



July 1, 2024

Assistant Attorney General  
U.S Department of Justice, ENRD  
P.O. Box 7611  
Washington D.C., 20044-7611  
[pubcomment-ees.enrd@usdoj.gov](mailto:pubcomment-ees.enrd@usdoj.gov)

*Submitted via email*

**Re: *United States v. TPC Group LLC*, D.J. Ref. No. 90-5-2-1-12550**

To Whom It May Concern:

Air Alliance Houston appreciates the opportunity to submit public comments in response to the proposed consent decree lodged in *United States v. TPC Group LLC*, Civil Action No. 1:24-cv-00187 (hereafter, "Consent Decree").<sup>1</sup> This Consent Decree addresses violations of Clean Air Act requirements related to the manufacture, storage, and transfer of hazardous chemicals at TPC Group LLC's ("TPC") facilities in Port Neches and Houston, Texas. These comments are timely filed in compliance with the July 1, 2024 deadline specified on EPA's website.<sup>2</sup>

**Background:** In November 2019, a catastrophic explosion at TPC's Port Neches 1,3 Butadiene manufacturing facility and terminal destroyed the facility's chemical production capacity and released 11 million pounds of air pollution, including hazardous air pollutants into surrounding communities. This disaster, the result of years of TPC negligence and repeated Clean Air Act violations, required the evacuation of approximately 50,000 people living within four miles of the facility and caused more than \$150 million in offsite property damage. Rather than rebuild lost manufacturing capacity at the Port Neches facility, TPC decided to expand its facility in Houston's highly populated east side. Upon inspection, EPA discovered many of the same Clean Air Act noncompliance problems at TPC's Houston facility that led to the destruction of the Port Neches facility. These Clean Air Act violations at TPC's Houston and Port Neches facilities culminated in criminal charges as well as a civil complaint. EPA and TPC have agreed to resolve violations alleged in the civil complaint through the proposed Consent Decree.

**Immediate Concerns/Summary:** Air Alliance Houston offers these comments in response to EPA's request for public input on the question of whether the Consent Decree is in the public interest and to propose modifications to the Consent Decree we believe are necessary to sufficiently mitigate the unacceptable public health and safety risks to hundreds of thousands of people posed by TPC's poorly operated and maintained Houston and Port Neches facilities.

1. **Houston Facility Expansion:** The Consent Decree allows TPC to proceed with plans to increase the Houston facility's 1,3 Butadiene production capacity before necessary safety

---

<sup>1</sup> The Consent Decree was notice at 89 Fed. Reg. 47178 (May 31, 2024).

<sup>2</sup> Available electronically at: <https://www.justice.gov/enrd/consent-decree/us-v-tpc-group-llc>

Everyone has a right to breathe clean air.

a: 2520 Caroline Street, Suite 100, Houston, TX 77004 | p: 713.528.3779 | w: [airalliancehouston.org](http://airalliancehouston.org)

improvement measures are complete. 1,3 Butadiene is an extremely explosive human carcinogen that caused the catastrophic explosion at TPC's Port Neches facility. TPC should not be allowed to replace 1,3 Butadiene production capacity destroyed by the Port Neches explosion at its Houston facility—abutting East Houston neighborhoods where hundreds of thousands of residents live, recreate, and attend school—unless and until TPC can demonstrate that its facility is safe. We propose specific changes to the Consent Decree below.

2. **Contributions to Surrounding Communities:** The Consent Decree does not require TPC to undertake or contribute to any projects improving and assisting people and communities harmed by its noncompliance in Houston and Port Neches. Civil penalties imposed by the Consent Decree will likely go unpaid due to TPC's bankruptcy, and the company declined to consider any Supplemental Environmental Projects ("SEP") as part of the Consent Decree. TPC's unwillingness to give back to the communities it has harmed indicates a culture that continues to value the bottom line over public safety and well-being. At the very least, the Consent Decree should require TPC to work with community leaders in Port Neches and Houston to develop SEPs in place of half of the proposed civil penalties.
3. **Language Access for Consent Decree Public Participation Requirements:** A majority of people living within four miles of TPC's Houston facility speak Spanish as their primary language. To ensure that public participation and information sharing requirements of the Consent Decree assist those living near TPC's facilities, public notifications and information publicizing public meetings and community engagement required—including requirements at Consent Decree ¶¶ 30(e), (f) and 32(b)—should be provided in both English and Spanish. Additionally, the Consent Decree should specify that information TPC is required to post to its public website must be posted in both English and Spanish.
4. **Use of Permits by Rule ("PBR") to Modify TPC's Houston Facility:** The Consent Decree requires TPC to notify the public about any modification to operations at the Port Neches facility 90 days prior to operation of that modification. Consent Decree ¶ 28(b). This requirement should not be limited to the Port Neches facility. TPC's failure to properly operate and maintain its Houston facility is no less a matter of concern to those living nearby just because it has not been destroyed by a catastrophic explosion. Accordingly, TPC should be required to notify the public of any planned modifications to the Houston facility. Moreover, TPC should not be allowed to use Texas PBRs to authorize any modifications to the Houston or Port Neches facilities. These authorizations do not require any public notice and fail to include monitoring requirements and public safety assurances appropriate for major facilities with longstanding and serious Clean Air Act compliance issues, like TPC's Houston and Port Neches facilities.

To serve the public interest, the Consent Decree must impose remedies for TPC's longstanding misconduct sufficient to force a change in company culture and lead to the prioritization of safe operation and community partnership. While the Consent Decree does require extensive changes at TPC's facilities, it currently falls short of this mark.

[Everyone has a right to breathe clean air.](#)

a: 2520 Caroline Street, Suite 100, Houston, TX 77004 | p: 713.528.3779 | w: [airalliancehouston.org](http://airalliancehouston.org)

**Air Alliance Houston and Existing Engagement Agreement for the Houston Facility:**

Air Alliance Houston is a Texas 501(c)(3) non-profit advocacy organization working to reduce public health impacts from air pollution and to advance Environmental Justice through applied research, education, and advocacy. Air Alliance Houston takes a strong stance against disproportionate exposure to air pollution by emphasizing an agenda centered on equity and Environmental Justice.

To that end, Air Alliance Houston participated in a contested case hearing before the Texas Commission on Environmental Quality (“TCEQ”) opposing the permit amendments referenced by Consent Decree ¶ 118, authorizing TPC’s Houston facility to increase its 1,3 Butadiene production capacity by 25 percent. In exchange for Air Alliance Houston’s withdrawal of its contested case hearing request, TPC agreed to the installation and operation of two additional gas chromatograph fenceline monitors and to the development of specific projects to improve the vent-gas recovery system at its Houston facility. (Attachment A) Engagement Agreement between TPC, Sierra Club, Air Alliance Houston, and Environmental Integrity Project, effective May 29, 2022. These actions are intended to improve the safety of operations at TPC’s Houston facility, reduce illegal pollution releases during emissions events, and to provide members of the affected public with data about elevated levels of 1,3 Butadiene at TPC’s fenceline. Air Alliance Houston is concerned that the Consent Decree’s deadlines and monitoring requirements do not consider TPC’s obligations under the Engagement Agreement and that significant actions required by the Consent Decree may already be required under the Engagement Agreement. EPA should not weaken the benefits Air Alliance Houston negotiated by allowing TPC to use Engagement Agreement obligations to remedy serious noncompliance with Clean Air Act requirements.

**TPC’s Long Record of Noncompliance:** TPC’s failure to maintain safe conditions at its aging Houston facility is not a new problem. In 2005, Texas Petrochemicals entered into an agreement with the City of Houston to reduce 1,3 Butadiene emissions from the Houston facility to avoid enforcement for unauthorized pollution releases after monitors detected elevated levels of the pollutant in the area surrounding the facility. Monitoring required by the agreement led to a sharp decrease in the amount of 1,3 Butadiene released by TPC and the nearby Goodyear synthetic rubber plant, but it did not address the root cause of the problem at TPC. Monitoring allowed for more expeditious repair of leaks as they occurred, but—as the findings that led to EPA’s current enforcement action show—the agreement did not lead to a change in culture at TPC necessary to maintain safe facilities. Indeed, after the term of the agreement ended and TPC switched to a less robust method of monitoring fenceline concentrations of 1,3 Butadiene, the city of Houston detected increases in pollutant concentrations near the plant. Recently, this increase led EPA to grant the City of Houston \$500,000 in taxpayer money to monitor hazardous air pollutant concentrations in the area. Additionally, TPC’s Houston facility has been the source of many serious illegal emission events and illegal excess emissions during routine operation due to poor design and upkeep of equipment. *See, e.g.,* Permit No. O1598 dated February 20, 2018, at 240-243 (establishing schedule to resolve noncompliance related to NO<sub>x</sub>, CO, O<sub>2</sub>, and VOC emissions from the Houston facility);<sup>3</sup> *see also* Permit Amendment Source Analysis & Technical Review,

---

<sup>3</sup> Available electronically at:

[https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ\\_EXTERNAL\\_SEARCH\\_GET\\_FILE&dID=5140946&Rendition=Web](https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=5140946&Rendition=Web)

Project Nos. 312938, 312937, 312936, and 315541 (acknowledging project to address ongoing noncompliance with PM limits for two of TPC’s heat recovery boilers).<sup>4</sup>

**Environmental Justice Concerns:** The 2019 explosion at TPC’s Port Neches facility resulted in the mandatory evacuation of approximately 50,000 people living within four miles of the plant. By way of contrast, approximately 204,000 people live within four miles of TPC’s Houston facility. TPC’s Risk Management Plan for the Houston facility indicates that an explosion of a single 1,3 Butadiene storage tank at this facility could release a vapor cloud explosion with a blast radius of 1.7 miles.<sup>5</sup> Approximately 29,000 people live within 1.7 miles of TPC’s Houston facility, (Attachment B) EJScreen Community Report, and there are at least eight schools located within this distance: Ceasar Chavez High School, Park Place Elementary School, Raul Yzaguirre School for Success, Deady Middle School, Rucker Elementary School, Patterson Elementary School, Bonner Elementary School, and Milby High School. According to EPA’s EJScreen tool, those living within four miles of the Houston facility are 51% low income, 93% people of color, with only 29% of households speaking English as their primary language. *Id.* As demonstrated by Table 1 below, this population is overburdened by industrial pollution and subject to an elevated risk of catastrophic events at facilities subject to Clean Air Act Risk Management Plan requirements as compared to state and national averages.

**Table 1: EJScreen Environmental Indicators Data**

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
Particulate Matter (µg/m3)	10.1	9.11	81	8.08	91
Ozone (ppb)	69.2	64.6	81	61.6	92
Diesel Particulate Matter (µg/m3)	0.425	0.218	95	0.261	86
Air Toxics Cancer Risk* (lifetime risk per million)	42	28	89	25	94
Air Toxics Respiratory HI*	0.41	0.3	80	0.31	70
Toxic Releases to Air	79,000	12,000	96	4,600	99
Traffic Proximity (daily traffic)	300	150	88	210	83

<sup>4</sup> Available electronically at:

[https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ\\_APD\\_SEARCH\\_GET\\_FILE&xAPDParent=6112316](https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_APD_SEARCH_GET_FILE&xAPDParent=6112316)

<sup>5</sup> TPC has represented that it operates 13 tanks for the storage of 1,3 Butadiene at the Houston facility with the collective capacity to store 50,363,000 pounds of the chemical. (Attachment C) TPC Group LLC’s Responses to Protestants’ First Set of Written Discovery at 9, SOAH Docket No. 582-22-0799, TCEQ Docket No. 2021-1422-AIR, dated April 7, 2022. TPC’s Risk Management Plan does not characterize the increased damage that would be caused by an explosion involving more than one of these tanks.

Everyone has a right to breathe clean air.

a: 2520 Caroline Street, Suite 100, Houston, TX 77004 | p: 713.528.3779 | w: [airalliancehouston.org](http://airalliancehouston.org)

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
count/distance to road)					
Lead Paint (% Pre-1960 Housing)	0.47	0.17	87	0.3	71
Superfund Proximity (site count/km distance)	0.36	0.085	96	0.13	92
RMP Facility Proximity (facility count/km distance)	2.5	0.63	96	0.43	97
Hazardous Waste Proximity (facility count/km distance)	4	0.75	97	1.9	86
Underground Storage Tanks (count/km <sup>2</sup> )	4.9	2.3	85	3.9	77
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.011	0.91	72	22	68

Given that the populations harmed by TPC’s noncompliance at its Houston facility consist primarily of politically marginalized and underserved people who are already disproportionately burdened by public health and safety risks related to industrial pollution, this case squarely raises concerns about Environmental Justice. Despite TPC’s longstanding serious noncompliance with Clean Air Act requirements, TPC’s compliance rating with the TCEQ is listed as “satisfactory.”<sup>6</sup> When organizations challenging TPC’s recent application for authorization to construct a major expansion of the Houston facility challenged the application on the basis of this noncompliance, the TCEQ said that it did not have authority to consider potential disaster risks or past noncompliance as part of the permitting process. This is so, even though the TCEQ’s federally-approved regulations provide that no major modification of a source in a nonattainment area may be approved unless the application “demonstrate[s] that the benefits of the proposed location and source configuration significantly outweigh the environmental and social costs of that location.” 30 Tex. Admin. Code § 116.150(d)(4).

The State of Texas has failed to protect Environmental Justice communities surrounding TPC’s Texas facilities. Accordingly, EPA “should not hesitate to step in and take necessary action .... To ensure the protection of communities regardless of where a person lives.” *Strengthening*

<sup>6</sup> Compliance History ratings for entities identified as owners or operators of TPC’s Houston Plant are available electronically at:

<https://www2.tceq.texas.gov/occe/ch/index.cfm?fuseaction=main.viewdetails&rid=534399762001134>

*Enforcement in Communities with Environmental Justice Concerns*, Memorandum, Lawrence E. Starfield, Acting Assistant Administrator, EPA, dated April 30, 2021.<sup>7</sup> Those living near TPC's Houston facility are subject to elevated environmental risk relative to the national average for every indicator listed in EPA's EJScreen reports. EPA's decision to settle this enforcement action without requiring TPC to cease operations at its Houston facility, and, indeed, without prohibiting the facility's expansion until safety concerns about existing operations are resolved, fails to ensure protection of those living near the Houston facility. Air Alliance Houston is skeptical that a facility endangering a more economically advantaged majority white community would receive the same luxury. It is the federal government's duty to step in and to provide the public with a remedy that sufficiently eliminates unreasonable and inequitably distributed risks, punishes misconduct that endangers the health and well-being of hundreds of thousands of people, and sends a message to industry that public safety must come first. Even in Texas.

**Conclusion and Recommendations:** Air Alliance Houston appreciates EPA's attempt to craft an ambitious settlement agreement with TPC to require real improvements to TPC's Houston and Port Neches facilities and to reduce the risk of catastrophic events at these facilities. However, we ultimately believe that the Consent Decree is not in the public interest. TPC's criminally negligent actions have already resulted in catastrophic damage to surrounding communities. In addition to the more than one hundred million dollars in off-property damage caused by the Port Neches explosion, TPC's mismanagement of its Houston and Port Neches facilities—facilities that produce and handle particularly dangerous chemicals, including the carcinogenic and highly-explosive 1,3 Butadiene—have led to repeated illegal releases of pollution during repeated emissions events and illegal releases of pollution due to the company's failure to comply with permit limits and pollution control requirements during routine operations. These illegal pollution releases have caused and increased the risk of serious negative health consequences for the many tens of thousands of people who live, work, and attend school near TPC's facilities. These physical harms are in addition to the physical and psychological harms resulting from the continuous and well-founded fear experienced by many of these people that they are being harmed by the air they breathe and that their families are at risk of being killed or seriously injured by another catastrophic event at TPC's poorly maintained and operated facilities.

The Consent Decree does not adequately account for the seriousness of these harms to Environmental Justice communities, which will continue regardless of whether another catastrophic event occurs. Moreover, the Consent Decree fails to reflect the seriousness of TPC's violations by not only allowing TPC to continue operating its manufacturing activities at its Houston facility but also to allow the facility to increase its 1,3 Butadiene production capacity before demonstrating that the facility can safely operate at its current production capacity.

At the very least, the Consent Decree should be modified to prohibit TPC from increasing its production capacity until it has completed all PHA actions with a red or orange risk level as required by ¶ 18, completed the Relief System Design Audit and Repair process required by Consent Decree ¶ 29, installed and begun operation of new monitors required by Consent Decree ¶ 30 and the Engagement Agreement, and implemented improvements identified through the Inherently Safer Technology Review required by Consent Decree ¶ 31. TPC should have already

---

<sup>7</sup> Available electronically at: <https://www.epa.gov/sites/production/files/2021-04/documents/strengtheningenforcementincommunitieswiththejconcerns.pdf>

made significant progress on tasks related to increased monitoring and improvement of its relief system pursuant to its commitments in the Engagement Agreement. These improvements are necessary to ensure that the operation of TPC's Houston facility does not pose an unreasonable risk to the hundreds of thousands of Houstonians who live, work, and attend school near the facility. If TPC's base facility is unsafe, allowing it to operate an increase to its production capacity is unreasonable and not in the public interest.

While prohibiting the authorized increase to the Houston facility's production capacity may seem like a drastic measure, it is consistent with the risk to public health and safety posed by the Houston facility and justified by the seriousness of the violations TPC has committed. This prohibition is also consistent with other provisions in the Consent Decree and with the TCEQ's own disaster review process. For example, the Consent Decree's Management of Change provisions at ¶ 21(e) prohibit the operation of changes to TPC's Houston facility prior to the completion of planning and training procedures required by 40 C.F.R. § 68.75. These procedures are necessary to ensure that staff at TPC are prepared to safely operate changes to equipment at the Houston facility before undertaking such operations. It is just as important for the EPA and TPC to ensure that equipment at the Houston facility is operating properly and is sufficient to support proposed changes before allowing TPC to operate at an increased production capacity. The TCEQ's disaster review fact sheet provides that facilities handling dangerous chemicals at quantities that are highly toxic to human life and health, easily volatilized by fire, and where an equipment malfunction or operating error could cause emissions with disastrous impacts off-plant must demonstrate that abatement equipment and response action plans are sufficient to mitigate the risk of disaster posed by the operation. The fact sheet states that "[i]f the effects of a catastrophic release cannot be mitigated due to the proximity of citizens and the nature of the project, the agency may recommend that the permit not be issued." The same principle should guide EPA's consideration of the appropriate remedy in this case. Until TPC can assure the agency and the public that its facilities are safe, appropriately controlled and maintained, and that monitoring exists that is sufficient to detect dangerous leaks, TPC should not be allowed to increase the risk to the public posed by its facilities by increasing the amount of toxic and/or explosive chemicals it stores and manufactures.

In conclusion, Air Alliance Houston urges EPA to modify the Consent Decree to prohibit TPC from increasing its 1,3 Butadiene production capacity at its Houston facility until all necessary safety improvements are completed, to require TPC to contribute to community improvement projects, to ensure public participation information is available in both English and Spanish, and to mandate public notification prior to any modifications to TPC's Houston or Port Neches facilities. These changes are essential to protect the health and safety of the hundreds of thousands of people living near TPC's poorly maintained facilities. We appreciate the EPA's efforts to address these serious concerns and thank you for your attention to this matter.

Sincerely,

/s/ Gabriel Clark-Leach

Gabriel Clark-Leach

6905 Vassar Drive

Austin, Texas 78723

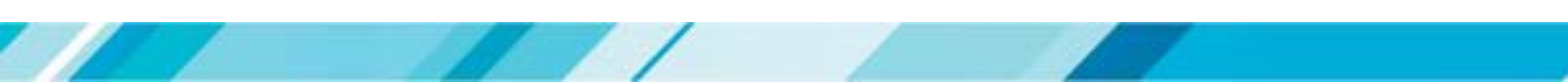
(425) 381.0673

[homunculus@gmail.com](mailto:homunculus@gmail.com)

*Attorney for Air Alliance Houston*

Everyone has a right to breathe clean air.

a: 2520 Caroline Street, Suite 100, Houston, TX 77004 | p: 713.528.3779 | w: [airalliancehouston.org](http://airalliancehouston.org)





**ATTACHMENT A**  
**ENGAGEMENT AGREEMENT**

## ENGAGEMENT AGREEMENT

This Engagement Agreement (“Agreement”) is made by and among TPC Group LLC (“TPC”), on one hand, and the Sierra Club, Air Alliance Houston, and the Environmental Integrity Project, on the other hand, to be effective this 29th day of May, 2022 (the “Effective Date”).

### **Recitals:**

WHEREAS, TPC owns and operates a petrochemical production facility located at 8600 Park Place Blvd. in Houston, Harris County, Texas (the “Houston Plant”); and

WHEREAS, TPC has submitted air permit applications to the Texas Commission on Environmental Quality (“TCEQ”) for two separate projects at the Houston Plant, namely, the applications for a 1,3-butadiene expansion and reliability project (the “BD Project”) were submitted on March 5, 2020, and thereafter supplemented, and the applications to increase particulate matter emissions at boilers 505 and 506 and debottleneck the dehydro unit (the “DH2 Project,” which together with the BD Project is referred to as the “Projects”) were submitted on May 5, 2020, and thereafter supplemented (collectively, the “Applications”);

WHEREAS, the air quality permits sought for the BD Project are TCEQ Air Quality Permit Numbers 22052, PSDTX1578, N286, GHGPSDTX201, 46307, PSDTX1580, N288, GHGPSDTX202, 46426, PSDTX999M1, N290, and GHGPSDTX203, and the air quality permit sought for the DH2 Project are TCEQ Air Quality Permit Numbers 19806 and PSDTX1586;

WHEREAS, the Sierra Club, Air Alliance Houston, and the Environmental Integrity Project sought to participate in the TCEQ’s consideration of the Applications through the filing of public comments, requests for a public meeting, and/or requests for contested case hearing;

WHEREAS, TPC directly referred the Applications to the State Office of Administrative Hearings (“SOAH”) for a contested case hearing in the matter assigned SOAH Docket No. 582-22-0799 and TCEQ Docket No. 2021-1422-AIR (the “Hearing”); and

WHEREAS, the Environmental Integrity Project requested party status for Sierra Club and Air Alliance Houston, and Sierra Club and Air Alliance Houston were granted party status to protest the Applications in the Hearing; and

WHEREAS, the authorizations sought by TPC are reflected in the terms of final draft permits prepared by the TCEQ, which were admitted as Applicant’s Exhibit C Administrative Record (“AR”) Tab H at 0052-0083; AR Tab H at 0039-0051; AR Tab H at 0019-0038; AR Tab H at 0088-0109 at the Hearing (the “Draft Permits”); and

WHEREAS, the parties believe it is in their collective interest to settle and resolve the protests to the BD Project and DH2 Project, and further support efforts to monitor and lower emissions at the Houston Plant.

### **Terms of Agreement:**

NOW, THEREFORE, in consideration of the agreements set forth herein, and to compromise, settle, release and resolve the requests for party status, protests, claims, and comments of the Environmental Integrity Project, Sierra Club, and Air Alliance Houston, from, related to or concerning the Applications, the Projects, or the Draft Permits, the Parties agree as follows:

## **I. Applicant's Obligations**

### **a. Fenceline Monitoring System Additions**

1. TPC commits to the installation of two additional gas chromatograph (GC) fenceline monitors equivalent to the current system to monitor 1,3 butadiene concentrations along the Houston Plant's North and South fencelines at the approximate locations identified in Exhibit A. The two additional fenceline monitors will be installed and operational within 36 months of TPC's receipt of final and unappealable permits in substantially the form of the Draft Permits (the "Final Permits"). TPC also commits to operating the fenceline monitoring system for a period of 5 years from the date that the two additional fenceline monitors are operational.

2. TPC commits to making fenceline system information available to a designated representative of Environmental Integrity Project, Sierra Club, and Air Alliance Houston for use by its membership by issuing a quarterly fenceline system data summary report for a period of 5 years from the date that the two additional fenceline monitors are operational. TPC will issue the report within 30 days of last day of quarter. The contents of the fenceline system data summary report are identified in Exhibit B.

### **b. Specific Projects for Emissions Prevention and Upset Avoidance**

1. TPC commits to the development of specific projects for the vent-gas recovery system for continued reliability improvement, identifying advanced instrumentation and operational/safety systems redundancy. The focus of the specific projects is on emissions prevention and upset avoidance. TPC commits to installation and operation of the following specific projects within 48 months of the receipt of the Final Permits:

- i. Purchase of spare heat transfer equipment to minimize impact to system capacity during normally scheduled maintenance cleaning activities.
- ii. Implementation of higher efficiency/capacity water entrainment hardware for compressors #5, #6 and #7.
- iii. Evaluate and upgrade, as appropriate, the vent systems for tanks in high concentration butadiene service to minimize flaring.

2. TPC may propose one or more specific projects as an alternative to the specific projects identified in Section I(b)(1)(i)-(iii) with the same focus. Environmental Integrity Project, Sierra Club, and Air Alliance Houston shall review and approve such alternative proposals from TPC within 30 days if they are reasonably designed to achieve substantially equivalent results.

### **c. Annual Status Report**

TPC will provide an update summary annually to inform Parties of the status of the installation of the fenceline monitoring system additions and specific projects described in Sections I(a) and I(b) for a period of five years from the receipt of the Final Permits. The annual update will be provided to the designated representative of Environmental Integrity Project, Sierra Club, and Air Alliance Houston noted above by January 31.

### **d. Engagement Meeting**

The Parties will jointly hold one in-person meeting with representatives of the Environmental Integrity Project, Sierra Club, and/or Air Alliance Houston and members of the local community at a location near the Houston Plant to discuss TPC's commitments in this Agreement. Sierra

Club, Air Alliance Houston, and TPC will confer together to identify a mutually agreeable agenda for the meeting, the location of the meeting, the number of participants (not to exceed 20 unless otherwise agreed to by TPC), to identify speakers for the meeting and how questions will be addressed, as well as the terms of any promotion for the meeting. It is the Parties' expectation that media will not participate in the meeting and no participant will record or use social media at the meeting. The meeting location shall be paid for by TPC and conducted within 90 days after the receipt of the Final Permits.

**e. Conditions Precedent**

The commitments of TPC identified in Section I are conditioned on the receipt by TPC of the following: (i) a signed motion for leave to withdraw party status and notice of withdrawal in the form described in Section II, and (ii) receipt of final and unappealable permits in substantially the form of the Draft Permits (the "Final Permits") following posting on the Executive Director's uncontested agenda.

**II. Protestants' Obligations**

**a. Withdrawal of Requests for Party Status**

Environmental Integrity Project, Sierra Club and Air Alliance Houston agree to withdraw their party status in the Hearing on the Applications and their comments on the Applications, as applicable, and consent to the issuance of the Final Permits as uncontested permits by the Executive Director of the TCEQ. Concurrently with the execution of this Agreement, Environmental Integrity Project, Sierra Club and Air Alliance Houston will deliver to TPC a motion for leave to withdraw party status, in the form attached as Exhibit C hereto, and a notice of withdrawal, in the form attached as Exhibit D hereto, for filing with SOAH and the TCEQ.

**b. Future Cooperation**

Environmental Integrity Project (on its own behalf), Sierra Club, and Air Alliance Houston also agree that they will not submit additional comments, requests for hearing or meeting, motions to overturn or reconsider, or administrative or judicial appeals to any government agency regarding the Applications, the Draft Permits or Final Permits; or, unless TPC has substantially failed to comply with the Final Permits or the Final Permits have been substantially modified after their initial issuance; the next renewal of the Final Permits; or the incorporation of changes authorized in the Final Permits into TPC's Title V Federal Operating Permit No. O1598.

**III. General Provisions**

**a. Notices**

All notices and communications required or permitted to be given hereunder shall be in writing and shall be delivered personally, or sent by overnight courier, or mailed by U.S. certified mail, or by email followed by U.S. mail, addressed to the appropriate party at the address for such party shown below:

As to TPC:

Brett Ross  
Associate General Counsel and Director of Compliance  
TPC Group  
One Allen Center  
500 Dallas Street, Suite 2000  
Houston, Texas 77002  
Telephone: 713.840.2416  
Brett.Ross@tpcgrp.com

and

Derek R. McDonald  
Baker Botts LLP  
98 San Jacinto Blvd., Suite 1500  
Austin, Texas 78701-4039  
Telephone: 512.322.2500  
derek.mcdonald@bakerbotts.com

As to Environmental Integrity Project and Air Alliance Houston:

Gabriel Clark-Leach  
Environmental Integrity Project  
1206 San Antonio St.  
Austin, Texas 78701  
Telephone: 425.381.0673  
gclark-leach@environmentalintegrity.org

As to Sierra Club:

Aaron Isherwood  
Coordinating Attorney  
Sierra Club  
2010 Webster St., Suite 1300  
Oakland, CA 94612  
Telephone: 415.977.5680

---

The parties hereto may change the named recipient, address, telephone numbers, and email addresses to which such communications are to be addressed by giving written notice in the manner provided in this provision.

**b. Formal Press Releases.** Air Alliance Houston shall use its best efforts to provide advance notice of two business days of its intent to issue a formal press release together with a copy of the proposed

press release and shall correct any factual errors identified by TPC within one business day to such press release before issuance to align with the content of the Agreement.

**c. Authority/Binding Effect.** The persons below signing for the Parties certify that he or she has the authority to bind his or her respective entity to this Agreement.

**d. Default and Remedies**

1. Each Party shall endeavor to comply with the terms of this Agreement in good faith. In the event any Party breaches or defaults on any of its obligations under this Agreement, the non-breaching Party shall, upon discovery thereof, give written notice of such breach or default. The notified Party shall have thirty (30) days following receipt of the notice to cure the breach or default.

2. In the event that the notified Party fails or refuses to timely cure such breach or default, the non-breaching Party shall then be entitled at its option to: (i) seek specific performance; and/or (ii) terminate the Agreement.

**e. Entire Agreement.** This Agreement embodies and constitutes the entire understanding between TPC, Environmental Integrity Project, Sierra Club and Air Alliance Houston with respect to the transactions contemplated by this Agreement, and all prior contemporaneous agreements, understandings, representations and statements, oral or written, are merged into this Agreement.

**f. Multiple Counterparts; Signature.** This Agreement may be executed in any number of identical counterparts, each of which for all purposes is deemed an original, and all of which constitute collectively one agreement. All parties agree that original signatures are not necessary for this Agreement. The parties have agreed to execute this Agreement independently and deliver the executed Agreement by any practical means, including facsimile transmission.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective for all purposes as of the Effective Date.

**TPC GROUP LLC**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**ENVIRONMENTAL INTEGRITY PROJECT**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**SIERRA CLUB**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**AIR ALLIANCE HOUSTON**

By: *Jennifer Hadayia*  
Name: Jennifer M. Hadayia, MPA  
Title: Executive Director

**Figure 1: TPC Houston - Site Map with Air Monitoring Stations**





## **Quarterly Fenceline System Data Summary Report**

- Cover letter for Quarterly Fenceline System Data Summary Report
- Criteria for Measurement of Data
- Instrument Operating Protocols
- Monthly Activities for each fenceline monitor
  - Details of when ambient data is unavailable for the monitor (e.g., software updates, system reboots)
- Quality Control Data
  - Multipoint calibrations, calibration checks and butadiene monthly data capture and meteorological data capture
- Monthly and Life to Date average concentrations of butadiene for each fenceline monitor
- Chart summarizing the Milby Park and Chavez monitoring station alerts received in TPC wind bins
- Review of fenceline hourly concentrations greater than 25 ppb butadiene
  - Details of site actions and identification of potential sources

**ATTACHMENT B**  
**EJSCREEN COMMUNITY REPORT**



# EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

## Houston, TX

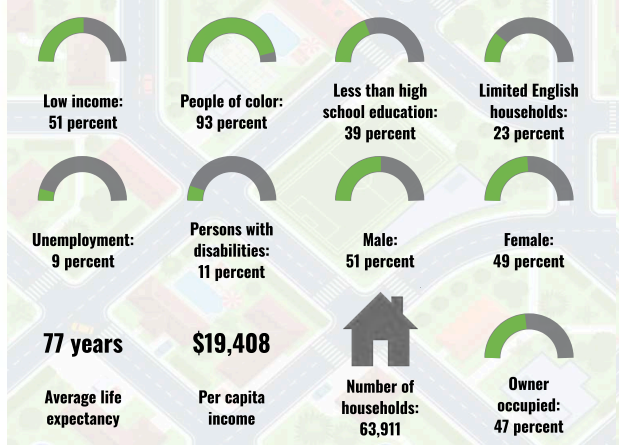
4 miles Ring Centered at 29.701810,-95.256069

Population: 204,536

Area in square miles: 50.26



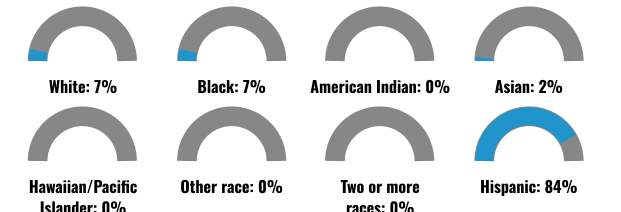
### COMMUNITY INFORMATION



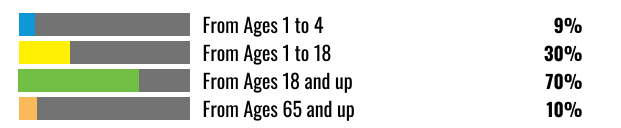
### LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	29%
Spanish	69%
Vietnamese	1%
Total Non-English	71%

### BREAKDOWN BY RACE



### BREAKDOWN BY AGE



### LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

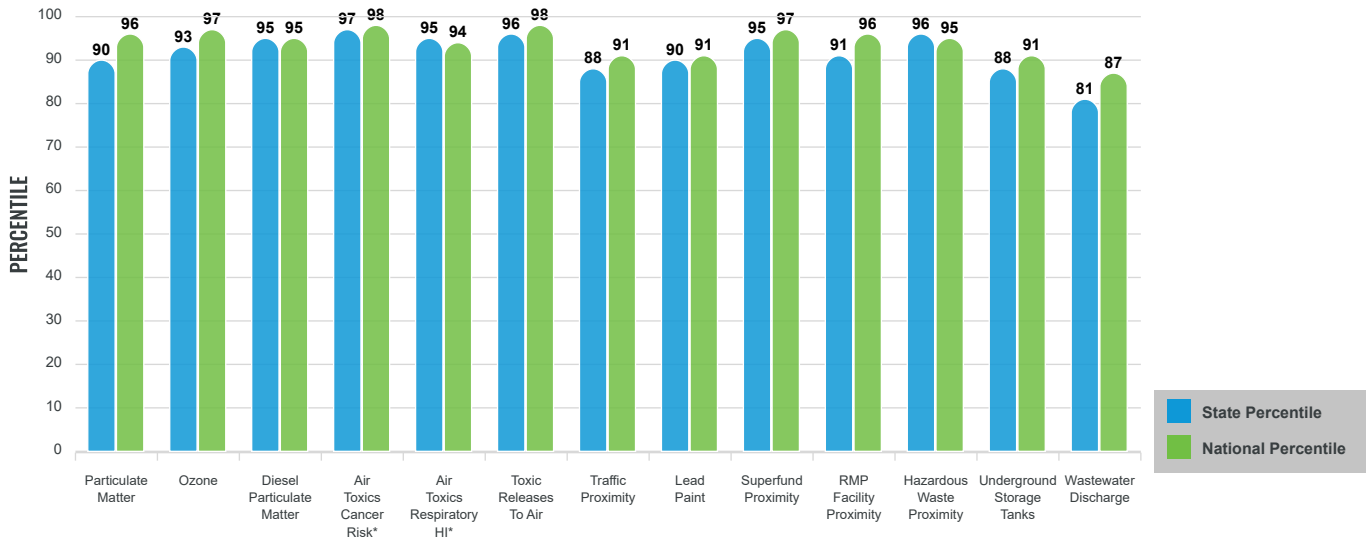
# Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

## EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

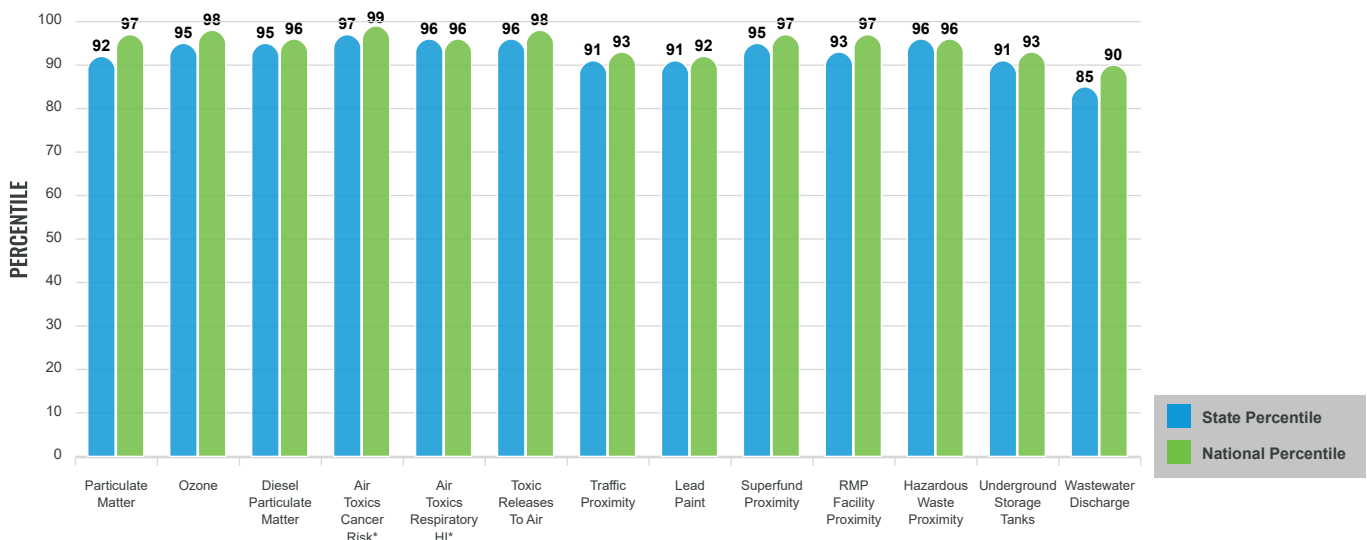
### EJ INDEXES FOR THE SELECTED LOCATION



## SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 4 miles Ring Centered at 29.701810,-95.256069

# EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
<b>POLLUTION AND SOURCES</b>					
Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	10.1	9.11	81	8.08	91
Ozone (ppb)	69.2	64.6	81	61.6	92
Diesel Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	0.425	0.218	95	0.261	86
Air Toxics Cancer Risk* (lifetime risk per million)	42	28	89	25	94
Air Toxics Respiratory HI*	0.41	0.3	80	0.31	70
Toxic Releases to Air	79,000	12,000	96	4,600	99
Traffic Proximity (daily traffic count/distance to road)	300	150	88	210	83
Lead Paint (% Pre-1960 Housing)	0.47	0.17	87	0.3	71
Superfund Proximity (site count/km distance)	0.36	0.085	96	0.13	92
RMP Facility Proximity (facility count/km distance)	2.5	0.63	96	0.43	97
Hazardous Waste Proximity (facility count/km distance)	4	0.75	97	1.9	86
Underground Storage Tanks (count/km <sup>2</sup> )	4.9	2.3	85	3.9	77
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.011	0.91	72	22	68
<b>SOCIOECONOMIC INDICATORS</b>					
Demographic Index	72%	46%	83	35%	91
Supplemental Demographic Index	29%	17%	87	14%	93
People of Color	93%	58%	83	39%	91
Low Income	51%	34%	75	31%	82
Unemployment Rate	9%	5%	78	6%	77
Limited English Speaking Households	23%	8%	89	5%	94
Less Than High School Education	39%	16%	88	12%	95
Under Age 5	9%	6%	72	6%	79
Over Age 64	10%	14%	38	17%	25
Low Life Expectancy	19%	20%	43	20%	49

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

**Sites reporting to EPA within defined area:**

Superfund .....	2
Hazardous Waste, Treatment, Storage, and Disposal Facilities .....	24
Water Dischargers .....	504
Air Pollution .....	63
Brownfields .....	19
Toxic Release Inventory .....	58

**Other community features within defined area:**

Schools .....	65
Hospitals .....	4
Places of Worship .....	118

**Other environmental data:**

Air Non-attainment .....	Yes
Impaired Waters .....	Yes

Selected location contains American Indian Reservation Lands* .....	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community .....	Yes
Selected location contains an EPA IRA disadvantaged community .....	Yes

Report for 4 miles Ring Centered at 29.701810, -95.256069

## EJScreen Environmental and Socioeconomic Indicators Data

### HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	19%	20%	43	20%	49
Heart Disease	5.9	5.9	49	6.1	46
Asthma	9.1	9.2	43	10	25
Cancer	3.7	5.2	18	6.1	8
Persons with Disabilities	9.8%	12.3%	38	13.4%	31

### CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	8%	10%	68	12%	58
Wildfire Risk	0%	30%	0	14%	0

### CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	19%	15%	69	14%	72
Lack of Health Insurance	33%	18%	90	9%	98
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Report for 4 miles Ring Centered at 29.701810,-95.256069

**ATTACHMENT C**  
**TPC DISCOVERY RESPONSES**

**SOAH DOCKET NO. 582-22-0799  
TCEQ DOCKET NO. 2021-1422-AIR**

<b>APPLICATION OF TPC GROUP</b>	§	
<b>LLC FOR NEW STATE AND</b>	§	
<b>PREVENTION OF SIGNIFICANT</b>	§	<b>BEFORE THE STATE OFFICE</b>
<b>DETERIORATION AIR QUALITY</b>	§	
<b>PERMITS NOs. 22052, PSDTX1578,</b>	§	<b>OF</b>
<b>N286, GHGPSDTX201, 46307,</b>	§	
<b>PSDTX1580, N288, GHGPSDTX202,</b>	§	<b>ADMINISTRATIVE HEARINGS</b>
<b>46426, PSDTX999M1, N290,</b>	§	
<b>GHGPSDTX203, 19806 and</b>	§	
<b>PSDTX1586</b>	§	

---

**TPC GROUP LLC’S RESPONSES TO PROTESTANTS’  
FIRST SET OF WRITTEN DISCOVERY**

---

**TO: Sierra Club and Air Alliance Houston, by and through its representative Gabriel Clark-Leach, Environmental Integrity Project, 1206 San Antonio St., Austin, Texas 78701.**

Applicant TPC Group, LLC (“Applicant” or “TPC”) objects and responds to Protestants Sierra Club’s and Air Alliance Houston’s (collectively, “Protestants”) First Set of Discovery Requests pursuant to TEX. R. CIV. P. 196, 197 and 198.

Subject to and without waiving the following objections, documents responsive to Protestants’ requests for production will be made available through a secure File Transfer Protocol site or at the office of Baker Botts, L.L.P., 98 San Jacinto Blvd., Suite 1500, Austin, TX, 78701 on Friday, April 8, 2022, and in rolling productions promptly thereafter. Please contact Brian Lynch, Paralegal, at [brian.lynch@bakerbotts.com](mailto:brian.lynch@bakerbotts.com) or 512.322.2608 to arrange a time retrieve the documents.

All responses and objections are based on TPC’s investigation to date. TPC will amend or supplement these responses, to the extent necessary, in accordance with the Texas Rules of Civil Procedure.

TPC is producing copies of written documents or tangible things within its possession, custody or control, subject to its objections and claims of privilege. TPC is not producing documents in the possession, custody or control of others.



## I. GENERAL OBJECTIONS

TPC hereby incorporates by reference into each of TPC's responses as if fully set out in each response:

1. TPC objects to the Requests for Production, Interrogatories and Requests for Admission to the extent they seek to impose obligations on TPC beyond what is required by the Texas Rules of Civil Procedure, State Office of Administrative Hearing ("SOAH") rules, or any other applicable rules.
2. TPC objects to the Requests for Production, Interrogatories and Requests for Admission to the extent they seek information that is neither relevant to the subject matter of this contested case hearing, nor reasonably calculated to lead to discovery of relevant or admissible evidence. TPC's production of, or agreement to produce, any document is not an admission that the document is either relevant or admissible.
3. TPC objects to any Requests for Production, Interrogatories and Requests for Admission that seek information protected from discovery by applicable privileges. Specifically, TPC objects to the extent any Requests for Production, Interrogatories and Requests for Admission seek information protected by the attorney-client privilege, attorney work-product doctrine, and/or any other applicable privilege. TPC will not produce such documents or provide such information. Inadvertent disclosure of such documents shall not constitute waiver of the applicable privilege, and TPC reserves its right to recall any such information produced through inadvertence.
4. TPC objects to the Requests for Production, Interrogatories and Requests for Admission to the extent they seek information not in TPC's possession, custody, or control.
5. TPC objects to the Requests for Admission, Interrogatories and Requests for Production to the extent that they seek information that is readily available from another source that is equally convenient, less burdensome, or less expensive, including information that is available from public or commercial sources (such as agency files and publicly-available databases) and other information to which Protestants have equal access.
6. If a document is responsive to more than one request, it will only be produced once and should be considered responsive to each request seeking the document.
7. TPC objects to the Requests for Production to the extent that they seek production of all metadata associated with the electronically stored information produced in response to these requests, as production of all metadata for all electronically stored documents is overbroad, unduly burdensome and may contain privileged information.
8. TPC objects to the Requests for Production to the extent that they seek production of electronically stored documents or information in native format, as production in this format precludes the use of Bates numbers or other methods of specifically marking electronic documents for identification and authentication purposes, precludes the parties' ability to redact privileged information from electronic documents to be produced, and does not permit the application of proper confidentiality designations to the face of a document.

9. TPC objects to the Requests for Production to the extent that they seek production of electronically stored documents or information contained in legacy systems or disaster recovery or archival backup tapes, and to production of deleted or fragmented data, on the grounds that such information is not reasonably available in the ordinary course of business.

## II. OBJECTIONS TO DEFINITIONS

TPC makes the following objections to Protestants' definitions. Each of the following objections is hereby incorporated by reference into each of TPC's responses as if fully set out in each response.

1. As used herein, the terms "you," "your," "applicant" or "TPC" shall mean Applicant TPC Group LLC and its respective attorneys, agents, employees, consultants, experts, contractors, and/or representatives.

### **RESPONSE:**

TPC objects to this definition as overbroad and unduly burdensome. TPC further objects to "representatives" as vague. The applicant in this proceeding is TPC. Discovery responses are therefore limited to information that is within the possession, custody, or control of TPC, and not its agents or representatives.

11. The term "Butadiene Expansion Project" refers to any and all construction of new facilities, physical or operational changes involving existing facilities, and changes to existing representations or permit terms in TCEQ air quality permits for the Houston Plant proposed in TPC's applications for TCEQ Air Quality Permit Numbers 46307, PSDTX1580, N288, GHGPSDTX202, 46426, PSDTX999M1, N290, GHGPSDTX203, 22052, PSDTX1578, N286, and GHGPSDTX201 filed on March 5, 2020 and reflected by Draft Permit Nos. 46307, PSDTX1580, N288, GHGPSDTX202, 46426, PSDTX999M1, N290, GHGPSDTX203, 22052, PSDTX1578, N286, GHGPSDTX201. This term also refers to changes to the Houston Plant that will not be authorized by these Draft Permits that are necessary to realize the business purpose of the butadiene capacity increase and reliability improvement project described by these applications.

### **RESPONSE:**

TPC objects to the inclusion of "changes to the Houston Plant that will not be authorized by these Draft Permits that are necessary to realize the business purpose of the butadiene capacity increase and reliability improvement project described by these applications," because such information is, by definition, not part of the applications or Draft Permits and is therefore not relevant to this contested case hearing. TPC will thus use the term "Butadiene Expansion Project" to refer to the construction of new facilities, physical or operational changes involving existing facilities, and changes to existing representations or permit terms in TCEQ air quality permits for the Houston Plant proposed in TPC's applications for TCEQ Air Quality Permit Numbers 46307, PSDTX1580, N288, GHGPSDTX202, 46426, PSDTX999M1, N290, GHGPSDTX203, 22052, PSDTX1578,

N286, and GHGPSDTX201 filed on March 5, 2020 and reflected by Draft Permit Nos. 46307, PSDTX1580, N288, GHGPSDTX202, 46426, PSDTX999M1, N290, GHGPSDTX203, 22052, PSDTX1578, N286, GHGPSDTX201.

12. The term “DH2 Heat Recovery Project” refers to any and all construction of new facilities, physical or operational changes involving existing facilities, and changes to existing representations or permit terms in TCEQ air quality permits for the Houston Plant proposed in TPC’s application for TCEQ Air Quality Permit Numbers 19806 and PSDTX1586 filed on May 5, 2020 and reflected by Draft Permit Nos. 19806 and PSDTX1586. This term also refers to changes to the Houston Plant that will not be authorized by these Draft Permits that are necessary to realize the business purpose of addressing particulate matter compliance issues with Boilers 505 and 506, debottlenecking the Dehydro 2 Unit and other miscellaneous changes described by the application.

**RESPONSE:**

TPC objects to the inclusion of “addressing particulate matter compliance issues with Boilers 505 and 506, debottlenecking the Dehydro 2 Unit and other miscellaneous changes described by the application,” because such information is, by definition, not part of the applications or Draft Permits and is therefore not relevant to this contested case hearing. TPC will thus use the term “DH2 Heat Recovery Project” to refer to construction of new facilities, physical or operational changes involving existing facilities, and changes to existing representations or permit terms in TCEQ air quality permits for the Houston Plant proposed in TPC’s application for TCEQ Air Quality Permit Numbers 19806 and PSDTX1586 filed on May 5, 2020 and reflected by Draft Permit Nos. 19806 and PSDTX1586

**TEX. R. CIV. P. 193.3 WITHHOLDING STATEMENT**

Information or material responsive to the Requests for Production has been withheld on the basis of TEX. R. CIV. P. 192.5, (“Work Product”), the attorney-client privilege, and designation as proprietary to third parties, or “Highly Sensitive Protected Materials”:

Work Product Privilege:  
Request Nos.:

Attorney-Client Privilege:  
Request Nos.: RFP 6, 14, 15

Highly Sensitive Protected Materials:  
Request Nos.:

## I. SPECIFIC OBJECTIONS AND RESPONSES

### REQUESTS FOR ADMISSION

**Request for Admission No. 1:** Please admit or deny that the letter included as Attachment A to Protestants' First Set of Discovery Requests to Applicant TPC Group LLC is a true and accurate copy of a letter dated November 6, 2019 signed by Michael Bankston and submitted to Ms. Amy Messick, Program Coordinator, Air Section, TCEQ Region 12.

**Response:** The objections stated in the "General Objections" section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC admits that Attachment A is a true and correct copy of a letter dated November 6, 2019 signed by Michael Bankston and submitted to Ms. Amy Messick, Program Coordinator, Air Section, TCEQ Region 12.

**Request for Admission No. 2:** Please admit or deny that the Inspection Reports included as Attachment B and Attachment C to Protestants' First Set of Discovery Requests to Applicant TPC Group LLC are true and accurate copies of an inspection reports concerning inspections carried out by EPA at the Houston Plant.

**Response:** In addition to the objections stated in the "General Objections" section, which are incorporated herein by reference, TPC objects to this Request as misleading and not reasonably calculated to lead to the discovery of admissible evidence. The request pertains to documents that (1) were not prepared by TPC, (2) are incomplete, and (3) relate to events or investigations that do not relate to federal or state requirements applicable to the applications and took place more than five years prior to the submission of the applications. Subject to, and without waiving the foregoing objections, TPC states that a reasonable inquiry was made but that the information known or easily obtainable is insufficient to enable the responding party to admit or deny the requests.

**Request for Admission No. 3:** Please admit or deny that the slideshow presentation included as Attachment D to Protestants' First Set of Discovery Requests to Applicant TPC Group LLC is a true and accurate copy of a slideshow presentation prepared by or for the TPC Group.

**Response:** In addition to the objections stated in the "General Objections" section, which are incorporated herein by reference, TPC objects to this Request as misleading and not reasonably calculated to lead to the discovery of admissible evidence. The request pertains to an undated slideshow presentation from 2011 that pertains to then prevailing business circumstances and does not relate to federal or state requirements applicable to the applications. Subject to, and without waiving the foregoing objections, TPC admits that Attachment D is a true and accurate copy of an undated TPC Group Inc. Slide Presentation (Exhibit 99.1) from 2011.

**Request for Admission No. 4:** Please admit or deny that the slideshow presentation included as Attachment E to Protestants' First Set of Discovery Requests to Applicant TPC Group LLC is a true and accurate copy of a slideshow presentation prepared by or for the TPC Group.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request as misleading and not reasonably calculated to lead to the discovery of admissible evidence. The request pertains to a June 2011 slideshow presentation that pertains to then prevailing business circumstances and does not relate to federal or state requirements applicable to the applications. Subject to, and without waiving the foregoing objections, TPC admits that Attachment E is a true and accurate copy of a June 2011 TPC Group Inc. Slide Presentation labeled Emissions Reductions TPC Group Houston Plant.

**Request for Admission No. 5:** Please admit or deny that, within the next five years, TPC plans to “[c]onstruct [a] new pressurized tank for additional BD storage,” Applicant’s Exhibit C, Tab D at 29.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC admits that TPC represented the construction of a “new pressurized tank for additional BD storage” in the application for Permit No. 46307 but denies that the construction of such tank is planned or needed as part of the BD Expansion Project.

**Request for Admission No. 6:** Please admit or deny that, within five years, TPC plans to increase the amount of 1,3 Butadiene that will be stored in existing tanks at the Houston Plant.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request as vague, misleading and not reasonably calculated to lead to the discovery of admissible evidence. The term “stored” is not defined, nor is it reasonably ascertainable in this context. TPC denies that it plans to increase the storage capacity for 1,3 Butadiene at the Houston Plant.

**Request for Admission No. 7:** Please admit or deny that “dehydro assets located within TPC’s Houston Plant ... can convert natural gas liquids into ... butadiene and isobutylene,” as stated in on page 29 of Attachment D to Protestants’ First Set of Discovery Requests to Applicant TPC Group LLC.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request as vague, misleading and not reasonably calculated to lead to the discovery of admissible evidence. TPC interprets the word “can” to mean that such conversion is both technically feasible and legally authorized. Subject to these objections, TPC admits that the DH2 Unit located within TPC’s Houston Plant can convert natural gas liquids into isobutylene but denies that the DH2 Unit can convert natural gas liquids into butadiene.

**Request for Admission No. 8:** Please admit or deny that if the Draft Permits are approved, TPC's Clean Air Act permits will authorize TPC to use its Dehydro 2 unit to assist in the production of 1,3 Butadiene, methy-tert-butyl ether, butenes, diisobutylene, isobutylene, and/or polyisobutylene.

**Response:** In addition to the objections stated in the "General Objections" section, which are incorporated herein by reference, TPC objects to this Request as vague, misleading and not reasonably calculated to lead to the discovery of admissible evidence. The phrase "to assist in the production of" is not a meaningful term of art in the chemicals industry. TPC therefore interprets this phrase to mean that the chemical is an authorized product or by-product of the DH2 Unit. Subject to, and without waiving the foregoing objections, TPC admits that isobutylene and butenes are products or by-products of the DH2 Unit but denies that 1,3 Butadiene, methy-tert-butyl ether and polyisobutylene are products or by-products of the DH2 Unit.

**Request for Admission No. 9:** Please admit or deny that changes to the Houston Plant as part of the DH2 Heat Recovery Project will increase the reliability of processes at the Houston Plant involved in the production of 1,3 Butadiene.

**Response:** In addition to the objections stated in the "General Objections" section, which are incorporated herein by reference, TPC objects to this Request as vague, misleading and not reasonably calculated to lead to the discovery of admissible evidence. Subject to, and without waiving the foregoing objections, TPC denies that changes to the Houston Plant as part of the DH2 Unit Project will increase the reliability of processes at the Houston Plant involved in the production of 1,3 Butadiene.

**Request for Admission No. 10:** Please admit or deny that changes to the Houston Plant as part of the DH2 Heat Recovery Project will contribute to increases in the Houston Plant's capacity to manufacture 1,3 Butadiene.

**Response:** In addition to the objections stated in the "General Objections" section, which are incorporated herein by reference, TPC objects to this Request as vague and not reasonably calculated to lead to the discovery of admissible evidence. Subject to, and without waiving the foregoing objections, TPC denies that changes to the Houston Plant as part of the DH2 Unit Project will contribute to increases in the Houston Plant's capacity to manufacture 1,3 Butadiene.

**Request for Admission No. 11:** Please admit or deny that there is at least one pending EPA enforcement action for alleged Clean Air Act violations at TPC's Houston Plant.

**Response:** In addition to the objections stated in the "General Objections" section, which are incorporated herein by reference, TPC objects to this Request as vague, as the term "enforcement action" is not defined, and is therefore vague and ambiguous. TPC further objects to the extent this Request seeks information that is known to EPA and not to TPC and is not reasonably calculated to lead to the discovery of admissible evidence. Subject to, and without waiving the

foregoing objections, TPC denies knowledge as to any pending EPA notice of violation or complaint for alleged Clean Air Act violations at TPC's Houston Plant.

**Request for Admission No. 12:** Please admit or deny that TPC's applications for the Butadiene Expansion Project request authorization for 1,3 Butadiene emissions during planned maintenance startup, or shutdown activities at one or more storage tanks.

**Response:** The objections stated in the "General Objections" section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC denies that TPC's applications for the BD Expansion Project request authorization for 1,3 Butadiene emissions during planned maintenance startup, or shutdown activities at one or more storage tanks.

**Request for Admission No. 13:** Please admit or deny that TPC's application for the DH2 Heat Recovery Project requests authorization for 1,3 Butadiene emissions during planned maintenance, startup, or shutdown activities at one or more storage tanks.

**Response:** The objections stated in the "General Objections" section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC denies that TPC's application for the DH2 Unit Project requests authorization for 1,3 Butadiene emissions during planned maintenance startup, or shutdown activities at one or more storage tanks.

## INTERROGATORIES

**Interrogatory No. 1:** Please provide the technical specifications for and explain which chemicals will be stored in the "BD TANK" identified in Table 5-1, Applicant's Exhibit C, Tab D at 31. Please provide this information even if TPC has determined that this tank will not be a facility authorized by Permit No. 46307.

**Response:** The objections stated in the "General Objections" section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC states that TPC represented the construction of a "new pressurized tank for additional BD storage" in the application for Permit No. 46307, however the construction of such tank is not planned or needed as part of the BD Expansion Project. If later constructed, the BD TANK will be engineered, designed and constructed as a pressurized spherical storage tank to follow recognized and generally accepted good engineering practices (RAGAGEP) for handling of high vapor pressure materials.

**Interrogatory No. 2:** Please identify the maximum amount of 1,3 Butadiene that TPC is currently authorized to store on-site at the Houston Plant and explain how much additional 1,3 Butadiene TPC will be authorized to store at the Houston Plant if the Butadiene Expansion Project and DH2 Heat Recovery Projects are authorized and constructed.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request as vague, misleading and not reasonably calculated to lead to the discovery of admissible evidence. The TCEQ does not authorize or establish limits on the maximum amount of 1,3 Butadiene that may be stored on-site. Subject to, and without waiving these objections, TPC has represented the operation of 13 pressurized spherical storage tanks for the storage of 1,3 Butadiene on-site at the Houston Plant. These tanks collectively have a capacity to store 1,3 Butadiene in the amount of 50,363,000 pounds. While TPC represented the construction of a “new pressurized tank for additional BD storage” in the application for Permit No. 46307, the construction of such tank is not planned or needed as part of the BD Expansion Project. The DH2 Unit Project is unrelated to the production and storage of 1,3 Butadiene and will not result in an increase in on-site storage capacity of 1,3 Butadiene on-site at the Houston Plant.

**Interrogatory No. 3:** Please identify which existing tanks at the Houston Plant have been used to store 1,3 Butadiene within the past five years.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC responds that the following pressurized spherical storage tanks have been used for the on-site storage of 1,3 Butadiene at the Houston Plant: 10, 15, 28, T-51, T-52, T-53, T-55, T-42, T-850, T-851, T-91, T-90, and T-43.

**Interrogatory No. 4:** Please identify and describe new and existing tanks at the Houston Plant not listed in your response to the previous interrogatory that will store 1,3 Butadiene if the proposed Butadiene Expansion Project is authorized and constructed. This interrogatory is not limited to tanks authorized by the Draft Permits in this matter and includes zero-emission pressurized tanks that TPC may believe are not subject to New Source Review preconstruction permitting requirements.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC states that TPC represented the construction of a “new pressurized tank for additional BD storage” in the application for Permit No. 46307, however the construction of such tank is not planned or needed as part of the BD Expansion Project.

**Interrogatory No. 5:** Please describe any planned maintenance, startup, and shutdown emissions of 1,3 Butadiene from any new or existing tank at the Houston Plant that will be authorized by the Draft Permits.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, the Draft Permits do not



authorize an increase in allowable emissions of 1,3 Butadiene from planned maintenance, startup, and shutdown activities at tanks at the Houston Plant.

**Interrogatory Nos. 6-7:** According to the application to amend Permit No. 19806, this project is intended to “address particulate matter (PM) compliance issues with Boilers 505 and 506 (EPNs EP-1B-505 and EB-1B-506)[.]” Applicant’s Exhibit C, Tab D at 516.

6. Please describe the “compliance issues” this project is intended to resolve. This description should identify any enforceable representations and/or permit terms that have been or are being violated, the extent of this noncompliance, the frequency of this noncompliance, and the cause(s) of noncompliance.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC refers to the Agreed Order entered by the Commission on January 13, 2021, produced as TPC\_004155-TPC\_004161.

7. Please identify all enforceable representations and permit terms that are being changed to resolve these compliance issues as part of this project and explain how these representations and permit terms are being changed.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC refers to TPC\_000526, TPC\_000528 to TPC\_000535, TPC\_000544 to TPC\_000547, TPC\_000554 to TPC\_000555, TPC\_000557 to TPC\_000559, and TPC\_000567 to TPC\_000569, of the application to amend Permit No. 19806, Appendix B of the Modeling Protocol for the application to amend Permit No. 19806, and the MAERT of Draft Permit No. 19806.

**Interrogatory Nos. 8-9:** According to the application to amend Permit No. 19806, this project is intended to “debottleneck the Dehydro 2 Unit (DH2).” Applicant’s Exhibit C, Tab D at 516.

8. Please describe the bottleneck this project is intended to resolve. This description should identify the cause of the existing bottleneck, the equipment and processes effected by the bottleneck, and the consequences of the bottleneck.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC refers to Section 5.2 of the application to amend Permit No. 19806 (TPC\_000523) and Appendix B of the Modeling Protocol for the application to amend Permit No. 19806 for a description of the changes requested to the DH2 Unit. The changes primarily relate to a physical change of certain component materials in reactor valving to allow an increase in process temperature and isobutylene conversion.

9. Please identify all physical and operational changes as well as enforceable representations and permit terms that are being changed to debottleneck the Dehydro 2 Unit and describe each such change.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC refers to Section 5.2 of the application to amend Permit No. 19806 (TPC\_000523) for a description of the changes requested to the DH2 Unit, as well as the MAERT of Draft Permit No. 19806.

**Interrogatory No. 10:** Please describe how you calculated the environmental and social costs association with the location of the Butadiene Expansion Project.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this request as vague and not reasonably calculated to lead to the discovery of admissible evidence. The phrase environmental and social costs is not defined and do not appear to relate to an applicable federal or state regulatory requirement. Subject to, and without waiving the foregoing objections, the key objective of the BD Expansion Project is to realize unused production capacity, increase BD production by a modest amount and to improve process reliability at TPC’s existing Houston plant. Prevention of Significant Deterioration (PSD) review applies, and PSD Air Quality Analysis (AQA) and Best Available Control Technology (BACT) requirements apply to PM, PM<sub>10</sub>, PM<sub>2.5</sub>. Nonattainment New Source Review (NNSR) applies to VOC.

#### Control Technology Review

The BD Expansion Project satisfies the applicable control requirements (Best Available Control Technology [BACT] and Lowest Achievable Emission Rate [LAER]). Details are discussed below.

Applicable control technology for Marine Loading includes 99.9% capture with vapor tightness tests and routing of VOC emissions to the Dock Thermal Oxidizer (EPN DOCK-TO). The Dock TO will meet the 99.9% DRE LAER requirement. The Fugitives will meet LAER by complying with 28LAER Leak Detection and Repair (LDAR) monitoring program. The Process Vents will be routed to the fuel gas system (including boilers), achieving greater than 99.9% DRE and are routed to a flare for back-up control. Tanks with vapor pressure greater than 0.1 psia will meet LAER by equipping the tanks with internal floating roof. The Cooling Tower will meet LAER of 0.042 ppmw VOC. BACT for PM is satisfied with the use of drift eliminators with total liquid drift not exceeding 0.0005%. For Boiler 12, use of Selective Catalytic Reduction (SCR) and low-NOx burners satisfy NOx BACT requirements. An ammonia slip of 10 ppmv at 3% O<sub>2</sub> will be achieved. CO emissions are controlled via an Oxidation Catalyst.

### Air Quality Analysis

The *de minimis* analysis indicates that the modeling results for PM<sub>10</sub> and PM<sub>2.5</sub> are below their respective *de minimis* concentrations and no further analysis is required. The Minor NSR / State National Ambient Air Quality Standards (NAAQS) AQA shows that the predicted concentrations of CO, NO<sub>2</sub> and SO<sub>2</sub> are all less than the respective *de minimis* levels at the property line. The air toxics modeling analysis indicated that the project emissions are not likely to result in any adverse impacts. The Additional Impacts Analysis, including a soils and vegetation analysis, determined that all evaluated criteria pollutant concentrations are below their respective secondary NAAQS.

### Additional Considerations

The existing site continues to implement the goals of the Voluntary Emissions Reductions Agreement (VERA) that TPC executed with the Commission on June 9, 2005. Accordingly, TPC has implemented an emissions control program by reducing emissions from various sources at the site. Some of the important actions taken by TPC include, but not limited to: (i) establishing 250 ppmv 1,3 Butadiene as leak level for repairs (as opposed to TCEQ's leak definition of 500 ppmv), (ii) installing fenceline monitoring for 1,3 Butadiene, and (iii) setting a net fenceline 1,3 Butadiene concentration goal of 1 ppb.

In summary, the environmental costs associated will be minimized by implementation of stringent control technologies and other methods of pollution prevention and the Commission has determined that they are acceptable under state and federal rules and guidance.

### **Social Costs**

TPC Group's investment in the BD Expansion Project allows TPC to improve the protectiveness of its operations and provides additional economic security for the Houston area. Key elements of the social costs associated with the location of BD Expansion Project are discussed below.

### Construction Benefits

The construction phases of each Project will have positive, short-term impacts on the local economy. Employment will increase temporarily in the region, with approximately 90 on-site workers required during peak construction. Local hiring will be prioritized and will be an important aspect of construction contractor agreements.

In addition to direct expenditures and employment, the Projects would also generate temporary indirect and induced economic benefits from increased economic activity. Construction workers would spend a portion of their wages on local goods and services, and increased revenues from locally procured material purchases and service contracts would also inject funds into the regional economy. A portion of this increased local revenue would also be spent in the area, also generating more local sales taxes.

### Operations Benefits

Operating expenses include chemicals, utilities, maintenance, overhead, insurance, and franchise tax; the majority of all expense categories will be procured locally, contributing to the local and

regional economies. Operations-phase jobs will include operators, technicians, supervisors, engineers and managers requiring specific educational and skill requirements. TPC will recruit and train workers for each of the Projects, with the objective of hiring employees locally to the extent possible.

The millions of dollars in annual payroll and material costs during operations will represent direct positive impacts to the economy in Harris County and the wider region. They will also generate indirect and induced benefits as local merchants and service providers see an increase in their sales both from purchases and workers' expenditure of income, which could, in turn, result in increased production and/or hiring of more workers. These benefits will continue over the life of the facility.

### Tax Benefits

The Projects will create significant new tax revenue at the local, State and Federal levels. During construction, local sales taxes will apply to capital expenses for materials and equipment. This will provide increased revenues to the County's school board, law enforcement and municipalities.

During the operations phase, the direct payroll costs will generate payroll taxes, while other operational costs will generate sales tax and payroll taxes for contractors. The Projects is also expected to pay taxes based on the profits generated from selling the facility's product.

### Community Services

TPC and its employees actively participate in numerous charitable and social programs which benefit the local community. They have contributed and will continue to contribute a great amount of time, effort and direct financial assistance to many valuable organizations and causes that directly benefit the citizens of their communities. Included in this outreach TPC awards college scholarships to graduating seniors who go on to receive two and four-year degrees. Through the Mark of Excellence Scholarship Program, initiated in 2006, the TPC has awarded more than \$990,000 in academic scholarships providing educational assistance to graduating seniors. More than \$585,000 have been awarded specifically to more than 65 graduating seniors from Cesar Chavez High School.

TPC's Annual Charity Golf Tournament raises money for not-for-profit organizations across southeast Texas. Since 2006, more than \$1.5 million has been awarded to more than 40 not-for-profit organizations across southeast Texas, including Barrio Dogs, East End Chamber Education Foundation and Buffalo Bayou Partnership serving Houston's east end.

Through TPC's annual United Way Campaigns, nearly \$1 million since 2015 has gone back into the communities where we operate.

Giving back as part of the TPC's ONE Day initiative, employees and family members come together to lend a helping hand on one day with two selected organizations and help make a difference. In 2018 and 2019, more than 300 volunteer hours were spent beautifying and restoring landscape and infrastructure at OFA Little League and Cesar Chavez High School. In 2021, employees hosted a food drive for Tejano Community for Concerns and in 2022 will work with

Rucker Elementary to rehab the basketball court, sidewalk, school entrance and multi-purpose rooms.

In addition to participation in our Back to School Supply drive, Adopt-a-Family and event sponsorships, TPC employees collectively volunteer more than 1200 hours annually in the communities where we operate.

TPC also has representation on the Shared Decision Making Committee (SDMC) at both the local elementary and high school to facilitate a strong partnership and meaningful opportunities to ensure student success.

**Interrogatory No. 11:** Please identify how many new pumps will be installed in VOC service as part of the Butadiene expansion project and indicate how many of those pumps will be leakless.

**Response:** The objections stated in the “General Objections” section, which are incorporated herein by reference. Subject to, and without waiving the foregoing objections, all new pumps to be installed in VOC service as part of the BD Expansion Project will be equipped with double mechanical low emission sealing systems. The BD Expansion Project will introduce 3 new API 610 or similar-type process pumps in BD service.

**Interrogatory No. 12:** Please identify and describe any planned maintenance, startup, or shutdown emissions of 1,3 Butadiene from storage tanks that will be authorized by the Draft Permits.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, TPC states that TPC represented the construction of a “new pressurized tank for additional BD storage” in the application for Permit No. 46307, however the construction of such tank is not planned or needed as part of the BD Expansion Project and no new planned maintenance, startup, or shutdown emissions of 1,3 Butadiene from that tank will be authorized by the Draft Permits.

**Interrogatory No. 13:** Please indicate, which, if any, “required actions” described on page 6 of Exhibit E will apply to emissions, activities, and/or facilities that will be authorized by the Draft Permits and explain how these required actions will apply to those emissions, activities, and/or facilities.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Interrogatory because it is overbroad and not reasonably calculated to lead to the discovery of admissible evidence. Subject to, and without waiving the foregoing objections, TPC states that all of the “required actions” have been implemented. The following of the “required actions” are reflected in the terms of TPC’s current permits as well as the Draft Permits, and nothing has changed as a result of the proposed Projects:

- Operation of Flare Gas Recovery
- 250 ppm Leak Detection rate for LDAR
- Use of dry-break loading equipment for BD
- Monitoring of cooling towers
- Review of plant-wide maintenance and equipment clearing procedures
- Representation of emissions reductions

## REQUESTS FOR PRODUCTION

**Request No. 1:** If you contend that any of the documents included as Attachments A through E to Protestants’ First Set of Discovery Requests to Applicant TPC Group LLC is not a true, accurate, and complete copy, please produce true, accurate, and complete copies of any such documents.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request as misleading and not reasonably calculated to lead to the discovery of admissible evidence. The request pertains to documents that (1) were not prepared by TPC, (2) are incomplete, and (3) relate to events or investigations that do not relate to federal or state requirements applicable to the applications and took place more than five years prior to the submission of the applications. TPC also objects to this Request to the extent it pertains to an undated slideshow presentation from 2011 that pertains to then prevailing business circumstances and does not relate to federal or state requirements applicable to the applications Subject to, and without waiving the foregoing objections, none.

**Request No. 2:** Please produce all documents identified in your responses to Protestants’ First Set of Interrogatories, as well as any and all documents identified in any responses to any subsequent interrogatories from Protestants to Applicant.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. TPC reserves the right to object to any further interrogatories propounded by Protestants. Subject to, and without waiving the foregoing objections, TPC will produce documents responsive to this request in its possession, custody, or control.

**Request No. 3:** Please produce all correspondence or communications between Applicant and the TCEQ related to the Butadiene Expansion Project and/or the DH2 Heat Recovery Project.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request because it is overbroad unduly burdensome; many of the communications this Request seeks is either already in the possession of Protestants or is publicly available. Subject to, and without waiving the foregoing objections, TPC will produce documents responsive to this request in its possession, custody, or control.

**Request No. 4:** Please produce all documents relating to stack testing conducted for facilities at TPC's Houston Plant in the last 15 years.

**Response:** In addition to the objections stated in the "General Objections" section, which are incorporated herein by reference, TPC objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, as it seeks information related to every facility at the Houston Plant, and is not tailored to the facilities that are relevant to the Draft Permits. TPC further objects to the breadth of this Request because it seeks information dating back 15 years. TPC also objects to this Request to the extent it seeks information that has already been provided in the applications. TPC also objects to this Request because the term "stack testing" is vague and not reasonably specific as to the type of stack testing results requested. Subject to, and without waiving the foregoing objections, TPC will produce stack testing reports from the last five years for Boilers 505 and 506. All other emission baseline information is provided in the applications.

**Request No. 5:** Please produce any documents assessing the remaining productive life of Boiler 9 (EPN-EP-H9) or other engineering assessments concerning the boiler's current and/or future physical capacity, its reliability, its operating efficiency, and/or its capacity to comply with applicable enforceable application representations and/or permit terms. Responsive documents include documents assessing the boiler's malfunctions or outages. Responsive documents also include any non-destructive and destructive mechanical and metallographic test reports. Documents generated prior to January 1, 2005 need not be produced, unless they are referenced or attached to more recent responsive documents.

**Response:** In addition to the objections stated in the "General Objections" section, which are incorporated herein by reference, TPC objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, as it seeks information dating back to 2005 and is not sufficiently tailored in scope. Subject to, and without waiving the foregoing objections, TPC will produce documents assessing the replacement of Boiler 9 (EPN-EP-H9) dated within in the last five years.

**Request No. 6:** Please produce all information provided to or generated by the technical team identified in Attachment A as part of the project described by Attachment A to "identify the potential source(s) of the particulate matter (PM), evaluate potential solutions and make recommendations for corrective actions to address the issue." Responsive material includes, but is not limited to, communications between TPC and its agents and 3<sup>rd</sup> parties and the technical team, any information provided to the technical team related to the project described by Attachment A, and any information generated or compiled by the technical team or by a third party as requested by the technical team or TPC as part of the project described in Attachment A. This request includes the results of any sampling, testing, or modeling performed as part of this project or considered by the technical team as part of the project.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, as it seeks “communications between TPC and its agents and 3<sup>rd</sup> parties and the technical team” without limitation. TPC further objects to this Request to the extent it seeks information that is protected by the attorney-client privilege. Subject to, and without waiving the foregoing objections, TPC will produce non-privileged responsive documents in its possession, custody, or control.

**Request No. 7:** Please produce documents related to any allegation by EPA, the TCEQ or any other federal or state government agency that TPC’s Houston Plant was or is in noncompliance with any Clean Air Act requirement. Documents generated prior to five years from the date of this discovery request need not be produced, unless they are cited by or attached to more recent responsive documents.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. TPC further objects to this Request to the extent it seeks information that is publicly available. The burden and expense of producing all documents related to any allegation by any governmental agency in the last 5 years, without further limitation, would be disproportionate to the likely benefit, given that TPC Group’s compliance history related to the Houston Plant is not the primary consideration in whether the Draft Permits meet all legal and technical requirements. TEX. R. CIV. P. 192.4. Subject to, and without waiving the foregoing objections, TPC will produce the following categories of documents in its possession, custody, or control: NOEs, NOVs, TPC’s responses to RFIs, and signed orders.

**Request No. 8:** Please produce any documents provided to EPA or any other government agency in response to an information request connected to an enforcement action or notice of violation since January 1, 2013.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, as it seeks information dating back to 2013. TPC further objects to the extent this Request seeks information that is publicly available. The burden and expense of producing all documents provided to any governmental agency, without further limitation, would be disproportionate to the likely benefit, given that TPC Group’s compliance history related to the Houston Plant is not the primary consideration in whether the Draft Permits meet all legal and technical requirements. TEX. R. CIV. P. 192.4. TPC further objects to this Request to the extent it is cumulative of Request No. 7. Subject to, and without waiving the foregoing objections, TPC will produce responsive documents in its possession, custody, or control that are dated within the last five years.



**Request No. 9:** Please produce any modeling analyses or modeling files related to any air quality modeling conducted to assess the combined particulate matter air quality impacts resulting from emissions increases associated with the Butadiene Expansion Project and the DH2 Heat Recovery Project.

**Response:** The objections stated in the “General Objections” section are incorporated herein by reference. Subject to, and without waiving the foregoing objections, none.

**Request No. 10:** Please produce all work papers and other supporting documentation that You reviewed or prepared that document the cost of particulate matter emission controls for Boilers EB-1B-505 and EB-1B-506 discussed in Appendix D of the application (Flat Plate ESP, Baghouse, Venturi Wet Scrubber). Applicant need not produce *EPA Air Pollution Cost Manual*, EPA/452/B-02-001, January 2002.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request to the extent it seeks information that is already in the Protestants’ possession. TPC further objects to this Request to the extent it is duplicative of Request No. 6. Subject to, and without waiving the foregoing objections, TPC will produce responsive documents in its possession, custody, or control.

**Request No. 11:** Please produce all documents constituting Your Process Hazard Analyses or that You reviewed or prepared as part of a Process Hazard Analyses required by 40 C.F.R. Part 68 for the Houston Plant since 2012. In particular, please include any documents related to or describing incidents at the Houston Plant “which had a likely potential for catastrophic consequences.” 40 C.F.R. § 68.67(c)(2).

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference TPC objects to this Request because it seeks information related to 40 C.F.R. Part 68, which is not delegated to TCEQ, the agency responsible for issuing the Draft Permits. Part 68 is not part of the legal requirements for issuance of a permit under the Clean Air Act. TPC further objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, as it seeks information dating back to 2012. TPC declines to produce documents responsive to this Request.

**Request No. 12:** According to TPC’s Applications, none of the changes proposed as part of the Butadiene Expansion Project or the DH2 Heat Recovery Project are subject to TCEQ’s Disaster Review requirements. Please produce all work papers and other supporting documentation that You reviewed or prepared that document Your determination that these projects are not subject to TCEQ’s Disaster Review requirements.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference TPC objects to this Request because it seeks information related to 40 C.F.R. Part 68, which is not delegated to TCEQ, the agency responsible for issuing the Draft Permits. Part 68 is not part of the legal requirements for issuance of a permit under the Clean Air Act. TPC further objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, as it contains no temporal limitation. TPC declines to produce documents responsive to this Request.

**Request No. 13:** Please produce all supporting documentation that You reviewed or relied on to maintain that “the benefits of the proposed project significantly outweigh the environmental and social costs associated with its location.” Applicant’s Exhibit C, Tab D at 50.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference, TPC objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. TPC further objects to the extent this Request seeks information that is already available to the Protestants. Subject to, and without waiving the foregoing objections, TPC will produce responsive documents related to the benefits of the proposed Projects in its possession, custody, or control.

**Request Nos. 14-15:** According to Applicant’s Exhibit C, Tab D at 36, “[t]he Houston Plant performed a reassessment of its wastewater treatment plant (WWTP) and as a result of the proposed project outlined in this report, the WWTP will result in an increase in its maximum allowable emission rates for the aeration ponds/clarifiers (EPN WW-PN) and the oil-water separator (EPN F-10A). As discussed in the pre-application meeting with the TCEQ, the increase in emissions is not related to this project and is not due to any physical or operational change and is therefore not a modification subject to nonattainment control requirements.”

14. Please produce all documents You reviewed or generated as part of this “reassessment.”

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference TPC objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, as it contains no temporal limitation. TPC further objects to this Request to the extent it seeks information that is protected by the work product privilege. Subject to, and without waiving the foregoing objections, TPC will produce responsive documents in its possession, custody, or control.

15. Please produce all documents that You reviewed, relied upon, or generated to support Your determination that the proposed (and later withdrawn) increase is “not related to this project and is not due to any physical or operational change[.]”

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference TPC objects to this Request because it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, as it contains no temporal limitation. TPC further objects to this Request to the extent it seeks information that is protected by the work product privilege. Subject to, and without waiving the foregoing objections, TPC will produce responsive documents in its possession, custody, or control.

**Request Nos. 16-18:** According to Applicant’s Exhibit C, Tab D at 36:

The Toxchem model (Version 4.4, April 2019) was used to estimate air emissions from the WWTP. The increase in emissions is due to the following changes to the WWTP: 1) updated contaminant concentrations and flowrates for the wastewater influent stream 2) adding user-defined compounds to the Toxchem compound database to accurately model compounds detected in the WWTP 3) adjusting WWTP unit parameters such as the mixed liquor suspended solids (MLSS) concentrations in the aeration ponds to reflect actual operations and 4) evaluating multiple operating scenarios.

The proposed flow rates and contaminant concentrations for the modeled wastewater influent stream were determined based on historical data and accounting the additional flows to the WWTP as a result from the BD Unit Amendment projects.

16. Please produce all documents that constitute or describe historical data used for this modeling.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference TPC objects to this Request because it seeks information related the Toxchem model, which TPC determined had been based on inaccurate inputs. TPC therefore proposed to retain the existing MAERT limits for the wastewater emission points (EPNs WW-PN and F-10A). *See* TPC\_00113. Information pertaining to the Toxchem model is therefore irrelevant and not likely to lead to the discovery of admissible evidence. Subject to, and without waiving the foregoing objections, TPC will produce responsive documents in its possession, custody, or control.

17. Please produce files used for or generated as part of this modeling.

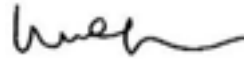
**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference TPC objects to this Request because it seeks information related the Toxchem model, which TPC determined had been based on inaccurate inputs. TPC therefore proposed to retain the existing MAERT limits for the wastewater emission points (EPNs WW-PN and F-10A). *See* TPC\_00113. Information pertaining to the Toxchem model is therefore irrelevant and not likely to lead to the

discovery of admissible evidence. TPC further objects to this Request to the extent it seeks information that is has already been made available to the Protestants in the applications. Subject to, and without waiving the foregoing objections, TPC will produce responsive documents in its possession, custody, or control.

18. Please produce any documents describing or analyzing the results of this modeling.

**Response:** In addition to the objections stated in the “General Objections” section, which are incorporated herein by reference TPC objects to this Request because it seeks information related the Toxchem model, which TPC determined had been based on inaccurate inputs. TPC therefore proposed to retain the existing MAERT limits for the wastewater emission points (EPNs WW-PN and F-10A). *See* TPC\_00113. Information pertaining to the Toxchem model is therefore irrelevant and not likely to lead to the discovery of admissible evidence. Subject to, and without waiving the foregoing objections, TPC will produce responsive documents in its possession, custody, or control.

Respectfully submitted,



By: \_\_\_\_\_

Derek R. McDonald  
Texas Bar No. 00786101  
Shannon Glen  
State Bar No. 24109927  
Baker Botts L.L.P.  
98 San Jacinto Blvd., Suite 1500  
Austin, Texas 78701-4039  
derek.mcdonald@bakerbotts.com  
shannon.glen@bakerbotts.com  
Tel: 512.322.2667  
Fax: 512.322.8342

Scott Janoe  
Texas Bar No. 24012897  
Baker Botts L.L.P.  
910 Louisiana Street  
Houston, Texas 77002-4995  
Tel: 713.229.1346  
Fax: 713.229.2847

**ATTORNEYS FOR APPLICANT  
TPC GROUP LLC**

**CERTIFICATE OF SERVICE**

I hereby certify that I have served a true and correct copy of the foregoing TPC Group LLC's Responses to Protestants' First Set of Written Discovery and served on the following parties by e-mail on this 7<sup>th</sup> day of April 2022

**FOR THE EXECUTIVE DIRECTOR**

via electronic mail:

Betsy Peticolas, Staff Attorney  
Lorena Patrick, Staff Attorney  
Texas Commission on Environmental Quality  
Environmental Law Division, MC-173  
P.O. Box 13087  
Austin, Texas 78711-3087  
Tel: (512) 239-0600  
Fax: (512) 239-0606  
*betsy.peticolas@tceq.texas.gov*  
*lorena.patrick@tceq.texas.gov*

**FOR SIERRA CLUB:**

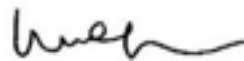
via electronic mail:

Gabriel Clark-Leach  
Senior Attorney  
Environmental Integrity Project  
1206 San Antonio St.  
Austin, TX 78701  
Tel: (425) 381-0673  
*gclark-leach@environmentalintegrity.org*

**FOR PUBLIC INTEREST COUNSEL**

via electronic mail:

Pranjal Mehta, Attorney  
Public Interest Counsel  
Texas Commission on Environmental Quality  
Public Interest Counsel, MC-103  
P.O. Box 13087  
Austin, Texas 78711-3087  
Tel: (512) 239-6363  
Fax: (512) 239-6377  
*pranjal.mehta@tceq.texas.gov*



---

Derek R. McDonald