

Brooke T. Paup, *Chairwoman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 23, 2025

TO: All interested persons.

RE: The Dow Chemical Company
TCEQ Air Quality Permit No. 914 and PSDTX1642

Decision of the Executive Director.

The executive director has made a decision that the above-referenced permit application meets the requirements of applicable law. **This decision does not authorize construction or operation of any proposed facilities.** This decision will be considered by the commissioners at a regularly scheduled public meeting before any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.

Enclosed with this letter are instructions to view the Executive Director's Response to Public Comment (RTC) on the Internet. Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov. A complete copy of the RTC (including the mailing list), complete application, draft permit and related documents, including public comments, are available for review at the TCEQ Central Office. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the TCEQ Central Office, the TCEQ Beaumont Regional Office, and at the Orange Public Library, 220 5th Street, Orange, Orange County, Texas. The facility's compliance file, if any exists, is available for public review at the TCEQ Beaumont Regional Office, 3870 Eastex Freeway, Beaumont, Texas.

If you disagree with the executive director's decision, and you believe you are an "affected person" as defined below, you may request a contested case hearing. In addition, anyone may request reconsideration of the executive director's decision. The procedures for the commission's evaluation of hearing requests/requests for reconsideration are located in 30 Texas Administrative Code Chapter 55, Subchapter F. A brief description of the procedures for these two requests follows.

How to Request a Contested Case Hearing.

It is important that your request include all the information that supports your right to a contested case hearing. Your hearing request must demonstrate that you meet the applicable legal requirements to have your hearing request granted. The commission's consideration of your request will be based on the information you provide.

The request must include the following:

- (1) Your name, address, daytime telephone number, and, if possible, a fax number.
- (2) The name of the applicant, the permit number and other numbers listed above so that your request may be processed properly.
- (3) A statement clearly expressing that you are requesting a contested case hearing. For example, the following statement would be sufficient: "I request a contested case hearing."
- (4) If the request is made by a group or association, the request must identify:
 - (A) one person by name, address, daytime telephone number, and, if possible, the fax number, of the person who will be responsible for receiving all communications and documents for the group;
 - (B) the comments on the application submitted by the group that are the basis of the hearing request; and
 - (C) by name and physical address one or more members of the group that would otherwise have standing to request a hearing in their own right. The interests the group seeks to protect must relate to the organization's purpose. Neither the claim asserted nor the relief requested must require the participation of the individual members in the case.

Additionally, your request must demonstrate that you are an **"affected person."** An affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. Your request must describe how and why you would be adversely affected by the proposed facility or activity in a manner not common to the general public. For example, to the extent your request is based on these concerns, you should describe the likely impact on your health, safety, or uses of your property which may be adversely affected by the proposed facility or activities. To demonstrate that you have a personal justiciable interest, you must state, as specifically as you are able, your location and the distance between your location and the proposed facility or activities. A person who may be affected by emissions of air contaminants from the facility is entitled to request a contested case hearing.

Your request must raise disputed issues of fact that are relevant and material to the commission's decision on this application that were raised **by you** during the public comment period. The request cannot be based solely on issues raised in comments that you have withdrawn.

To facilitate the commission's determination of the number and scope of issues to be referred to hearing, you should: 1) specify any of the executive director's responses to **your** comments that you dispute; 2) the factual basis of the dispute; and 3) list any disputed issues of law.

How to Request Reconsideration of the Executive Director's Decision.

Unlike a request for a contested case hearing, anyone may request reconsideration of the executive director's decision. A request for reconsideration should contain your name, address, daytime phone number, and, if possible, your fax number. The request must state that you are requesting reconsideration of the executive director's decision, and must explain why you believe the decision should be reconsidered.

Deadline for Submitting Requests.

A request for a contested case hearing or reconsideration of the executive director's decision must be **received by** the Chief Clerk's office no later than **30 calendar days** after the date of this letter. You may submit your request electronically at www.tceq.texas.gov/agency/decisions/cc/comments.html or by mail to the following address:

Laurie Gharis, Chief Clerk
TCEQ, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

Processing of Requests.

Timely requests for a contested case hearing or for reconsideration of the executive director's decision will be referred to the TCEQ's Alternative Dispute Resolution Program and set on the agenda of one of the commission's regularly scheduled meetings. Additional instructions explaining these procedures will be sent to the attached mailing list when this meeting has been scheduled.

How to Obtain Additional Information.

If you have any questions or need additional information about the procedures described in this letter, please call the Public Education Program, toll free, at 1-800-687-4040.

Sincerely,

A handwritten signature in black ink that reads "Laurie Gharis". The signature is written in a cursive, flowing style.

Laurie Gharis
Chief Clerk

LG/cb

Enclosure

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT
for
The Dow Chemical Company
TCEQ Air Quality Permit No. 914 and PSDTX1642

The Executive Director has made the Response to Public Comment (RTC) for the application by The Dow Chemical Company for TCEQ Air Quality Permit No. 914 and PSDTX1642 available for viewing on the Internet. You may view and print the document by visiting the TCEQ Commissioners' Integrated Database at the following link:

<https://www.tceq.texas.gov/goto/cid>

In order to view the RTC at the link above, enter the TCEQ ID Number for this application (914 and PSDTX1642) and click the "Search" button. The search results will display a link to the RTC.

Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov.

Additional Information

For more information on the public participation process, you may contact the Office of the Public Interest Counsel at (512) 239-6363 or call the Public Education Program, toll free, at (800) 687-4040.

A complete copy of the RTC (including the mailing list), the complete application, the draft permit, and related documents, including comments, are available for review at the TCEQ Central Office in Austin, Texas. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the TCEQ Central Office, the TCEQ Beaumont Regional Office, and at the Orange Public Library, 220 5th Street, Orange, Orange County, Texas. The facility's compliance file, if any exists, is available for public review at the TCEQ Beaumont Regional Office, 3870 Eastex Freeway, Beaumont, Texas.



COMISIÓN DE CALIDAD AMBIENTAL DE TEXAS

Protegiendo a Texas reduciendo y previniendo la contaminación

23 de abril de 2025

TO: Todas las personas interesadas.

RE: The Dow Chemical Company
Permiso de Calidad del Aire TCEQ No. 914 y PSDTX1642

Decisión del Director Ejecutivo.

El director ejecutivo ha tomado la decisión de que la solicitud de permiso mencionada anteriormente cumple con los requisitos de la ley aplicable. **Esta decisión no autoriza la construcción u operación de ninguna instalación propuesta.** Esta decisión será considerada por los comisionados en una reunión pública programada regularmente antes de que se tome cualquier medida sobre esta solicitud, a menos que todas las solicitudes de audiencia o reconsideración de casos impugnados hayan sido retiradas antes de esa reunión.

Se adjuntan a esta carta las instrucciones para ver en Internet la Respuesta del Director Ejecutivo al Comentario Público (RTC). Las personas que prefieran una copia por correo del RTC o que tengan problemas para acceder al RTC en el sitio web, deben comunicarse con la Oficina del Secretario Oficial, por teléfono al (512) 239-3300 o por correo electrónico a chiefclk@tceq.texas.gov. Una copia completa del RTC (incluida la lista de correo), la solicitud completa, el borrador del permiso y los documentos relacionados, incluidos los comentarios públicos, están disponibles para su revisión en la Oficina Central de TCEQ. Además, una copia de la solicitud completa, el borrador del permiso y la decisión preliminar del director ejecutivo están disponibles para ver y copiar en la Oficina Central de la TCEQ, la Oficina Regional de la TCEQ Beaumont y la Biblioteca Pública de Orange, 220 5th Street, Orange, Orange Condado, Texas. El archivo de cumplimiento de la instalación, si existe alguno, está disponible para su revisión pública en la Oficina Regional Beaumont de la TCEQ.

Si no está de acuerdo con la decisión del director ejecutivo y cree que es una "persona afectada" como se define a continuación, puede solicitar una audiencia de caso impugnado. Además, cualquier persona puede solicitar la reconsideración de la decisión del director ejecutivo. Los procedimientos para la evaluación de la comisión de las solicitudes de audiencia/solicitudes de reconsideración se encuentran en 30 Código Administrativo de Texas, Capítulo 55, Subcapítulo F. A continuación, se presenta una breve descripción de los procedimientos para estas dos solicitudes.

Cómo solicitar una audiencia de caso impugnado.

Es importante que su solicitud incluya toda la información que respalde su derecho a una audiencia de caso impugnado. Su solicitud de audiencia debe demostrar que cumple con los requisitos legales aplicables para que se le conceda su solicitud de audiencia. La

consideración de la comisión de su solicitud se basará en la información que usted proporcione.

La solicitud debe incluir lo siguiente:

- (1) Su nombre, dirección, número de teléfono durante el día y, si es posible, un número de fax.
- (2) El nombre del solicitante, el número de permiso y otros números enumerados anteriormente para que su solicitud pueda procesarse adecuadamente.
- (3) Una declaración que exprese claramente que está solicitando una audiencia de caso impugnado. Por ejemplo, la siguiente declaración sería suficiente: "Solicito una audiencia de caso impugnado".
- (4) Si la solicitud es realizada por un grupo o asociación, la solicitud debe identificar:
 - (A) una persona por nombre, dirección, número de teléfono durante el día y, si es posible, el número de fax, de la persona que será responsable de recibir todas las comunicaciones y documentos para el grupo.;
 - (B) los comentarios sobre la solicitud presentada por el grupo que constituyen la base de la solicitud de audiencia; y
 - (C) por nombre y dirección física, uno o más miembros del grupo que de otro modo tendrían derecho a solicitar una audiencia por derecho propio. Los intereses que el grupo busca proteger deben estar relacionados con el propósito de la organización. Ni la reclamación alegada ni la reparación solicitada deben requerir la participación de los miembros individuales en el caso.

Además, su solicitud debe demostrar que usted es una **"persona afectada"**. Una persona afectada es aquella que tiene un interés justiciable personal relacionado con un derecho, deber, privilegio, poder o interés económico legal afectado por la solicitud. Su solicitud debe describir cómo y por qué se vería afectado negativamente por la instalación o actividad propuesta de una manera que no sea común al público en general. Por ejemplo, en la medida en que su solicitud se base en estas preocupaciones, debe describir el impacto probable en su salud, seguridad o usos de su propiedad que puedan verse afectados negativamente por la instalación o las actividades propuestas. Para demostrar que tiene un interés personal justiciable, debe indicar, tan específicamente como pueda, su ubicación y la distancia entre su ubicación y la instalación o actividades propuestas. Una persona que pueda verse afectada por las emisiones de contaminantes del aire de la instalación tiene derecho a solicitar una audiencia de caso impugnado.

Su solicitud debe plantear cuestiones de hecho controvertidas que sean relevantes y materiales para la decisión de la comisión sobre esta solicitud que fueron planteadas **por usted** durante el período de comentarios públicos. La solicitud no puede basarse únicamente en cuestiones planteadas en los comentarios que haya retirado.

Para facilitar la determinación por parte de la comisión del número y alcance de los asuntos que se remitirán a la audiencia, usted debe: 1) especificar cualquiera de las respuestas del director ejecutivo a **sus** comentarios que usted disputa; 2) la base fáctica de la disputa; y 3) enumerar cualquier cuestión de derecho en disputa.

Cómo solicitar la reconsideración de la decisión del Director Ejecutivo.

A diferencia de una solicitud de audiencia de caso impugnado, cualquier persona puede solicitar la reconsideración de la decisión del director ejecutivo. Una solicitud de reconsideración debe contener su nombre, dirección, número de teléfono durante el día y, si es posible, su número de fax. La solicitud debe indicar que está solicitando la reconsideración de la decisión del director ejecutivo, y debe explicar por qué cree que la decisión debe ser reconsiderada.

Fecha límite para la presentación de solicitudes.

La oficina del Secretario Oficial debe **recibir** una solicitud de audiencia de caso impugnado o reconsideración de la decisión del director ejecutivo a más tardar **30 días calendario** después de la fecha de esta carta. Puede enviar su solicitud electrónicamente a www.tceq.texas.gov/agency/decisions/cc/comments.html o por correo a la siguiente dirección:

Laurie Gharis, Chief Clerk
TCEQ, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

Procesamiento de solicitudes.

Las solicitudes oportunas para una audiencia de caso impugnado o para la reconsideración de la decisión del director ejecutivo se remitirán al Programa de Resolución Alternativa de Disputas de TCEQ y se incluirán en la agenda de una de las reuniones programadas regularmente de la comisión. Las instrucciones adicionales que explican estos procedimientos se enviarán a la lista de correo adjunta cuando se haya programado esta reunión.

Cómo obtener información adicional.

Si tiene alguna pregunta o necesita información adicional sobre los procedimientos descritos en esta carta, llame al Programa de Educación Pública, al número gratuito, 1-800-687-4040.

Atentamente,



Laurie Gharis
Secretaria Oficial

LG/cb

Recinto

RESPUESTA DEL DIRECTOR EJECUTIVO AL COMENTARIO DEL PÚBLICO
para
The Dow Chemical Company
Permiso de Calidad del Aire TCEQ No. 914 y PSDTX1642

El Director Ejecutivo ha puesto a disposición de Internet la respuesta al comentario público (RTC) para la solicitud de The Dow Chemical Company del Permiso de Calidad del Aire TCEQ No. 914 y PSDTX1642. Puede ver e imprimir el documento visitando la Base de Datos Integrada de los Comisionados de TCEQ en el siguiente enlace:

<https://www.tceq.texas.gov/goto/cid>

Para ver el RTC en el enlace anterior, ingrese el número de identificación TCEQ para esta solicitud (914 and PSDTX1642) y haga clic en el botón "Buscar". Los resultados de la búsqueda mostrarán un enlace al RTC.

Las personas que prefieran una copia por correo del RTC o que tengan problemas para acceder al RTC en el sitio web, deben comunicarse con la Oficina del Secretario Oficial, por teléfono al (512) 239-3300 o por correo electrónico a chiefclk@tceq.texas.gov.

Información adicional

Para obtener más información sobre el proceso de participación pública, puede comunicarse con la Oficina del Asesor de Interés Público al (512) 239-6363 o llamar al Programa de Educación Pública, al número gratuito, (800) 687-4040.

Una copia completa del RTC (incluida la lista de correo), la solicitud completa, el borrador del permiso y los documentos relacionados, incluidos los comentarios, están disponibles para su revisión en la Oficina Central de TCEQ en Austin, Texas. Además, una copia de la solicitud completa, el borrador del permiso y la decisión preliminar del director ejecutivo están disponibles para ver y copiar en la Oficina Central de la TCEQ, la Oficina Regional de la TCEQ Beaumont y la Biblioteca Pública de Orange, 220 5th Street, Orange, Orange Condado, Texas. El archivo de cumplimiento de la instalación, si existe alguno, está disponible para su revisión pública en la Oficina Regional Beaumont de la TCEQ.

MAILING LIST / LISTA DE CORREO

for / para

The Dow Chemical Company

TCEQ Air Quality Permit No. 914 and PSDTX1642 / Permiso de Calidad del Aire TCEQ No.
914 y PSDTX1642

FOR THE APPLICANT /
PARA EL SOLICITANTE:

David Constant, Environmental Manager
The Dow Chemical Company
P.O. Box 1089
Orange , Texas 77631

INTERESTED PERSONS /
PERSONAS INTERESADAS:

Terry D. Stelly
227 North 30th Street
Nederland, Texas 77627

FOR THE EXECUTIVE DIRECTOR /
PARA EL DIRECTOR EJECUTIVO
via electronic mail /
por correo electrónico:

Ryan Vise, Deputy Director
Texas Commission on Environmental
Quality
External Relations Division
Public Education Program MC-108
P.O. Box 13087
Austin, Texas 78711-3087

Amy Browning, Acting Senior Attorney
Texas Commission on Environmental
Quality
Environmental Law Division MC-173
P.O. Box 13087
Austin, Texas 78711-3087

Louis Malarcher, Technical Staff
Texas Commission on Environmental
Quality
Air Permits Division MC-163
P.O. Box 13087
Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL /
PARA ABOGADOS DE INTERÉS PÚBLICO
via electronic mail /
por correo electrónico:

Garrett T. Arthur, Attorney
Texas Commission on Environmental
Quality
Public Interest Counsel MC-103
P.O. Box 13087
Austin, Texas 78711-3087

FOR THE CHIEF CLERK /
PARA EL SECRETARIO OFICIAL
via electronic mail
por correo electrónico:

Laurie Gharis, Chief Clerk
Texas Commission on Environmental
Quality
Office of Chief Clerk MC-105
P.O. Box 13087
Austin, Texas 78711-3087

TCEQ AIR QUALITY PERMIT NUMBER 914 and PSDTX1642

| | | |
|---------------------------------|----------|------------------------------|
| APPLICATION BY | § | BEFORE THE |
| THE DOW CHEMICAL COMPANY | § | TEXAS COMMISSION ON |
| ETHYLENE UNIT | § | ENVIRONMENTAL QUALITY |
| ORANGE, ORANGE COUNTY | § | |

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the New Source Review Authorization application and Executive Director's preliminary decision.

As required by Title 30 Texas Administrative Code (TAC) § 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk received timely comments from the following persons: Terry D. Stelly (Southeast Texas Clean Air & Water, Inc.). This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about TCEQ can be found at our website at www.tceq.texas.gov.

BACKGROUND

Description of Facility

The Dow Chemical Company (Applicant) has applied to TCEQ for a New Source Review Authorization under Texas Clean Air Act (TCAA) § 382.0518. This will authorize the modification of an existing facility that may emit air contaminants.

This permit will authorize the Applicant to modify an Ethylene Unit. The facility is located at 3055 Farm-to-Market Road 1006, Orange, Texas, 77630, Orange County. Increased emissions of contaminants authorized under this permit include carbon monoxide, hazardous air pollutants, nitrogen oxides, organic compounds and sulfur dioxide.

Procedural Background

Before work is begun on the modification of an existing facility that may emit air contaminants, the person planning the modification must obtain a permit amendment from the commission. This permit application is for a permit amendment of Air Quality Permit Number 914 and issuance of PSDTX1642.

The permit application was received on June 7, 2024, and declared administratively complete on June 13, 2024. The Notice of Receipt and Intent to Obtain an Air Quality Permit (NORI, first public notice) for this permit application was published in English on June 29, 2024, in the *Orange Leader* and in Spanish on June 27, 2024, in the *El Perico*. The Notice of Application and Preliminary Decision for an Air Quality Permit (NAPD, second public notice) was published on October 19, 2024, in English in the

Orange Leader and on October 17, 2024, in Spanish in the *El Perico*. Because this application was received after September 1, 2015, it is subject to the procedural requirements of and rules implementing Senate Bill 709 (84th Legislature, 2015).

COMMENTS AND RESPONSES

COMMENT 1: Health Effects/Air Quality

Commenters are concerned about the effect of the emissions from the proposed project on the air quality and health of people, particularly sensitive populations such as the elderly, children, and people with existing medical conditions. The commenter included specific examples of fence line monitoring which demonstrates an exceedance of the benzene emissions authorized.

(Terry D. Stelly (Southeast Texas Clean Air & Water, Inc.))

RESPONSE 1: The Executive Director is required to review permit applications to ensure they will be protective of human health and the environment. For this type of air permit application, potential impacts to human health and welfare or the environment are determined by comparing the Applicant's proposed air emissions to appropriate state and federal standards and guidelines. These standards and guidelines include the National Ambient Air Quality Standards (NAAQS), TCEQ Effects Screening Levels (ESLs), and TCEQ rules. As described in detail below, the Executive Director determined that the emissions authorized by this permit are protective of both human health and welfare and the environment.

NAAQS

The U.S. Environmental Protection Agency (EPA) created and continues to evaluate the NAAQS, which include both primary and secondary standards, for pollutants considered harmful to public health and the environment.¹ Primary standards protect public health, including sensitive members of the population such as children, the elderly, and those individuals with preexisting health conditions. Secondary NAAQS protect public welfare and the environment, including animals, crops, vegetation, visibility, and buildings, from any known or anticipated adverse effects from air contaminants. The EPA has set NAAQS for criteria pollutants, which include carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), particulate matter less than or equal to 10 microns in aerodynamic diameter (PM₁₀), and PM less than or equal to 2.5 microns in aerodynamic diameter (PM_{2.5}).

The Applicant conducted a NAAQS analysis for CO and NO₂. Impacts of minor NSR air pollutant SO₂ was below the applicable NAAQS and State Property Line Standard de minimis levels. The first step of the NAAQS analysis is to compare the proposed modeled emissions against the established de minimis level. Predicted concentrations (GLC_{max})² below the de minimis level are considered to be so low that they do not require further NAAQS analysis. Table 1 contains the results of the de minimis analysis.

¹ 40 CFR § 50.2

² The GLC_{max} is the maximum ground level concentration predicted by the modeling.

Table 1. Modeling Results for De Minimis Review

| Pollutant | Averaging Time | GLC _{max} (µg/m ³) | De Minimis (µg/m ³) |
|-----------------|----------------|---|---------------------------------|
| NO ₂ | 1-hr | 3.22 | 7.5 |
| NO ₂ | Annual | 0.002 | 1 |
| CO | 1-hr | 27 | 2000 |
| CO | 8-hr | 10 | 500 |

The pollutants below the de minimis level should not cause or contribute to a violation of the NAAQS and are protective of human health and the environment.

The Applicant had no pollutants above de minimis and was therefore not required to conduct a full NAAQS analysis for any pollutants to account for cumulative effects by including an evaluation of all on-property sources, applicable off-property sources, and representative monitored background concentrations.

Effects Screening Levels

ESLs are specific guideline concentrations used in TCEQ's evaluation of certain pollutants. These guidelines are derived by TCEQ's Toxicology Division and are based on a pollutant's potential to cause adverse health effects, odor nuisances, and effects on vegetation. Health-based ESLs are set below levels reported to produce adverse health effects, and are set to protect the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions. TCEQ's Toxicology Division specifically considers the possibility of cumulative and aggregate exposure when developing the ESL values that are used in air permitting, creating an additional margin of safety that accounts for potential cumulative and aggregate impacts. Adverse health or welfare effects are not expected to occur if the air concentration of a pollutant is below its respective ESL. If an air concentration of a pollutant is above the screening level, it is not necessarily indicative that an adverse effect will occur, but rather that further evaluation is warranted.

The Applicant conducted a health effects analysis using the Modeling and Effects Review Applicability (MERA) guidance.³ The MERA is a tool to evaluate impacts of non-criteria pollutants. It is a step-by-step process, evaluated on a chemical species by chemical species basis, in which the potential health effects are evaluated against the ESL for the chemical species. The initial steps are simple and conservative, and as the review progresses through the process, the steps require more detail and result in a more refined (less conservative) analysis. If the contaminant meets the criteria of a step, the review of human health and welfare effects for that chemical species is complete and is said to "fall out" of the MERA process at that step because it is protective of human health and welfare. All pollutants satisfy the MERA criteria and therefore are not expected to cause adverse health effects.

³ See APDG 5874 guidance document.

Table 3. Health Effects Modeling Results

| Pollutant & CAS# | Averaging Time | GLC_{max} (µg/m³) | 10% ESL (µg/m³) |
|-----------------------------|-----------------------|---|-----------------------------------|
| benzene 71-43-2 | 1-hr | 1.57 | 17 |
| benzene 71-43-2 | Annual | 4.32E-06 | 0.45 |
| 1,3-butadiene 106-99-0 | 1-hr | 0.44 | 51 |
| 1,3-butadiene 106-99-0 | Annual | 1.50E-05 | 0.99 |
| n-butane 106-97-8 | 1-hr | 0.08 | 6600 |
| 2-butene 107-01-7 | 1-hr | 0.71 | 1000 |
| 2-butene 107-01-7 | Annual | 3.06E-05 | 48 |
| diisobutylene 25167-70-8 | 1-hr | 0.01 | 340 |
| dimethyl sulfide 75-18-3 | 1-hr | 0.73 | 0.76 |
| ethylene 74-85-1 | 1-hr | 14.85 | 140 |
| ethylene 74-85-1 | Annual | 0.001 | 3.4 |
| ethylbenzene 100-41-4 | 1-hr | 0.07 | 2600 |
| ethylbenzene 100-41-4 | Annual | 4.35E-07 | 57 |
| isobutane 75-28-5 | 1-hr | 0.35 | 2300 |
| toluene 108-88-3 | 1-hr | 1.09 | 450 |
| vinyl acetate 108-05-4 | 1-hr | 0.01 | 42 |
| xylene 1330-20-7 | 1-hr | 0.21 | 220 |
| xylene 1330-20-7 | Annual | 1.27E-06 | 18 |

State Property Line Analysis (30 TAC Chapter 112)

Because this application has sulfur emissions, the Applicant conducted a state property line analysis to demonstrate compliance with TCEQ rules for net ground-level concentrations for sulfur dioxide (SO₂), hydrogen sulfide (H₂S), and sulfuric acid (H₂SO₄), as applicable. This analysis demonstrated that resulting air concentrations will not exceed the applicable state standard.

Table 4. State Property Line Results for SO₂

| Pollutant | Averaging Time | GLC _{max} (µg/m ³) | De Minimis (µg/m ³) |
|-----------------|----------------|---|---------------------------------|
| SO ₂ | 1-hr | 4.66 | 16.34 |

In summary, based on the Executive Director's staff review, it is not expected that existing health conditions will worsen, or that there will be adverse health effects on the general public, sensitive subgroups, or the public welfare and the environment as a result of proposed emission rates associated with this project.

As shown in Table 3, the benzene emission rates authorized related to this project have been modeled to be less than an amount which would be a concern based on the MERA impacts analysis.

Any exceedance of an authorized emission is tracked and reported as emission events as specified in 30 TAC § 101.201 and § 101.211. The site is required to investigate and report how the emission event will be corrected. If a modification at the site is required to correct an emission event, the site is allowed to evaluate and use the most appropriate mechanism to authorize the modification.

This site has authorized modifications through Pollution Control Project Standard Permits including Standard Permit 172656 which was for authorization of a flare gas recovery unit (FGRU) which would route vent gas away from the flare and to furnaces to use as fuel, Standard Permit 177265 which was for authorization of a thermal oxidizer as a control option for some vents currently controlled by a flare which are better controlled by an oxidizer than a flare due to the low concentration of material to be controlled, and Standard Permit 177932 which was for authorization to route specific tank vents which were authorized for emission to the atmosphere to be controlled by a thermal oxidizer. Once authorization is received by the site, work may begin at the site for these modifications which could take up to 18 months to start construction.

A review of the standard permits for relevance to this project which is specifically related to the routing of a hydrogen vent stream to the flare for control confirmed that the standard permit projects were not directly related.

COMMENT 2: Air Monitors

Commenters requested that an air monitor be placed closer to the local community surrounding the site.

(Terry D. Stelly (Southeast Texas Clean Air & Water, Inc.))

RESPONSE 2: Due to cost and logistical constraints, the placement of air monitors is prioritized to provide data on regional air quality in areas frequented by the public. The existing air monitoring network is the result of a strategic balance of matching federal monitoring requirements with state and local needs. Consistent with federal air monitoring requirements, TCEQ evaluates the placement of air quality monitors within the air monitoring network using trends in population, reported emissions inventory data, and existing air monitoring data for a given area. In addition, TCEQ may prioritize monitor placement in areas with potential regional air quality issues, such as those related to increased oil and gas activity in the Barnett Shale and Eagle Ford Shale areas.

TCEQ annually evaluates the number and location of air monitors within its network to assess compliance with federal monitoring requirements and the adequacy of monitoring coverage for identified monitoring objectives as a part of the Annual Monitoring Network Plan provided to EPA on July 1 of each year. This plan is made available on TCEQ's website for public review and comment for 30 days beginning in mid-May. Requests for additional monitoring or the identification of additional monitoring needs may be made during this public comment period and will be considered along with other monitoring priorities across the state. To receive email announcements related to the ambient air monitoring network, including the availability of the Annual Monitoring Network Plan for public review and comment, please visit the following link <https://service.govdelivery.com/accounts/TXTCEQ/subscriber/new> and select "Air Monitoring Network Announcements."

Stationary air monitors are sited to measure air quality that is representative of a broader area or region. Therefore, monitors are not typically placed to measure the impacts from specific industrial facilities.

COMMENT 3: Compliance History

Commenters asked about the compliance history of the applicant and site. (Terry D. Stelly

(Southeast Texas Clean Air & Water, Inc.)

RESPONSE 3: During the technical review of the permit application, a compliance history review of both the company and the site is conducted based on the criteria in 30 TAC Chapter 60. These rules may be found at the following website: <https://www.tceq.texas.gov/rules/index.html>.

The compliance history is reviewed for the five-year period prior to the date the permit application was received and includes multimedia compliance-related components about the site under review. These components include enforcement orders, consent decrees, court judgments, criminal convictions, chronic excessive emissions events, investigations, notices of violations, audits and violations disclosed under the Audit Act, environmental management systems, voluntary on-site compliance assessments, voluntary pollution reduction programs, and early compliance. However, TCEQ does not have jurisdiction to consider violations outside of the State of Texas.

A company and site may have one of the following classifications and ratings:

- High: rating below 0.10 – complies with environmental regulations extremely well.
- Satisfactory: rating 0.10 – 55.00 – generally complies with environmental regulations.
- Unsatisfactory: rating greater than 55.00 – fails to comply with a significant portion of the relevant environmental regulations.
- N/A: the company has not had any compliance and/or enforcement actions against them within the last 5 years.

This site has a rating of **10.90**, and a classification of **Satisfactory**. The company rating has a rating of **1.54**, and a classification of **Satisfactory**. The company rating reflects the average of the ratings for all sites the company owns in Texas.

COMMENT 4: Consideration to Reduce Flare Air Emissions

Commenters indicated that flare emission reductions should be included or specified prior to approval of this amendment.

(Terry D. Stelly (Southeast Texas Clean Air & Water, Inc.))

RESPONSE 4: As detailed in the Preliminary Determination Summary, the flare is subject to a federal consent decree, Case 2:21-cv-00114 (DJ# 90-5-2-1-11114) with EPA; which requires the addition of a FGRU. Construction of the FGRU has been authorized through TCEQ Pollution Control Standard Permit No. 172656 and is underway. The permit application for this project does not include the emission reduction from the flare required for the FGRU. An application to update the permit to include the FGRU is required by December 31, 2025, per Special Condition 39.

Additionally, a hydrogen (off gas) stream which is currently sent to INV Nylon Chemicals Americas, LLC (CN605811850) will be required to be routed to Flare CB-801 (EPNs PK-16 and PK-16M) for control and compliance. This new requirement is added because the federal consent decree contains the requirement that the hydrogen rich gas mixture is to be added to the waste stream to be controlled by the Orange Ethylene flare (Flare CB-801).

Approval of TCEQ NSR Project Number 374897 will allow a reduction in actual emissions from the flare which will be achieved through a reduction in natural gas required to maintain the net heating value at the flare tip by replacing the natural gas with the hydrogen stream. The actual reduction in natural gas burned at the flare will be achieved by including the heating value for the hydrogen stream that this project will authorize. The total allowable emissions change cannot be determined until completion of compliance with the consent decree.

The consent decree requires that, following its implementation, any increase in hydrogen in the vent gas controlled by the flare, as well as the installation of the FGRU, must be incorporated into the appropriate TCEQ NSR Permit to ensure continued compliance beyond the decree's expiration. To incorporate the FGRU into the TCEQ NSR Permit, operational data must be collected, including a determination of the actual amount of vent gas recovered and redirected away from the flare. In accordance with the consent decree, the site will submit a future project proposal focused on flare emission reductions once all relevant requirements have been implemented and sufficient data is available to evaluate the extent of emission reductions achieved.

Delaying issuance of this project only results in delaying actual reductions in emissions from the flare, as required by federal consent decree, Case 2:21-cv-0114 (DJ# 90-5-2-1-11114) with the EPA.

COMMENT 5: Ethylene Unit Maintenance

Commenters indicated that the Applicant should do more than included in this amendment to reduce emissions and reduce flare emissions.

(Terry D. Stelly (Southeast Texas Clean Air & Water, Inc.))

RESPONSE 5: Since this permit amendment was submitted and reviewed, the applicant has submitted additional permit applications aimed at reducing emissions. Two of these applications were reviewed and approved under the Standard Permit for Pollution Control Projects: Standard Permit Nos. 172656 and 177932. These permits were briefly mentioned in Response 1, but a more detailed explanation is provided here to clarify their purpose and emission reduction benefits.

Standard Permit No. 172656 authorized a project to reroute certain vent gases that were previously sent to the Ethylene Plant Flare (CB-801). Instead of flaring, these gases will now be recovered and used as supplemental fuel in the plant's Cracking Heaters (units BA-99 through BA-109). This rerouting is expected to reduce the amount of gas sent to the flare, lower natural gas usage at the heaters, and result in some increases in emissions from the heaters themselves. However, the overall emissions are expected to decrease. The applicant estimates a net reduction of 6.74 tons per year (tpy) of carbon monoxide (CO), 10.62 tpy of nitrogen oxides (NO_x), and 0.01 tpy of volatile organic compounds (VOCs). Importantly, this project does not include the hydrogen vent stream associated with TCEQ NSR Project No. 374897. Once construction is complete, the site will collect operational data to determine the actual amount of recovered gas and adjust the allowable flare emissions accordingly. This project is one part of a broader effort to reduce total emissions from Flare CB-801.

Standard Permit No. 177932 authorized a separate project to reroute certain vent streams from existing storage tanks—previously vented directly to the atmosphere—to a thermal oxidizer for control. The oxidizer burns these vapors, creating small amounts of new emissions (such as NO₂, CO, SO₂, PM, PM₁₀, and PM_{2.5}) as byproducts of combustion. However, this project results in a significant decrease in VOC emissions, and the overall environmental impact was determined to be acceptable. Like the first project, this one does not include the hydrogen vent stream identified in TCEQ NSR Project No. 374897, and it does not involve any changes to Flare CB-801. It is expected to reduce VOC impacts at the site's fence line.

Through the implementation of Standard Permits 172656 and 177932, the applicant has begun installing equipment to reduce emissions from distillate tanks near the fence line and to improve flare gas recovery, which will further reduce the need for flaring.

These Standard Permits were submitted separately because they did not involve increases in emissions and qualified as pollution control projects, which are eligible for streamlined permitting. This approach allows for faster implementation of emission-reduction technologies without circumventing public notice requirements. The applicant continues to use all available permitting mechanisms, including the current amendments to NSR Permit Nos. 914 and PSDTX1642, to improve operational efficiency, reduce emissions, and comply with both state and federal environmental regulations.

COMMENT 6: TCEQ Air Quality Maps

Commenters indicated that TCEQ should produce maps or make monitoring data more accessible and easier to use.

(Terry D. Stelly (Southeast Texas Clean Air & Water, Inc.))

RESPONSE 6: TCEQ appreciates input on how data collected from monitors can be made more useful to the residents of Texas. Due to the number of different uses and technical nature of most of the monitoring data collected, it is difficult to make it clearly, consistently, and easily interpretable.

TCEQ Monitoring Operations has developed the Geographical Texas Air Quality Monitoring viewer (GeoTAM Viewer) to access information about air quality monitors, view and print maps of areas of interest, and obtain details about selected air monitors and their surrounding area. The website can be accessed at:

<https://www.tceq.texas.gov/gis/geotam-viewer>

Additionally, this page has and email address for the Air Monitoring Program where questions or suggestions may be submitted to the appropriate staff. The contact information also includes a phone number to talk with staff in the program.

COMMENT 7: Environmental Justice

Commenters raised concerns regarding the environmental justice implications of this project.

(Terry D. Stelly (Southeast Texas Clean Air & Water, Inc.))

RESPONSE 7: Air permits evaluated by TCEQ are reviewed without reference to the socioeconomic or racial status of the surrounding community. TCEQ is committed to protecting the health of the people of Texas and the environment regardless of location. A health effects review was conducted for the proposed facilities during the permit review and the permit was found to be protective of human health and the environment.

TCEQ encourages participation in the permitting process. The Office of the Chief Clerk works to help the public and neighborhood groups participate in the regulatory process to ensure that agency programs that may affect human health or the environment operate without discrimination and to make sure that concerns are considered thoroughly and are handled in a way that is fair to all. You may contact the Office of the Chief Clerk at 512-239-3300 for further information. More information may be found on the TCEQ website:

<https://www.tceq.texas.gov/agency/decisions/participation/title-vi-compliance>.

CHANGES MADE IN RESPONSE TO COMMENT

No changes to the draft permit have been made in response to public comment.

No changes have been made to the Executive Director's preliminary determination that the application meets the requirements for permit issuance.

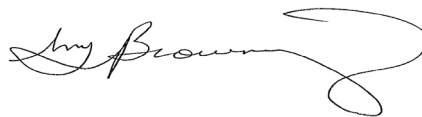
Respectfully submitted,

Texas Commission on Environmental Quality

Kelly Keel, Executive Director

Phillip Ledbetter, Director
Office of Legal Services

Charmaine Backens, Deputy Director
Environmental Law Division



Amy Browning, Acting Senior Attorney
Environmental Law Division
State Bar Number 24059503
PO Box 13087, MC 173
Austin, Texas 78711-3087

REPRESENTING THE EXECUTIVE
DIRECTOR OF THE TEXAS COMMISSION
ON ENVIRONMENTAL QUALITY