value
TSS	Daily Max	9/22/2021	45	46
TSS	7 Day Avg.	Week of 9/20/2021	30	46
E. Coli	Single Grab Max	9/22/2021	800	866

Cause of Noncompliance:

Found clarifier drive had tripped off overnight. Was off for several hours causing the solids to bulk to the surface and flow over into the contact basin.

Duration: Start Date and Time: See description of Noncompliance

End Date and Time:

Or Date Expected to be Corrected:

Potential Danger to Human Health and Safety or the Environment: None anticipated at this time.

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☐ Yes ☒ No Field Measurements
☒ Yes ☐ No Laboratory Samples
☐ Yes ☒ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects:

Electrician found bad phase monitor. A new one was ordered and installed.

Actions Taken to Correct the Problem and Prevent Recurrence:

Contact basin was pumped back into the bar screen to clear any solids accumulated on the bottom. Clarifier was hosed down to knock down the remainder of the bulking solids.

Verification Information

Information Reported By (Name/Title): Zachary Willeford, Operations Manager

Date Reported: 10/4/2021

Signature: 

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Hays County MUD 4

Telephone No: 512-201-3595

☒: Permittee

☐: Subscriber

TCEQ Region: 11

County: Hays

*Permit Number: WQ0014309001

Noncompliance Summary

Description of Noncompliance: [NSDescription]

Parameter	Type	Date	Permitted Value	Reported Value
E. Coli	Single Grab	10/19/2021	800	2420

[NSDescription]

Cause of Noncompliance: At this time we are unaware of the cause and are investigating all possibilities. All other parameters were met during sample collection.

Duration: Start Date and Time: 10/19/2021 7:00:00 AM

End Date and Time: 10/19/2021 7:00:00 AM

Or Date Expected to be Corrected: [NSExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: None anticipated at this time.

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

No Field Measurements

Yes Laboratory Samples

No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: We are currently investigating the issue.

Actions Taken to Correct the Problem and Prevent Recurrence: As a precautionary measure, we will review and retrain personnel on proper sample collection.

Verification Information

Information Reported By (Name/Title): Zachary Willeford –Operations manager

Date Reported: 11/12/2021

Signature: 

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Hays County MUD 4

Telephone No: 512-201-3595

☒: Permittee

☐: Subscriber

TCEQ Region: 11

County: Hays

*Permit Number: R14309-001

Noncompliance Summary

Description of Noncompliance: [NSDescription]

Parameter	Type	Date	Permitted Value	Reported Value
E. Coli	Single Grab	12/07/2021	800	1300

[NSDescription cont.]

Cause of Noncompliance: Drastic drop in temperature caused the solids to bulk in the clarifier allowing them to flow over to the chlorine contact chamber.

Duration: Start Date and Time: 12/7/2021 12:00:00 AM

End Date and Time: 12/7/2021 12:00:00 AM

Or Date Expected to be Corrected: [NSExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: None anticipated at this time.

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

No Field Measurements

Yes Laboratory Samples

No Fish Kill If yes, estimated number killed: [ATFishKillNum]

Actions Taken to Mitigate Adverse Effects: Washed down clarifier of any floating solids and pumped down the chlorine contact chamber to return any solids that accumulated back to the head of the plant.

Actions Taken to Correct the Problem and Prevent Recurrence: Adjusted the RAS to lower the number of solids in the Clarifier.

Verification Information

Information Reported By (Name/Title): Zachary Willeford -Operations Manager

Date Reported: 1/14/2022

Signature: 

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Hays County MUD 4

Telephone No: 512-201-3595

☒: Permittee

☐: Subscriber

TCEQ Region: 11

County: Hays

*Permit Number: WQ0014309001

Noncompliance Summary

Description of Noncompliance: [NSDescription]

Parameter	Type	Date	Permitted Value	Reported Value
TSS	Daily Avg.	Month of December	20	22.25

Cause of Noncompliance: Due to the drastic temperature changes, the plant experienced some bulking in the clarifier that made it into the effluent stream causing the TSS to run a little high.

Duration: Start Date and Time: [NSStartDate]

End Date and Time: [NSEndDate]

Or Date Expected to be Corrected: [NSExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: None expected at this time.

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

No Field Measurements

Yes Laboratory Samples

No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Wash down clarifier daily to knock down solids.

Actions Taken to Correct the Problem and Prevent Recurrence: Adjusted the RAS to reduce the amount of solids in the clarifier.

Verification Information

Information Reported By (Name/Title): Zachary Willeford - Operations Manager

Date Reported: 1/13/2022

Signature:



Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Hays County MUD 4

Telephone No: 512-201-3595

☒: Permittee

☐: Subscriber

TCEQ Region: 11 County: Hays

*Permit Number: WQ0014309001

Noncompliance Summary

Description of Noncompliance: [NSDescription]

Parameter	Type	Date	Permitted Value	Reported Value
TSS	7 Day AVG	Week of 3/28/2022	30	446
TSS	Single Grab	3/29/2022	65	446
TSS	Daily Max	3/29/2022	45	446
BOD	Daily Max	3/29/2022	45	185
BOD	7 Day AVG	Week of 3/28/2022	30	185
BOD	Single Grab	3/29/2022	65	185
E-coli	Single Grab	3/29/2022	800	2420

Cause of Noncompliance: Cleaning of the collection system was being performed and resulted in increased flows, organic loading, and debris received at the wastewater plant.

Duration: **Start Date and Time:** See description of Non-Compliance

End Date and Time:

Or Date Expected to be Corrected: [NSExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: None anticipated at this time.

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

No **Field Measurements**

Yes **Laboratory Samples**

No **Fish Kill** If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: DO and chlorine feed were adjusted to help treat the increased flows, organic loading, and debris that were being received.

Actions Taken to Correct the Problem and Prevent Recurrence: Collection system is still in the process of being cleaned but once it is complete, we will return the plant back into normal operations.

Verification Information

Information Reported By (Name/Title): Zachary Willeford –Operations Manager

Date Reported: 4/7/2022 **Signature:** 

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Hays County MUD 4
Telephone No: 512-201-3595

☒: Permittee

☐: Subscriber

TCEQ Region: 11

County: Hays

*Permit Number: WQ0014309001

Noncompliance Summary

Description of Noncompliance:

Parameter	Type	Date	Permitted Value	Reported Value
TSS	7 Day Avg	Week of 4/2/22	30	49
TSS	Daily Max	4/5/22	45	49

Cause of Noncompliance: Cleaning of the collection system was still being performed at the beginning of the month and resulted in increased flows, organic loading, and debris received at the wastewater plant

Duration: **Start Date and Time:** See Description of Non-compliance

End Date and Time: [NSEndDate]

Or Date Expected to be Corrected: [NSExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: None expected at this time.

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

No **Field Measurements**

No **Laboratory Samples**

No **Fish Kill** If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: DO and chlorine feed were adjusted to help treat the increased flows, organic loading, and debris that were being received.

Actions Taken to Correct the Problem and Prevent Recurrence: Collection system is still in the process of being cleaned but once it is complete, we will return the plant back into normal operations.

Verification Information

Information Reported By (Name/Title): Zachary Willeford -Operations Manager

Date Reported: 5/18/2022

Signature: 

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Hays County Mud #4
Telephone No: 281-840-9973

☒: Permittee

☐: Subscriber

TCEQ Region: 11

County: Hays

*Permit Number: WQ0014309001

Noncompliance Summary

Description of Noncompliance

Parameter	Type	Date	Permitted Value	Reported value
E.Coli	Single Grab	5/17/2022	800	2420

Cause of Noncompliance: Accumulation of debris in the transfer line between the contact basins and the storage tank from an upset clarifier. The sample tap is located on this common line.

Duration: **Start Date and Time:** See description above

End Date and Time:

Or Date Expected to be Corrected: [NSExpectedCorrected]

Potential Danger to Human Health and Safety or the Environment: No potential hazards observed

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

No **Field Measurements**

No **Laboratory Samples**

No **Fish Kill** If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: [ATMitigate]

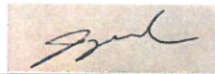
Actions Taken to Correct the Problem and Prevent Recurrence: Drained the clarifier to clean any rags or debris from the center well causing short circuiting. Soliciting contractor to clean the transfer line between the contact basins and the storage tank.

Verification Information

Information Reported By (Name/Title): Jeremy Weber –Sr. Operations Manager

Date Reported: 6/14/2022

Signature:



Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

Water Quality Noncompliance Notification

☐: Unauthorized Discharge

☒: Reportable Effluent Violation

☐: Other

General Information

Entity Name: Hays County MUD 4

Telephone No: 512-461-5007

☒: Permittee

☐: Subscriber

TCEQ Region: 11 County: Hays

*Permit Number: WQ0014309001

Noncompliance Summary

Description of Noncompliance: See Below

Parameter	Type	Date	Permitted Value	Reported Value
BOD	Single Grab	6/28/2022	65	73
BOD	Daily Max	6/28/2022	45	73
BOD	7 Day Average	Week of 6/27/2022	30	73
BOD	Daily Avg	Month of 6/2022	20	21.75
E. coli	Daily Max	6/28/2022	800	2420

Cause of Noncompliance: Blower failure morning of sampling caused a loss of mixing and dissolved oxygen in aeration basins

Duration: Start Date and Time: 6/27/2022 5:00:00 AM
End Date and Time: 6/30/2022 5:00:00 AM
Or Date Expected to be Corrected: 6/30/2022

Potential Danger to Human Health and Safety or the Environment: None

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

No Field Measurements
Yes Laboratory Samples
No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Contact basin was pumped back into the bar screen to clear any solids accumulated on the bottom. Clarifier was hosed down to knock down the remainder of the solids

Actions Taken to Correct the Problem and Prevent Recurrence: Aeration blower was repaired same day and returned to normal operations.

Verification Information

Information Reported By (Name/Title): Jesse Black -Operations Manager

Date Reported: 7/7/2021 Signature: 

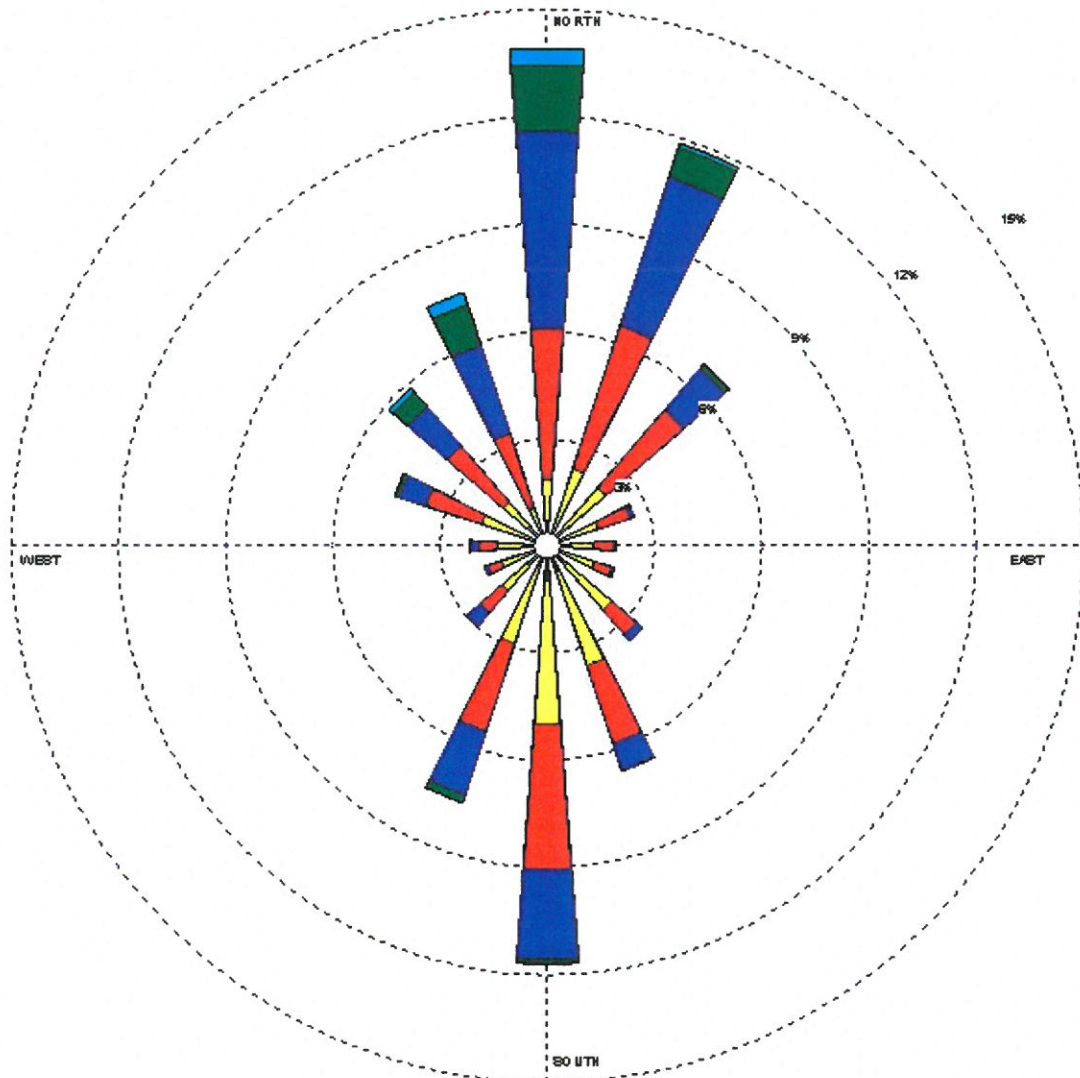
Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.


* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of the treatment plant to which the collection system is tied. If you are uncertain of this permit number, you may call the TCEQ Regional Office for assistance.

ATTACHMENT #19 – WIND ROSE

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

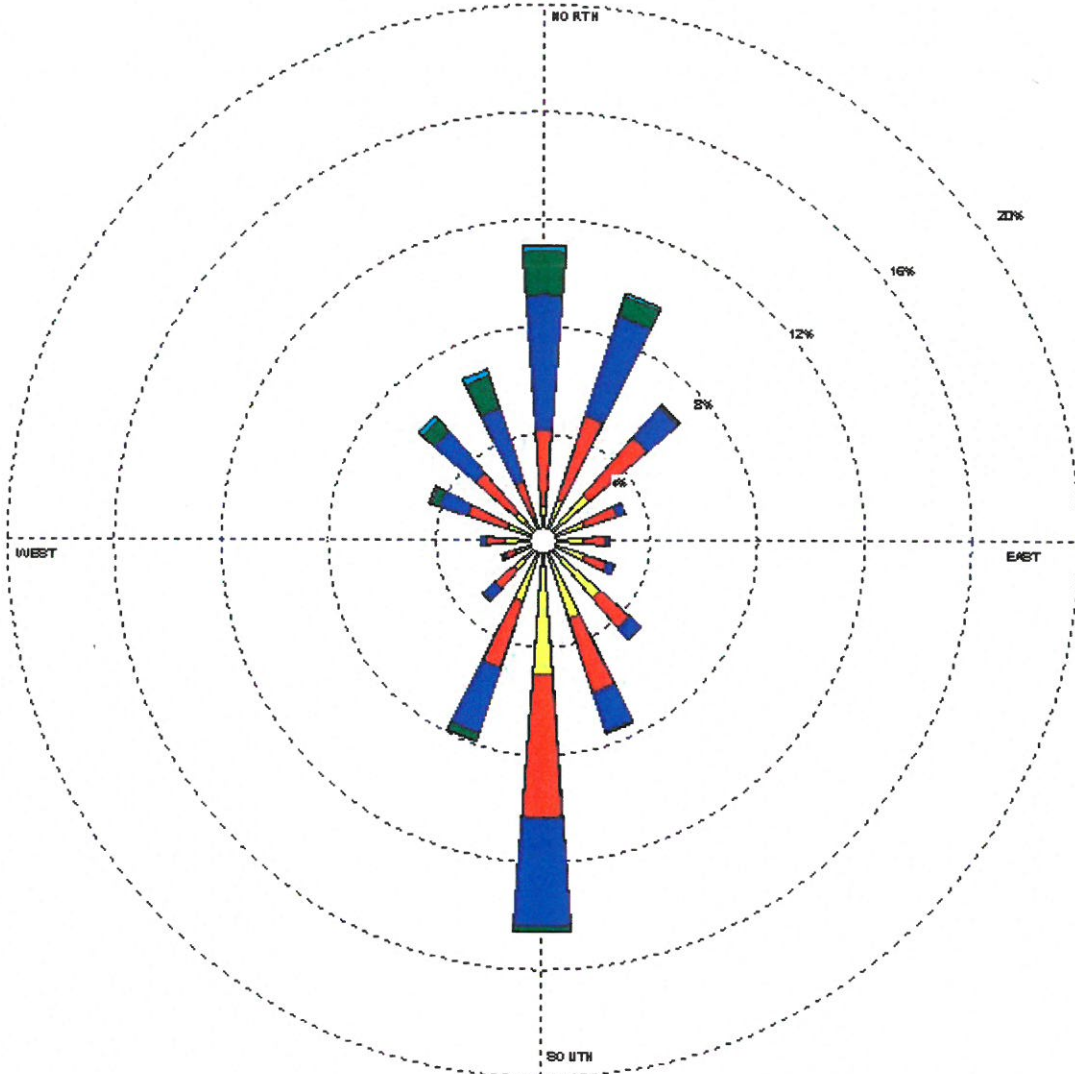


Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 4.60 m/s	CALM WINDS 6.83%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 Jan 1 - Jan 31 Midnight - 11 PM	

WSPR 01 Rev 3.0 by Gates Environmental Services - www.gates-environmental.com

WIND ROSE PLOT

Station #13958 - AUSTIN MUNICIPAL ARPT, TX

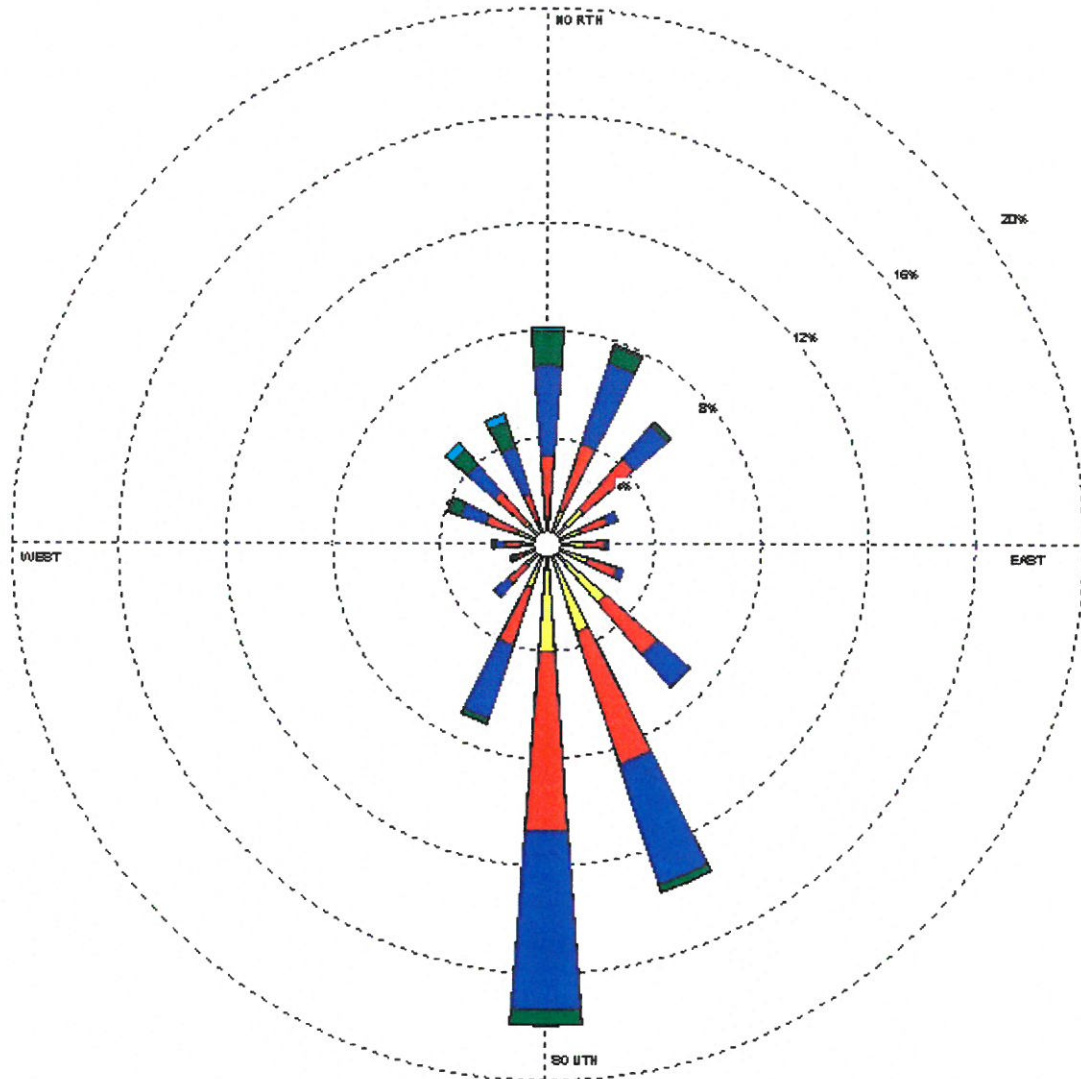



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-AR S
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 4.77 m/s	CALM WINDS 4.67%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 Feb 1 - Feb 29 Midnight - 11 PM	

WSPLOT Ver 2.3 by Caldes Environmental Systems - www.caldes-environmental.com

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

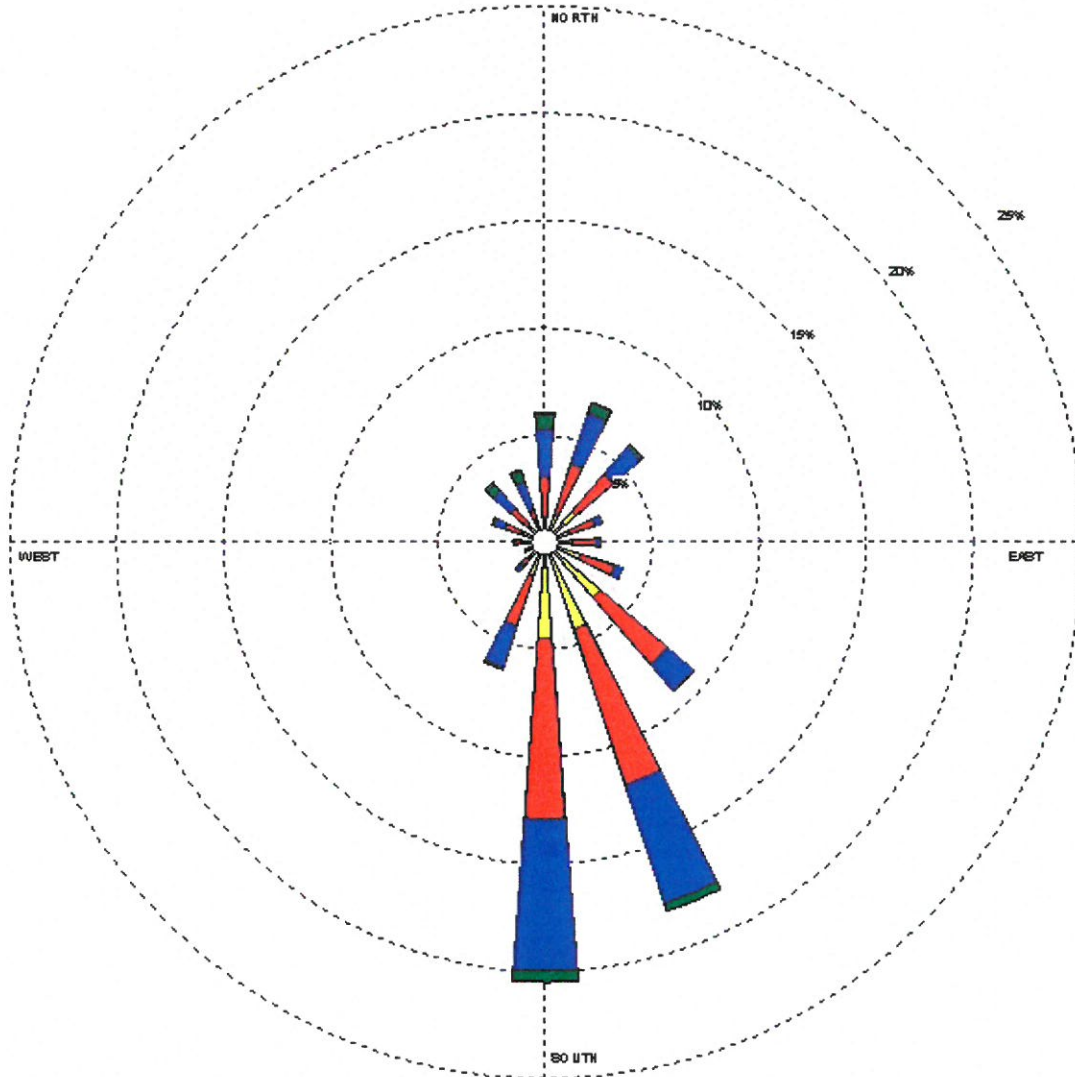


Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 4.97 m/s	CALM WINDS 3.99%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 Mar 1 - Mar 31 Midnight - 11 PM	

WSPR 01 Rev 2.3 by Carlos Environmental Systems - www.carlos-environmental.com

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

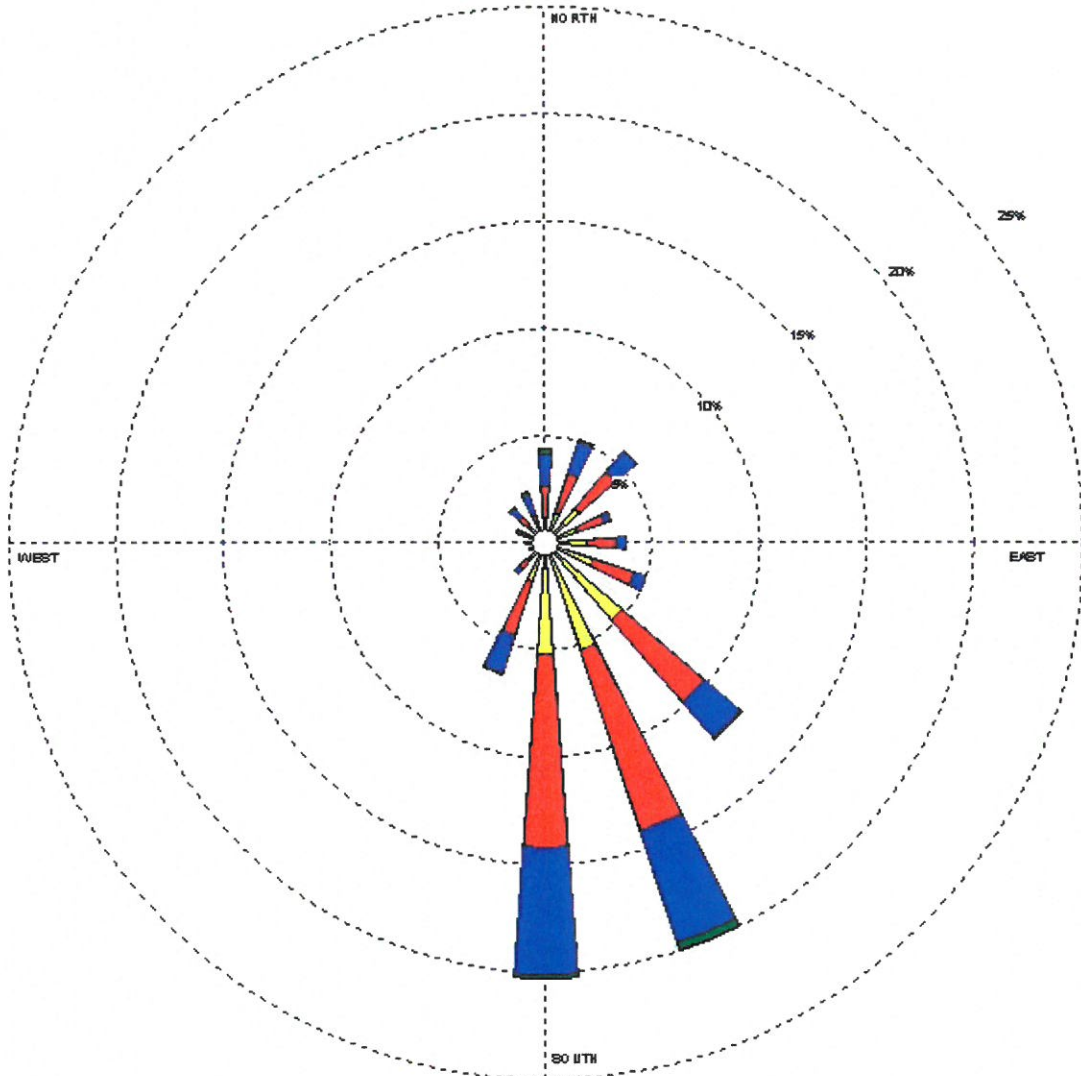



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	Avg. WIND SPEED 4.68 m/s	CALM WINDS 3.55%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 Apr 1 - Apr 30 Midnight - 11 PM	

WSPC Dr Plot 2.3 by Caldes Environmental Software - www.caldes-environmental.com

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

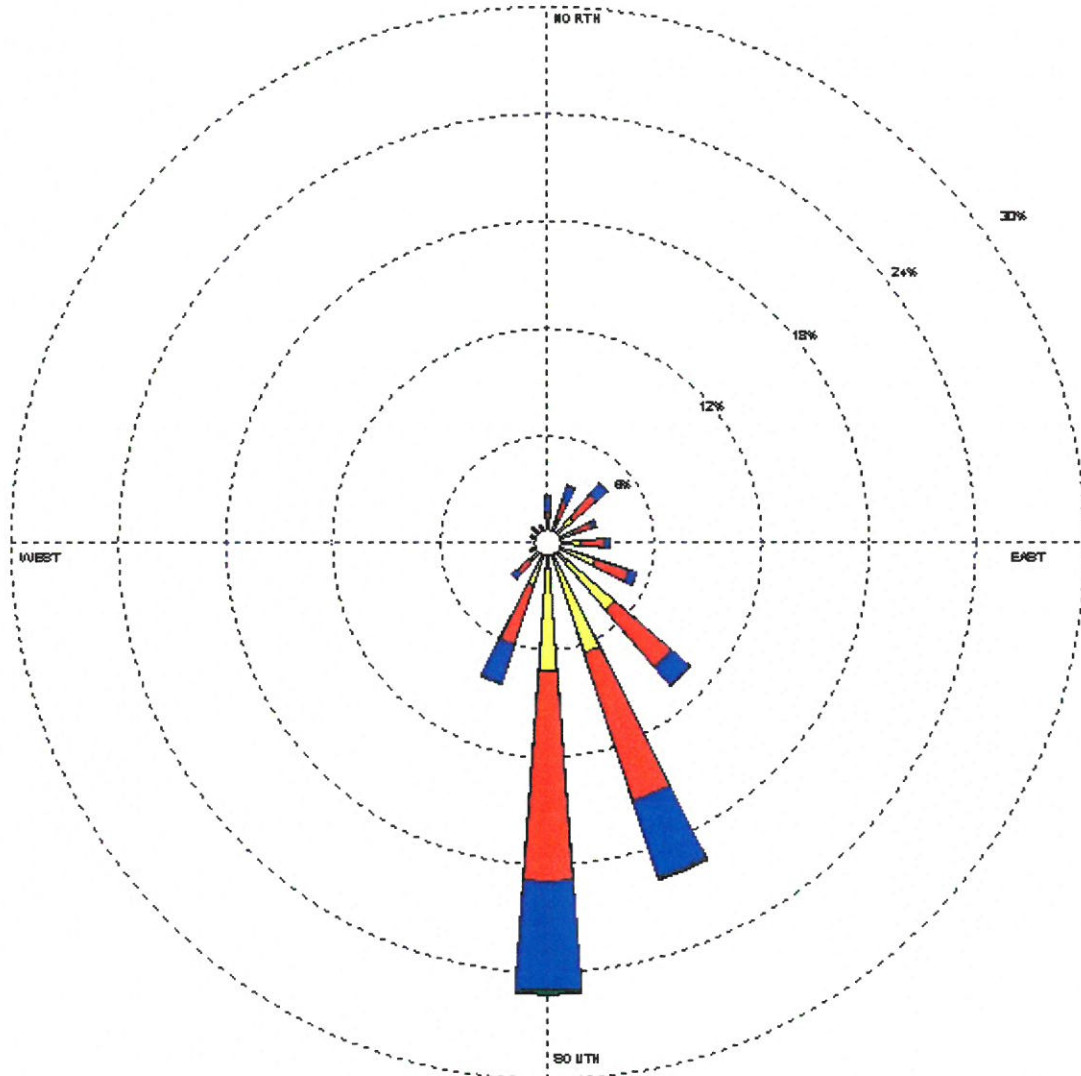



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-AR S
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	Avg. WIND SPEED 4.33 m/s	CALM WINDS 4.23%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 May 1 - May 31 Midnight - 11 PM	

WSPR Plot Ver 2.3 by Gates Environmental Software - www.gates-environmental.com

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

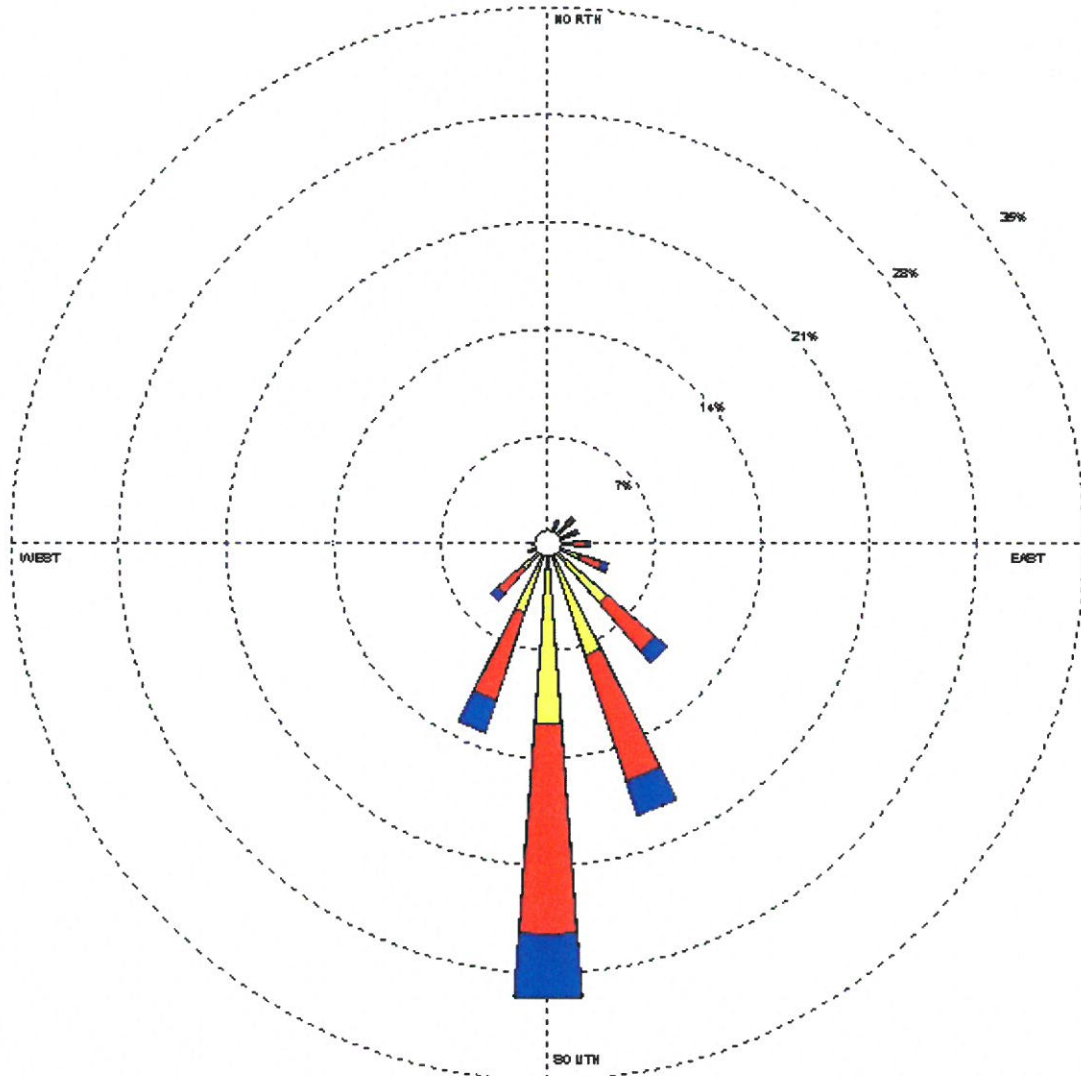



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 4.08 m/s	CALM WINDS 6.01%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 Jun 1 - Jun 30 Midnight - 11 PM	

WPPC 01, Ver 2.3 by Gates Environmental Software - www.gates-environmental.com

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

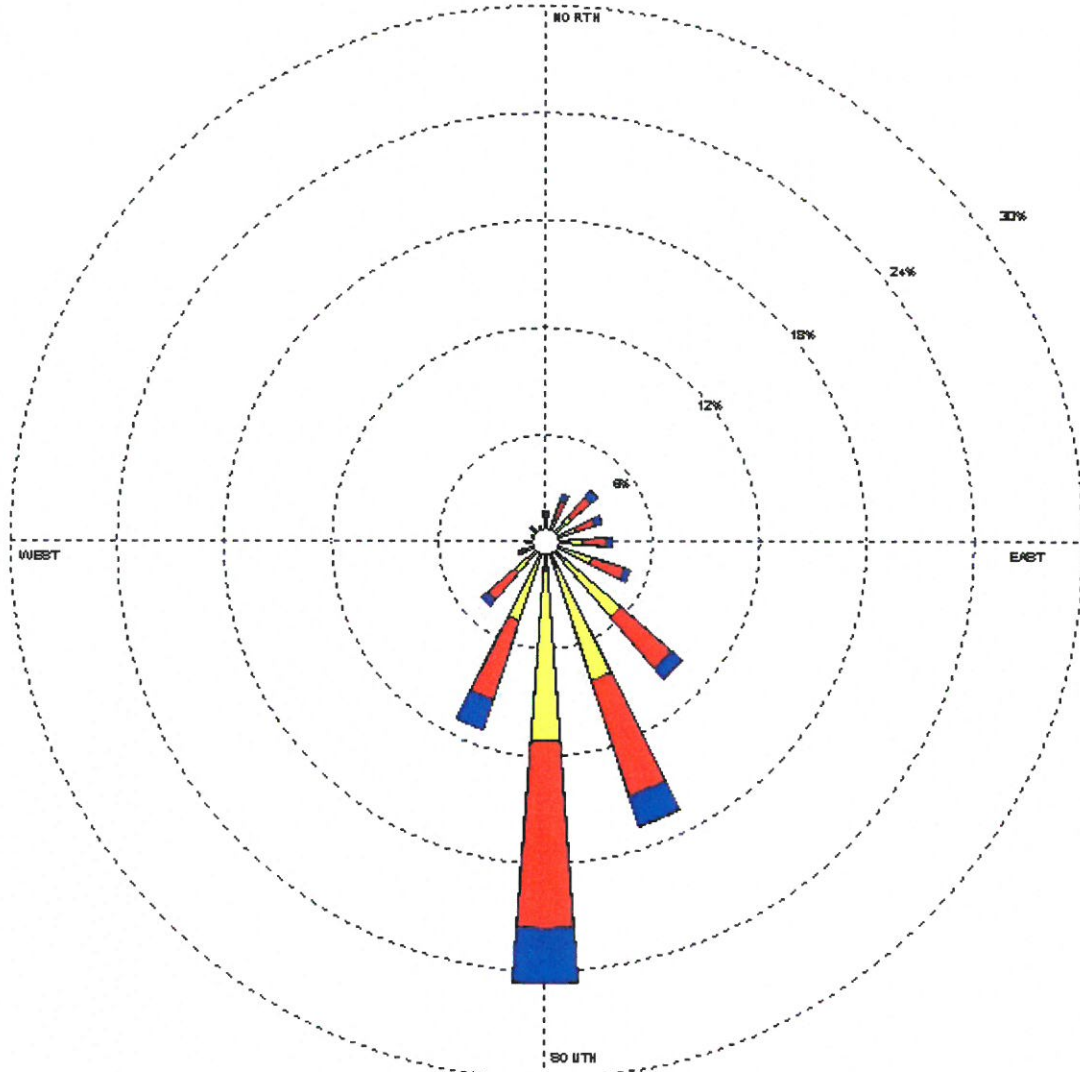



Wind Speed (m/s)  <ul style="list-style-type: none">> 11.058.49 - 11.055.40 - 8.493.34 - 5.401.80 - 3.340.51 - 1.80	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 3.74 m/s	CALM WINDS 5.14%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATETIME 1981 Jul 1 - Jul 31 Midnight - 11 PM	

WRPK 01, Rev 2.0 by Carlos Goveas/ARL Software - www.itsm-arc.com

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

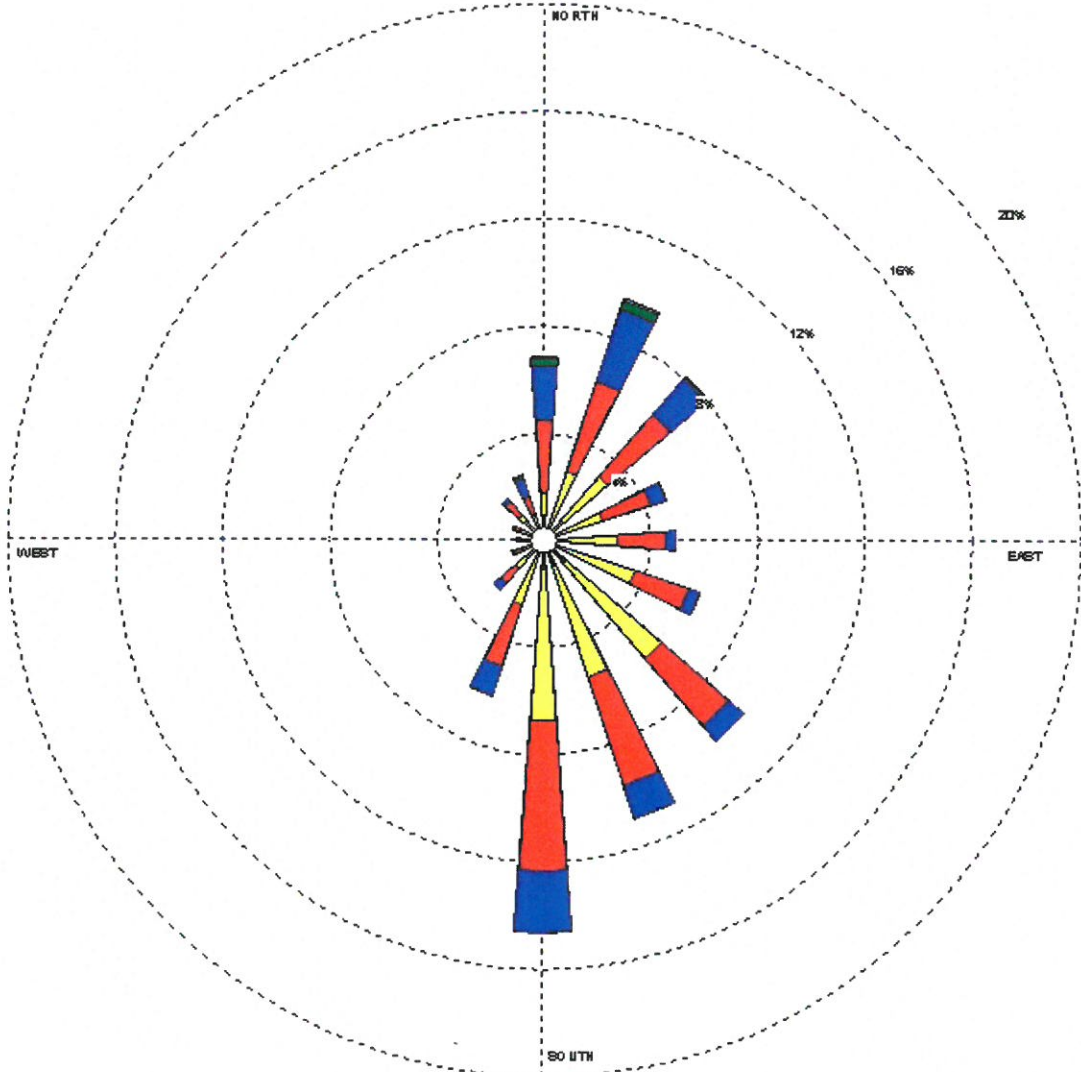



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 3.58 m/s	CALM WINDS 6.33%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATETIME 1961 Aug 1 - Aug 31 Midnight - 11 PM	

WSPC BY Ver 3.3 by Carlos Geronzi/ARL Software - www.les-servers.com

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

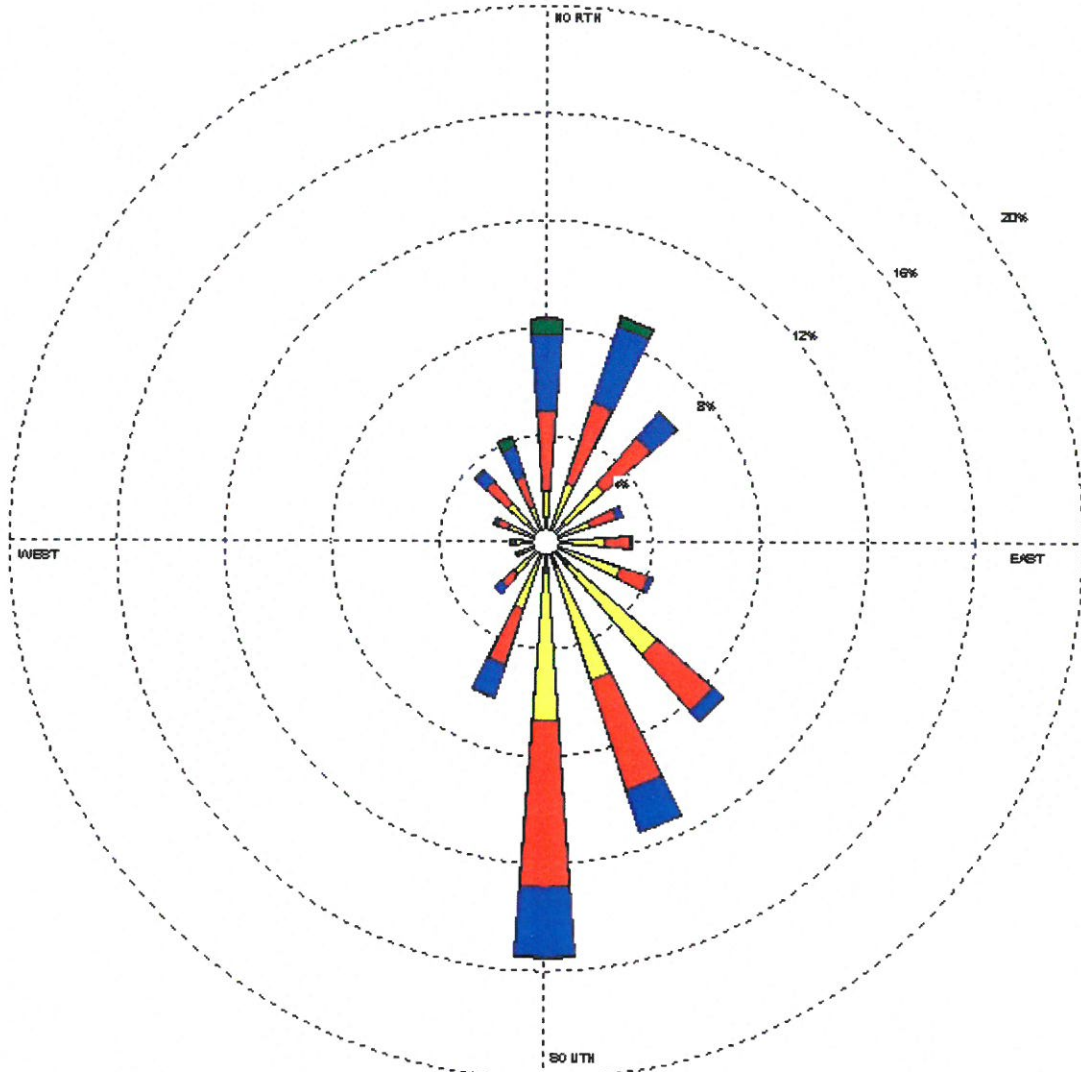



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 3.83 m/s	CALM WINDS 7.55%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 Sep 1 - Sep 30 Midnight - 11 PM	

WSPC 01 Rev 2.3 by Carlos Gonzalez del Real - www.bliss-software.com

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

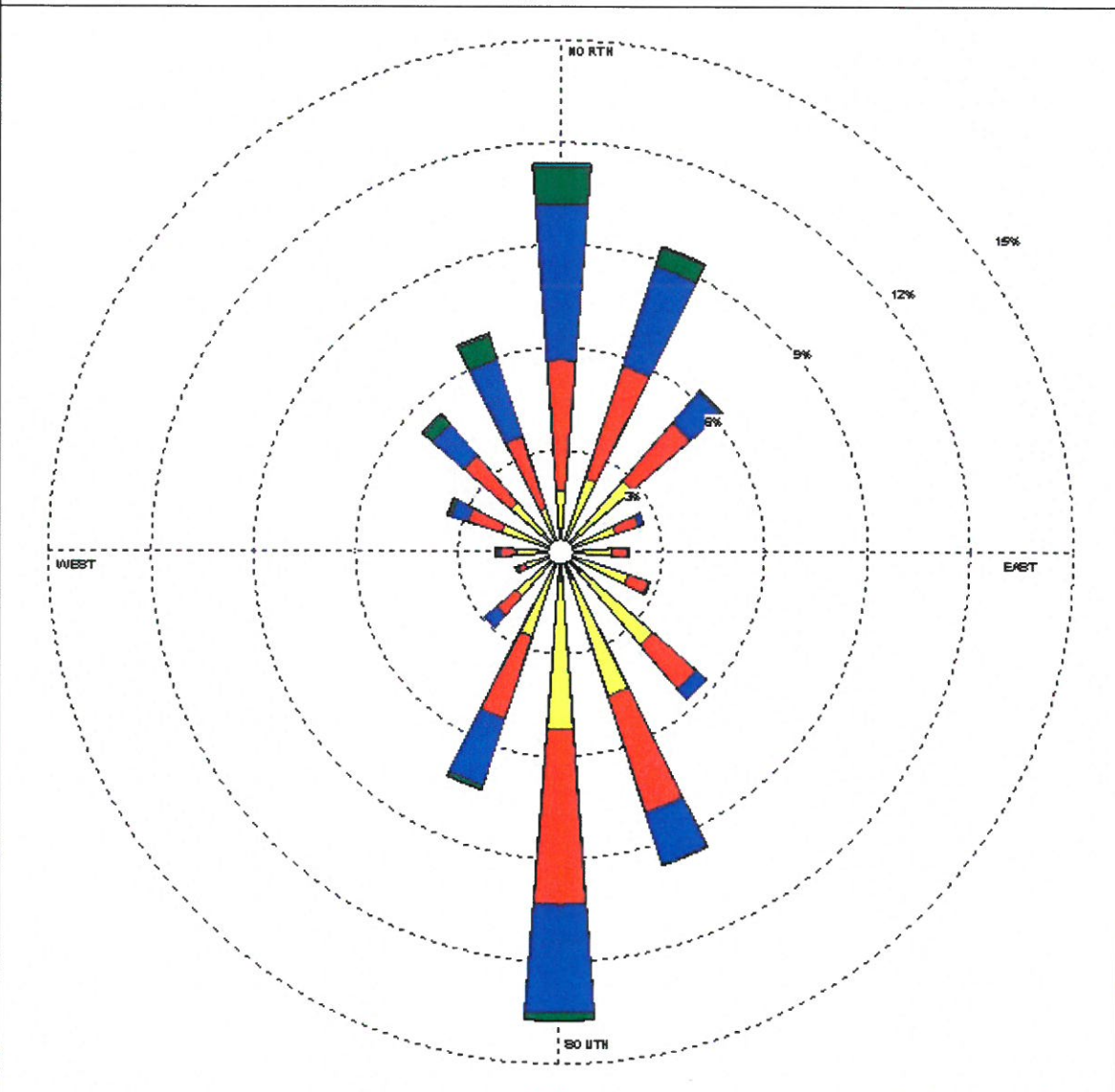



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 3.87 m/s	CALM WINDS 8.97%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1981 Oct 1 - Oct 31 Midnight - 11 PM	

WSPR 01 Rev 2.3 by Carlos Gonzalez del Real - www.bliss-arc.com

WIND ROSE PLOT

Station #13958 - AUSTIN/MUNICIPAL ARPT, TX

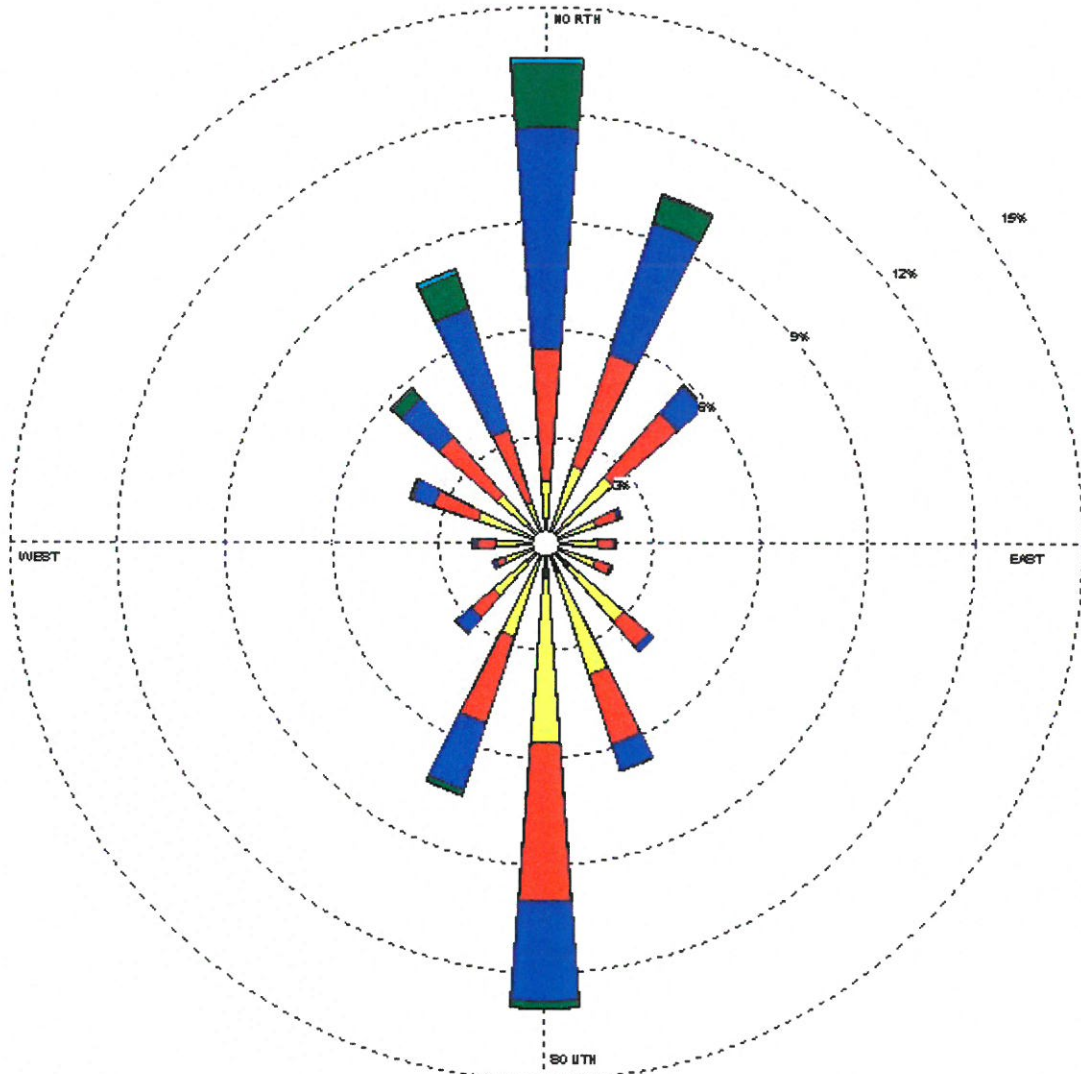



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 4.28 m/s	CALM WINDS 7.24%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATETIME 1961 Nov 1 - Nov30 Midnight - 11 PM	

WSPC BY: Nov 3.3 by Caltech Commercial Software - www.cals.com

WIND ROSE PLOT

Station #13958 - AUSTIN MUNICIPAL ARPT, TX



Wind Speed (m/s) 	MODELER Sara West	DATE 8/29/2002	COMPANY NAME USDA-ARS
	DISPLAY Wind Speed	UNIT m/s	COMMENTS
	AVG. WIND SPEED 4.47 m/s	CALM WINDS 8.07%	
	ORIENTATION Direction (blowing from)	PLOT YEAR-DATE-TIME 1961 Dec 1 - Dec 31 Midnight - 11 PM	

WSPC 01 Ver 3.3 by Gates Environmental Services - www.gates-environmental.com