

TCEQ DOCKET NO. 2022-1552-AIR

APPLICATION BY EXFLUOR § BEFORE THE
RESEARCH CORPORATION FOR §
AIR QUALITY PERMIT NO. 165848 § TEXAS COMMISSION ON
IN WILLIAMSON COUNTY, TEXAS § ENVIRONMENTAL QUALITY
§

APPLICANT EXFLUOR RESEARCH CORPORATION'S
RESPONSE TO HEARING REQUESTS AND REQUESTS FOR RECONSIDERATION

Exflur Research Corporation (“*Exflur*”) files this response to the Requests for Contested Case Hearing (the “*Hearing Requests*”) and “*Requests for Reconsideration*” on Exflur’s application (“*Application*”) submitted to the Texas Commission on Environmental Quality (“*TCEQ*”) for Proposed Air Quality Permit Number 165848 (“*Permit*”), which would authorize operations of a specialty chemical manufacturing facility in Williamson County, Texas (“*Exflur Facility*”). The site of the Exflur Facility would be located in a rural area approximately 15 miles west of Georgetown, Texas and 40 miles north of Austin, Texas.

In accordance with applicable legal standards and based on past precedent in other comparable matters, Exflur respectfully requests that the TCEQ Commissioners (the “*Commission*”) deny all requests for a contested case hearing (“*Hearing Requests*”) regarding the Application¹ from any person (“*Hearing Requester*”) who: (i) does not have a demonstrated personal justiciable interest within one mile of any emission points at the Exflur Facility, or (ii) who has not otherwise met all applicable requirements for a Hearing Request. Exflur does not object to the granting of Hearing Requests from Hearing Requesters with a demonstrated personal justiciable interest within one mile of the Exflur Facility if all other Hearing Requirements have been met, although impacts on those Hearing Requesters are not expected to be discernable.

¹ The mailing list included with the November 9, 2022 letter from the TCEQ Chief Clerk regarding consideration by the TCEQ Commissioners of the Hearing Requests, which has been filed with the Commission in this Docket, lists the hearing requesters.

Exflur also requests that all Requests for Reconsideration be denied, since none of the Requests for Reconsideration raise any issues which have not already been fully addressed, or they raise issues that are not relevant to the Application.

I. FACTUAL AND PROCEDURAL BACKGROUND.²

As explained on Exflur's website,³ Exflur was created in 1984 to develop a commercially viable method for conversion of hydrocarbons to fluorocarbons using elemental fluorine. Exflur's proprietary process uses fluorine gas to convert hydrocarbons to fluorocarbons while keeping the carbon-carbon backbone of the molecule intact. At its inception, Exflur concentrated its efforts on contract research mainly for the National Aeronautics and Space Administration and the United States Air Force developing specialty space lubricants, nonflammable hydraulic fluids, and specialty coatings. In the early 1990s, Exflur adapted its unique fluorination process to manufacturing specialty fluorinated chemicals, and has over 25 U.S. patents covering its fluorination process and many of its fluorinated products. Exflur currently operates a facility in Round Rock, Texas pursuant to TCEQ authorizations and a Pollution Prevention Plan.

As explained in the affidavit attached hereto as **Attachment "A"** from Joerg Windolph, Principal Engineer for Waid Environmental ("**Waid**") who prepared the Application, no pollutants would be emitted from the Exflur Facility at rates above what the U.S. Environmental Protection Agency ("**EPA**") considers to be a significant emission rate. Thus, EPA's "**major NSR**" permitting program does not apply. However, TCEQ's "**minor NSR**" permitting program still applies to Exflur's Application as based on TCEQ's minor NSR requirements.

² The background relating to procedural steps is consistent with electronic records available in the Commissioner's Integrated Database and largely duplicative of the TCEQ Executive Director's ("**TCEQ ED's**") Response to Public Comment ("**RTC**") relating to the Application, which has been filed with the Commission in this docket.

³ See: <https://exflur.com/pages/about-us>

The Application to authorize emissions for Exflur Facility was received by TCEQ on July 9, 2021 and declared administratively complete on July 14, 2021. The Notice of Receipt and Intent to Obtain an Air Quality Permit (first notice or “*NORI*”) was published in English on July 28, 2021 and in Spanish on July 29, 2021. The Notice of Application and Preliminary Decision (second notice or “*NAPD*”) was published in English on March 6, 2022 and in Spanish on March 10, 2022. An Amended Consolidated *NORI* and *NAPD* was published in English on May 4, 2022 and in Spanish on May 19, 2022. A public meeting was held on June 16, 2022, in Florence, Texas. The public comment period ended on June 20, 2022. The TCEQ Executive Director’s (“*TCEQ ED*’s”) final decision letter that the Application meets requirements of applicable law and the TCEQ ED’s Response to Comments (“*RTC*”) was mailed on September 13, 2022, and the deadline for submission of Requests for Reconsideration and for a contested case hearing was due on October 13, 2022.

II. APPLICABLE LAW FOR HEARING REQUESTS AND REQUESTS FOR RECONSIDERATION⁴

Availability of a contested case hearing in TCEQ’s permitting process is determined by several basic requirements. First, and foremost, only the Commission, the TCEQ ED, the applicant, or an affected person when authorized by law may request a contested case hearing.⁵ A hearing request by an affected person must be in writing, must be timely filed no later than 30 days after mailing of the ED’s decision and *RTC*, may not be based on an issue raised in a public

⁴ The Hearing Requests and Commission decisions regarding the Hearing Requests for the Application in this case are governed primarily by statutory provisions in TEX. GOV’T CODE § 2003.047, TEX. HEALTH & SAFETY CODE § 382.056, and TEX. WATER CODE §§ 5.115, and 5.556 which are implemented by various provisions in TCEQ’s rules, including primarily 30 TEX. ADMIN. CODE, CHAPTER 39, CHAPTER 50, SUBCHAPTER F and CHAPTER 55, SUBCHAPTER F. In the interest of efficiency and since TCEQ’s rules comprehensively encompass all relevant statutory provisions, only provisions of TCEQ’s rules which relate to applications filed after September 1, 2015 which govern the Application in this case are cited herein unless otherwise expressly noted. Because various provisions of TCEQ’s rules overlap and are duplicative but consistent, every applicable TCEQ rule is not cited where various overlapping TCEQ rules apply.

⁵ See 30 TEX. ADMIN. CODE § 55.201(b).

comment that was withdrawn, and must be based on the hearing requestor's own timely comments, and must be relevant and material to the application.⁶

Second, a Hearing Request must identify all relevant and material disputed issues of fact or mixed questions of law and fact that were raised during the comment period and that form the basis of the request for a contested case hearing.⁷ The Commission may not refer an issue to SOAH for a contested case hearing unless the Commission determines that the issue:

- (1) Involves a disputed question of fact or a mixed question of law and fact;
- (2) Was raised during the public comment period, and, for applications filed on or after September 1, 2015, was raised in a comment made by an affected person whose request is granted; and
- (3) Is relevant and material to the decision on the application.⁸

Even if a Hearing Request has met all of the procedural elements, the Commission may not grant a Hearing Request unless the Commission first determines that the request was filed by an affected person.⁹ An affected person is:

[O]ne who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. An interest common to members of the general public does not qualify as a personal justiciable interest.¹⁰

In applying the personal justiciable interest test to determine if a hearing requestor is an affected person, the Commission must consider the following factors:

- (1) Whether the interest claimed is one protected by the law under which the application will be considered;
- (2) Distance restrictions or other limitations imposed by law on the affected interest;
- (3) Whether a reasonable relationship exists between the interest claimed and the activity regulated;
- (4) Likely impact of the regulated activity on the health and safety of the person, and on the use of property of the person;

⁶ *Id.* § 55.201(c) (emphasis added).

⁷ *Id.* § 55.211(c)(2)(A)(ii).

⁸ *Id.* § 50.115(c) (emphasis added).

⁹ *Id.* §§ 55.201(b)(4), 55.211(c)(2)(A)(ii) (emphasis added) (The Commission, the TCEQ ED or an applicant may also request a contested case hearing, but no such request has been submitted).

¹⁰ *Id.* § 55.203(a) (emphasis added).

- (5) *Likely impact* of the regulated activity on use of the impacted natural resource by the person;
- (6) For a hearing request on an application filed on or after September 1, 2015, *whether the requestor timely submitted comments* on the application that were not withdrawn; and
- (7) For governmental entities, their statutory authority over or interest in the issues relevant to the application.¹¹

In addition, for this Application, filed after September 1, 2015, the Commission may consider additional factors in determining whether a person is an *affected person*:

- (1) The merits of the underlying application and supporting documentation in the commission's administrative record, including whether the application meets the requirements for permit issuance;
- (2) The analysis and opinions of the executive director; and
- (3) Any other expert reports, affidavits, opinions, or data submitted by the executive director, the applicant, or hearing requestor.¹²

As explained above, only an *affected person* who has a *personal justiciable interest* related to a legal right, duty, privilege, power, or economic interest affected by the application has a lawful right to possibly qualify for a contested case hearing.¹³ In determining whether a person has a *personal justiciable interest*, the Commission has by rule provided a comprehensive list of relevant factors which can be considered.¹⁴

A. HEARING REQUESTERS WITH A CLAIMED INTEREST FURTHER THAN ONE MILE FROM THE PROPOSED EXFLUOR FACILITY DO NOT HAVE A PERSONAL JUSTICIABLE INTEREST

A primary test regarding whether a hearing requestor has established a personal justiciable interest in a TCEQ air application is the distance from the facilities which would be authorized to emit air contaminants. The sound reasoning for applying the distance test has been repeated again

¹¹ *Id.* § 55.203(c) (emphasis added).

¹² *Id.* § 55.203(d).

¹³ *Id.* § 55.203(a).

¹⁴ *Id.* § 55.203(c).

and again in the TCEQ ED's briefing documents for well over a decade. For example, the TCEQ ED has consistently taken the position that:

For air authorizations, distance from the proposed facility is particularly relevant to the issue of whether there is a likely impact of the regulated activity on a person's interests because of the dispersion and effects of individual air contaminants emitted from a facility. The natural resource that is the subject of this permit is the ambient air an individual breathes and, given the distance of [the hearing requestor] from the relative location of the proposed facility, his health and safety would not be impacted in a manner different from the general public."¹⁵

...

For air authorizations, distance from the proposed facility is particularly relevant to the issue of whether there is a likely impact of the regulated activity on a person's interests because of the dispersion and effects of individual air contaminants emitted from a facility. The natural resource that is the subject of this permit is the ambient air that the requesters breathe, and they have indicated a manner in which emissions from the plant could impact it. Because distance from the proposed facility is key to the issue of whether there is a likely impact of the regulated activity on a person's interests such as the health and safety of the person, and on the use of property of the person, the [TCEQ ED] has identified an area of approximately 1 mile from the proposed facility on the provided map.¹⁶

...

Emissions from this facility are expected to disperse in the air as the distance from the emissions point increases, thus distance from the proposed facility is key to the issue of whether or not there is a likely impact of the regulated activity on a person's interest (such as the health and safety of the person) and the use of property of the person. The Executive Director has generally determined that hearing requestors who reside greater than one mile from the facility are not likely to be impacted differently than any other member of the general public.¹⁷

...

Further, for air quality permits, distance from the proposed plant is particularly relevant to the issue of whether there is a likely impact of the regulated activity on a person's interests because of the dispersion and effects of individual air contaminants emitted from a plant.¹⁸

¹⁵ *Executive Director's Response to Hearing Requests, Application by Lhoist North America of Texas, LLC (formerly known as Lhoist North America of Texas, Ltd), to amend Air Quality Permit No. 9009, TCEQ Docket No. 2020-0406-AIR (Commission Agenda date April 22, 2020).*

¹⁶ *Executive Director's Response to Hearing Requests, Application by Citgo Refining and Chemical Company L.P. for the amendment of Air Quality Permit Nos. 3123A and 9604A, TCEQ Docket No. 2020-07166-AIR (Commission Agenda date August 12, 2020) (emphasis added).*

¹⁷ *Executive Director's Response to Hearing Requests, Application by Regency Field Services, L.L.C. for Renewal of Air Quality Permit No. 6051 and PSDTX55M3, TCEQ Docket No. 2010-0843-AIR (Commission Agenda date July 28, 2010) (emphasis added).*

¹⁸ *Executive Director's Response to Hearing Requests and Requests for Reconsideration, Application by Max Midstream Texas, L.L.C. for Air Quality Permit No. 162941, TCEQ Docket No. 2022-0157-AIR (Commission Agenda date March 30, 2022).*

The Commission has not created a *de facto* one-mile standard to determine whether a hearing requester is an affected person with a personal justiciable interest. Instead, the determination is based on a fact specific evaluation of the permit, including the type and volume of emissions that is used to determine the likely impact that the facility will have on a specific requester that is not common to the general public.¹⁹ Particular recognition has been given where emissions authorized by a minor NSR air permit would be less impactful,²⁰ which as explained above are applications for authorizations for which pollutants would not be authorized above rates considered to be significant.

Based on a survey of Commission decisions on hearing requests for all TCEQ air applications in the last two and a half years, the Commission has recently denied hearing requests for which the hearing requestor claimed to own property 1.21 miles, 1.36, miles and 1.51 miles away from the proposed facilities.²¹ The closest property interest claimed in a hearing request for a TCEQ air application for which the Commission has granted a hearing request in the last two and one half years is 1.13 miles.²²

The mapping included in the Affidavit of Joerg Windolph, Principal Engineer at Waid Environmental (“**Windolph Affidavit**”), which is attached hereto as **Attachment “A”** shows the location of the claimed property interests of all of the Hearing Requesters, based in part on records publicly available from the Williamson County Appraisal District (“**WCAD**”). As explained in Windolph’s Affidavit, even for those Hearing Requesters who do have a property interest within

¹⁹ Application by Max Midstream Texas, L.L.C. for Air Quality Permit No. 162941, TCEQ Docket No. 2022-0157-AIR (Commission Agenda date March 30, 2022), TCEQ Open Meeting Recording for Wednesday, March 30, 2022, New Business Item 1, available at <https://www.youtube.com/watch?v=F8wR0ZJH-g&list=PLwzfZK5z8LrHUGDFJkoH6FJ4xbpT9bgKK&index=6>, at 8:15-9:02 (emphasis added).

²⁰ *Id.*

²¹ See *supra*, Application by Holcim (US) Inc. for Air Quality Permit Nos. 8996 and PSDTX454M5, TCEQ Docket No. 2021-0051-AIR.

²² See *supra*, Application by Martin Marietta Materials Southwest, LLC, for amendment and renewal of Air Quality Permit No. 41849, TCEQ Docket No. 2021-0054-AIR.

one mile, based on atmospheric dispersion modeling following TCEQ and EPA protocols, no air contaminant concentrations were predicted which would be authorized by the Permit that would exceed any state or federal standards or Effects Screening Level (“*ESL*”) at the claimed property interest located within one mile. Further, as explained in the Affidavit of Lucy Fraiser, Ph.D., DABT, Fraiser Toxicology Consulting LLC (“*Fraiser Affidavit*”), which is attached hereto as **Attachment B**, discernible impacts are not expected on Hearing Requesters who claim an interest within one mile of Exflor’s Facility from any pollutant for which authorization is requested by the Application, and at greater distances than one mile, potential impacts are expected to be even less.

B. HEARING REQUESTS MUST SHOW A LIKELY, CONCRETE IMPACT THAT IS NOT HYPOTHETICAL OR SPECULATIVE

The “*Likely impact* of the regulated activity on the health and safety of the person, and on the use of property of the person” and the “*Likely impact* of the regulated activity on use of the impacted natural resource by the person” are key considerations in applying the *personal justiciable interest test* to determine if a hearing requestor is an *affected person*.²³ Alleged injuries “couched in terms of *potentialities* or events that “*may*” happen” are “*mere speculation, and as such, it falls short of establishing a justiciable interest and standing.*”²⁴

[To] have such an interest, the complainant must show that a *concrete, particularized, actual or imminent injury* faces him due to the decision; a *hypothetical or speculative injury is not enough.*”²⁵

²³ See 30 TEX. ADMIN. CODE § 55.203(c)(4) and (5) (emphasis added).

²⁴ *Texas Disposal Systems Landfill, Inc. v. Texas Comm’n on Env’tl. Quality*, 259 S.W.3d 361, 363-64 (Tex.App.—Amarillo 2008, no pet.) (emphasis added).

²⁵ *Id.* at 363 (emphasis added).

Further, the Austin Court of Appeals has determined that it is reasonable to conclude that hearing requestors are not affected persons if the proposed “activity will have minimal effect on their health, safety, use of property, and use of natural resources.”²⁶

The Fraiser Affidavit explains that the air emissions which would be authorized by the Application for the Exflur Facility would comply with all applicable state and federal air quality requirements, which are conservatively designed to be protective of public health and welfare. As also explained in the Fraiser Affidavit, air concentrations predicted from the proposed emissions from the Exflur Facilities for all but one contaminant are well below applicable health-based standards, and for the one contaminant that exceeds an ESL, additional evaluation reflects the likelihood of health or welfare effects is extremely small and only at a location where no Hearing Requester has claimed a property interest.

The conclusions in the Fraiser Affidavit are completely in line with and fully support following Commission’s precedent in this case and finding that interests one mile or further from a proposed air emissions source cannot support granting of a hearing request.²⁷ The absence of impact explained in the Fraiser Affidavit shows that there is no tangible, technical reason why a person with a purported interest one mile or further from the Exflur Facilities could be an affected person for purposes of the Application in this case. There is no likely impact.

C. HEARING REQUEUSTS CANNOT BE GRANTED UNLESS THE SPECIFIC, REQUIRED INFORMATION IS INCLUDED

As discussed above, a person cannot establish a personal justiciable interest unless they have raised in a timely comment and asserted in a timely hearing request (and made a

²⁶ See *Tex. Comm'n on Env'tl. Quality v. Sierra Club*, 455 S.W.3d 228, 240 (Tex. App. – Austin 2014) (emphasis added).

²⁷ Exflur is aware of certain matters in which parties with an interest further than one mile from an air emissions source have been admitted by the State Office of Administrative Hearings as parties to a contested case hearing, although in those cases, the applicant did not object or an Administrative Law Judge may have made the decision in a manner differently than the Commission has historically done.

demonstration) that the permit if issued would have a likely impact on the hearing requestor that is more than minimal. In addition, TCEQ's rules clearly require that a hearing request should be denied if it fails to include certain basic information.²⁸ TCEQ's rules are clear that a hearing request must substantially comply with the following specific requirements:

- (1) Give the name, address, daytime telephone number, and, where possible, fax number of the person who files the request. . . .
- (2) Identify the person's personal justiciable interest affected by the application, including a brief, but specific, written statement explaining in plain language the requestor's location and distance relative to the proposed facility or activity that is the subject of the application and how and why the requestor believes he or she will be adversely affected by the proposed facility or activity in a manner not common to members of the general public.²⁹

Thus, the failure of any Hearing Request to meet the basic, specific requirements renders the hearing request *incurably deficient*.

D. HEARING REQUESTS FROM A GROUP OR ASSOCIATION

In addition to the rules and requirements identified above for Hearing Requests submitted by individuals, TCEQ's rules include specific requirements for a Hearing Request submitted by a group or association:

- (a) A group or association may request a contested case hearing only if the group or association meets all of the following requirements:
 - (1) one or more members of the group or association would otherwise have standing to request a hearing in their own right;
 - (2) the interests the group or association seeks to protect are germane to the organization's purpose; and
 - (3) neither the claim asserted nor the relief requested requires the participation of the individual members in the case.
- (b) For applications filed on or after September 1, 2015, a request by a group or association for a contested case may not be granted unless all of the following requirements are met:

²⁸ 30 TEX. ADMIN. CODE § 55.211(b)(2) (denial based on failure to meet the requirements); 30 TEX. ADMIN. CODE § 55.211(c)(2)(D) (must be granted but must comply with 55.201).

²⁹ 55.201(d) (emphasis added).

- (1) comments on the application are timely submitted by the group or association;
- (2) the request identifies, by name and physical address, one or more members of the group or association that would otherwise have standing to request a hearing in their own right;
- (3) the interests the group or association seeks to protect are germane to the organization's purpose; and
- (4) neither the claim asserted, nor the relief requested, requires the participation of the individual members in the case.³⁰

E. REQUESTS FOR RECONSIDERATION

A Request for Reconsideration must be in writing, must be timely filed with the chief clerk, must expressly state that the person is requesting reconsideration of the TCEQ ED's decision, and must give reasons why the requestor believes the decision should be reconsidered.³¹ Reconsideration Requests should also contain the name, address, and daytime telephone number of the person who files the request.³² None of the Requests for Reconsideration in this case raise a material fact issue or identify a basis upon which the TCEQ ED's decision to issue Exflur's Permit should be reconsidered. As explained in detail below, each issue raised in each of the Requests for Reconsideration was fully addressed and evaluated as indicated in the TCEQ ED's RTC, and/or the issue is not relevant in any way to Exflur's Application.

III. IMPLEMENTATION OF THE APPLICABLE LAW TO THE HEARING REQUESTS AND REQUESTS FOR RECONSIDERATION ON THE APPLICATION FOR THE EXFLUOR FACILITY

1. North San Gabriel Alliance ("NSGA").

NSGA is the only group or association that submitted Hearing Requests or a Request for Reconsideration on Exflur's Application. In its several Hearing Requests, NSGA provided a very

³⁰ *Id.* § 55.205 (emphasis added).

³¹ *Id.* § 55.201(e); *see also, e.g., Fisherman's Harvest, Inc. v. Post, Buckley, Schuh & Jernigan, Inc., et al.*, No. G-05-0151 (S.D. Tex. 2008), 2008 WL 4277001 at 2 (explaining that a motion for reconsideration is appropriate to address an intervening change in controlling law; to consider new evidence not previously available; correct a clear or manifest error of law or fact; or to prevent manifest injustice).

³² *Id.* § 55.201(e).

generalized purpose with interests that could purportedly be impacted by Exflur's Permit, although it did not provide any bylaws or other documentation other than its generalized statements about its overall purpose. Thus, NSGA has not sufficiently demonstrated with specificity that it has an interest that it seeks to protect that is germane to the NSGA's purpose. NSGA identified the following purported members with a claimed personal justiciable interest in Exflur's Application:

Patricia McCormick Mulvihill is identified in the April 1, 2022, June 3, 2022 and October 13, 2022 NSGA Hearing Request as Trustee for a property purportedly located 0.67 miles north of the property boundary of where the Exflur Facility is located, which appears to coincide with Map Parcel ID No 20 and/or 21 included with the mapping in **Attachment "A"**, which the WCAD indicates is owned by the Mulvihill Children's Trust, with Henry N., Mulvihill, Jr. & Patricia McCormick Mulvihill as Trustees. However, a clear property interest has not been demonstrated based on the lack of clarity, and no documentation verifying that the Patricia McCormick Mulvihill identified as a member of NSGA is the same person as the trustee identified by the WCAD.

Bryce Phillip McCormick is identified in the April 1, 2022 and June 3, 2022 NSGA Hearing Request as having property interests approximately 0.9 miles north of the property boundary of where the Exflur Facility is located, although WCAD records for property indicate that property which appears to coincide with two parcels described as Map Parcel ID No. 15 included with the mapping in **Attachment "A"** is owned by Bryce Phillip McCormick, Jr. or Bryce Phillip McCormick, Jr. and Carolyn G. McCormick. However, a clear property interest has not been demonstrated based on the lack of clarity, whether the Bryce Phillip McCormick, Jr. described in the WCAD records is the same as the Bryce Phillip McCormick identified as a NSGA member, and no documentation has been provided.

Ann Friou is identified in the June 3, 2022 NSGA Hearing Request as having approximately 350 acres of property directly across County Road 236 from the property boundary of where the Exflur Facility is located. Although property described as owned by Ms. Friou appears to coincide with the property described as Map Parcel ID No 5 in the mapping included in **Attachment "A"**, the WCAD indicates these parcels of property are actually owned by Ann Wheelock Friou Individually and as the Independent Executor of the Estate of Thomas Friou as Trustee and by Ann Wheelock Friou Individually and as the Independent Executor of the Estate of Thomas Friou as Trustee. As discussed below, multiple other Hearing Requests claiming an ownership in the very same properties were submitted by Elizabeth Ann Friou. Thus, the NSGA Hearing Request has not sufficiently demonstrated that the Ann Friou who NSGA claims as a member is the true owner of the property identified in the Hearing Request, and no documentation has been provided.

Charles Ray Williams, Jr. and Haziel McCormick Williams are identified in the October 13, 2022 NSGA Hearing Request as having property interests in property purportedly 0.7 and 0.9 miles from the emissions points for the Exflur Facility. Parcels of property which appear to coincide with the property describe in the Hearing Request are described as Map Parcel ID No 31 in the mapping included in **Attachment “A”**, which according to the WCAD are both owned by Haziel Roberta McCormick Williams. It is not clear that the property owner identified in the WCAD is the same as the Haziel McCormick Williams who has been named as a member of NSGA.

Margaret Peggy Anne McCormick Wardlaw is identified in the October 13, 2022 NSGA Hearing Request as having an interest in the McCormick Children’s Family Limited Partnership (“**FLP**”), which purportedly owns a tract 0.8 miles from the property boundary of where the Exflur Facility would be located, and ownership in another parcel 0.85 miles away. Parcels of property which appear to coincide with the FLP property described in the Hearing Request is described as Map Parcel ID No 32 in the mapping included in **Attachment “A”**, which according to the WCAD is owned by FLP. However, no supporting documentation has been provided to make a sufficient demonstration regarding ownership of and/or interests in either parcel of property.

Referrable Issues: If the Commission determines that NSGA has submitted sufficient information to demonstrate that its purpose is germane to the Application, and that one or more of named members has a legal property interest as identified in the Hearing Requests, Exflur has modified further below the list of issues recommended for referral in NSGA’s October 13, 2022 Hearing Request letter.

Request for Reconsideration. To the extent any of NSGA’s October 13, 2022 Hearing Requests could also be construed to include a Request for Reconsideration, NSGA did not raise any issues that are relevant and material to Exflur’s Application before issuance of the TCEQ ED’s RTC which was not thoroughly addressed by the TCEQ ED’s RTC, and nothing new was raised in the NSGA’s October 13, 2022 Hearing Request and Request for Reconsideration after issuance of the TCEQ ED’s RTC which they had not already raised.

The following Hearing Requests and Requests for Reconsideration were received on Exflur’s Application from individuals:

2. **Nicole Elizabeth Bauer**
800 Hidden Bear Rd.
Liberty Hill, TX 78642-4634

Ms. Bauer raises issues generally relating to air emissions and water contamination reaching her property that may be harmful. Although the Hearing Request was timely received on October 13, 2022, it cannot be granted because the Hearing Requester is not an affected person because the only personal justiciable interest stated is based on purported property ownership 25 miles northwest of the property boundary where the Exflur Facility would be located. Although the mapping included in **Attachment “A”**

identifies the location of the address in the Hearing Request as being several miles south of the Exflur Facility, as shown on Map Parcel ID No 1, Waid was unable to confirm via CAD records that they own the property, but in either event the only purported interest stated is much further than one mile away by several miles. In addition, because Ms. Bauer did not submit any comments, none of the issues raised can be referred to a contested case hearing because they are not based on timely filed comments raised by the Hearing Requester during the comment period, and the water related issues are not relevant and material to the application.

Request for Reconsideration. Although Ms. Bauer's Request for Reconsideration was timely received on October 13, 2022, it cannot be granted because the water related issues raised do not identify a material fact issue or identify a basis upon which the TCEQ ED's decision to issue Exflur's Permit should be reconsidered, since water related issues are not relevant to an application for a minor NSR air permit.

**3. Anne & Thomas Beville, Jr.
443 County Road 278
Liberty Hill, TX 78642-4378**

The Bevilles raise issues generally relating to air emissions and water contamination reaching their property that may be harmful. Although this Hearing Request was timely received on October 12, 2022, this Hearing Request cannot be granted because the Hearing Requesters are not affected persons because the only purported personal justiciable interest stated is based on property ownership 12 miles south of the Exflur Facility, which is described as Map Parcel ID No 2 in the mapping included in **Attachment "A"**. Waid was unable to confirm via CAD records that they own the property, and none of the issues raised can be referred to a contested case hearing because the only issue raised in a comment timely filed by the Bevilles is a water related issue, which is not relevant and material to an application for a minor NSR air permit.

**4. Terry G. Cook
Commissioner, Williamson County Precinct 1
1801 E Old Settlers Blvd Ste 110
Round Rock, TX 78664-1905**

Commissioner Cook raises issues generally relating to air emissions and waste management and about clarification of questions relating to manufacturing of chemicals. Although Commissioner Cook alleges that the Hearing Request was completed on October 13, 2022, it was received after the October 13, 2022 deadline. Even if the Hearing Request would have been timely received, it cannot be granted because the Hearing Requester is not an affected person because no personal justiciable interest is stated, and none of the issues raised can be referred to a contested case hearing because they are not based on timely filed comments raised by the Hearing Requester during the comment period.

5. Ms. Sheryl Marie Farley

**6600 County Road 200
Liberty Hill, TX 78642-3725**

Ms. Farley raises issues relating generally to locating an industrial facility in a non-industrial area, regarding air emissions reaching her property that may be harmful, and regarding water contamination in general. Although this Hearing Request was timely received on October 12, 2022, this Hearing Request cannot be granted because the Hearing Requester is not an affected person because the only purported personal justiciable interest stated is based on property ownership 3 miles south of the property boundary where the Exflur Facility would be located, which is described as Map Parcel ID No 4 in the mapping included in **Attachment “A”**. Waid was unable to confirm via CAD records that they own the property, and Ms. Farley did not raise any discernible air related issues in her previously filed comments on May 2, 2022 or on April 6, 2022 that are relevant to an application for a minor NSR air permit.

Request for Reconsideration. To the extent Ms. Farley’s May 2, 2022 comment might be construed to be a Request for Reconsideration (which Exflur does not believe it is), it cannot be granted because only issues raised relate generally to locating an industrial facility in a non-industrial area, which is not relevant and material to the Application.

**6. Elizabeth Ann Friou
5203 Ridge Oak Dr.
Austin, TX 78731-4811**

As explained above, NSGA named Ms. Friou as a member of NSGA. In her Hearing Requests, Ms. Friou states that she owns property adjacent to the property where the Exflur Facility would be located, across from Williamson County Road 236, which appears to be the property described as Map Parcel ID No 5 in the mapping included in **Attachment “A”**, although as discussed below, the Hearing Request does not demonstrate that Ms. Friou owns the property.

She submitted timely comments and Hearing Requests on June 19, 2022, May 10, 2022, May 2, 2022, April 6, 2022, and April 5, 2022, and provided oral comments at the Public Meeting on June 16, 2022. She raised issues relating to water, and whether permitted or unpermitted air emissions will be protective of her land and her health, the health of her employees, livestock and wildlife.

Graves Dougherty Hearon & Moody submitted an additional Hearing Request on behalf of Ms. Friou on October 11, 2022, and identified parcels of property as being owned by Ms. Friou which appear to be the property described as Map Parcel ID No 5 in the mapping included in **Attachment “A”**. However, the WCAD indicates these properties are actually owned by Ann Wheelock Friou Individually and as Trustee of the Thomas Claborne Friou Family Trust, and by Ann Wheelock Friou Individually and as the Independent Executor of the Estate of Thomas Friou as Trustee. Thus, Ms. Elizabeth Ann Friou who submitted the Hearing Request has not demonstrated that she is the owner of the property upon which

her personal justiciable interest is based, and therefore cannot be granted a contested case hearing.

Referrable Issues: If the Commission determines that Ms. Friou has submitted sufficient information to demonstrate a personal justiciable interest, Exflur has modified further below the list of issues recommended referral in Ms. Friou's Hearing Request dated October 13, 2022.

7. Jillian Gabriel
105 Lark St
Leander, TX 78641-1890

Request for Reconsideration. Ms. Gabriel did not submit a Hearing Request. Although Ms. Gabriel's Request for Reconsideration was timely received on April 16, 2022, it cannot be granted because the generalized issues raised relating to compliance history, pollution and land use have been fully considered and addressed, and/or is not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 6, 10 and 21.

8. Richard Grabish
201 Shady Oaks Trl
Liberty Hill, TX 78642-3944

Request for Reconsideration. Mr. Grabish did not submit a Hearing Request. Although Mr. Grabish's Request for Reconsideration was timely received on April 6, 2022, it cannot be granted because the generalized issues raised relating to pollution and land use have been fully considered and addressed, and/or is not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 6, 10, 18 and 21.

9. Kelley Heath
205 Talon Grasp Trl
Leander, TX 78641-2595

Kelley Heath raises generalized issues in the Hearing Request relating to air emissions and water contamination reaching her property that may be harmful. Although the Hearing Request was timely received on October 11, 2022, it cannot be granted because the Hearing Requester is not an affected person because the only personal justiciable interest stated is based on purported property ownership, and although the mapping included in **Attachment "A"** identifies the location of the address in the Hearing Request as being in Leander, Texas, which is over approximately 20 miles from the Exflur Facility, as shown on Map Parcel ID No 8. Waid was unable to confirm via CAD records that they own the property, but in any event the only purported interest stated is much further than one mile away by several miles.

**10. Suzanne Johnson
Johnson Woods Company
1400 County Road 236
Florence, TX 76527-4918**

Ms. Johnson raises issues in her Hearing Request generally relating to air emissions and concerns regarding chemicals. Ms. Johnson's purported property ownership which appears to be within one mile of the property boundary where the Exflur Facility would be located, as indicated on the mapping included in **Attachment "A"** as Map Parcel ID No 9. However, although the Hearing Request was timely received on October 13, 2022, it cannot be granted because none of the issues raised can be referred to a contested case hearing because they are not based on timely filed comments raised by the Hearing Requester during the comment period. Her comments on April 11, 2022 were only generalized comments regarding health concerns and no discernible issue related to air emissions was stated.

Referrable Issues: If the Commission determines that Ms. Johnson has submitted sufficient comments to support her Hearing Request, the only referrable issue is as follows: Whether the Draft Permit is protective of air quality, human health and welfare, and the environment.

**11. Catherine Johnston
4960 Highway 138
Florence, TX 76527-4901**

Ms. Johnston does not clearly raise any issues in her Hearing Request, other than a generalized concern regarding chemicals, although a letter from a third party was attached also raising general concerns about chemicals, and referencing air emissions from Exflur's Facility. Although the Hearing Request was timely received on October 13, 2022, it cannot be granted because the Hearing Requester is not an affected person because no personal justiciable interest is stated, and Ms. Johnston's address as shown on the mapping included in **Attachment "A"** is Map Parcel ID No 10, which is several miles away from the property where the Exflur Facility would be located. Even if the generalized issues raised regarding chemicals and air emissions were specific enough for referral, which they are not, the issues are also not based on timely filed comments raised by the Hearing Requester during the comment period in her comments submitted on April 10, 2022 and April 7, 2022.

**12. Alycen Malone
158 Barn Owl Loop
Leander, TX 78641-1881**

Request for Reconsideration. Ms. Malone did not submit a Hearing Request. Although Ms. Malone's Request for Reconsideration was timely received on September 27, 2022, it cannot be granted because the generalized issues raised relating to pollution and land use

have been fully considered and addressed, and/or is not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 6, 10, 18 and 24.

**13. Charles Ely McCormick
440 W Pleasantview Dr
Hurst, TX 76054-3504**

Mr. Charles Ely McCormick raises issues in his Hearing Request generally relating to air emissions and water contamination reaching his property that may be harmful. Mr. McCormick claims a property interest in 5 acres 0.6 miles north of the Exflur Facility, which appears to coincide with the mapping included in **Attachment “A”** as Map Parcel ID No 12. However, although the Hearing Request was timely received on October 13, 2022, it cannot be granted because Mr. Charles Ely McCormick did not submit any comments during the comment period to support his Hearing Request.

**14. Charles McCormick
2035 Woodglen Dr
Round Rock, TX 78681-2605**

Mr. Charles McCormick raises issues in his Hearing Request relating to an exhaust monitoring system with alarms. Mr. McCormick claims a property interest in 30 acres on County Road 208 approximately 0.6 miles north of the Exflur Facility. Although the WCAD indicates that a Charles Oneal McCormick with the same address listed in the Hearing Request appears to coincide with the mapping included in **Attachment “A”** as Map Parcel ID No 13, the parcel is less than 5 acres. Thus, it has not been demonstrated that Mr. McCormick has a sufficient property interest.

Referrable Issues: If the Commission determines that Mr. McCormick has submitted sufficient information to demonstrate a personal justiciable interest, the only issue that should be referred is as follows: Should an exhaust monitoring system that measures and records emissions in real time with alarms to alert emergency services be installed?

**15. Erin McCormick
19926 Park Hollow
San Antonio, TX 78259-1924**

Erin McCormick raises issues in two substantially similar Hearing Requests (providing different addresses for each) submitted on the same day generally relating to air emissions, potential contamination and a prior incident at Exflur’s Round Rock site. Erin McCormick claims a property interest in a tract of land 0.6 miles north of the Exflur Facility, which appears to coincide with the mapping included in **Attachment “A”** as Map Parcel ID No 14, which the WCAD indicates is owned by Erin Marie McCormick. However, although the Hearing Requests were timely received on October 13, 2022, they cannot be granted because Erin McCormick did not submit any comments during the comment period to support the Hearing Requests.

16. Erin McCormick
1250 County Road 208
Florence, TX 76527-4628

See the above evaluation of the Hearing Request submitted from Erin McCormick, with an address in San Antonio, Texas. According to the WCAD, the Florence, Texas address provided with this hearing request coincides with the mapping included in **Attachment “A”** as Map Parcel ID No 15. However, Waid has determined that the property associated with Map Parcel ID No 15 is owned by Bryce Phillip McCormick, Jr. or Bryce Phillip McCormick, Jr. and Carolyn G. McCormick. Further, the Hearing Request is not supported by a timely filed comment and cannot be granted.

17. Joyce McCormick
2301 Ohlen Rd
Austin, TX 78757-7758

Joyce McCormick raises issues in her Hearing Request generally relating to air emissions and water contamination reaching her property that may be harmful. Ms. McCormick claims a property interest in 7 acres 0.6 miles north of the Exflur Facility, which appears to coincide with the mapping included in **Attachment “A”** as Map Parcel ID No 16, which the WCAD indicates is owned by *Joyce Kelly McCormick*. However, although the Hearing Request was timely received on October 13, 2022, it cannot be granted because Ms. Joyce McCormick did not submit any comments during the comment period to support her Hearing Request.

18. Nickolas McCormick
1050 County Road 208
Florence, TX 76527-4277

Nickolas McCormick raises issues in his Hearing Request generally relating to health concerns, compliance history, and generalized concerns about air emissions and water and land contamination that may be harmful. Mr. McCormick claims a property interest within 0.6 miles of the Exflur Facility, which appears to coincide with the mapping included in **Attachment “A”** as Map Parcel ID No 17, which the WCAD indicates is an almost 7-acre parcel owned by *Nicholas James McCormick*. However, even if the landowner is the same as the Hearing Requester, and even though the Hearing Request was timely received on October 13, 2022, it cannot be granted because Mr. McCormick did not submit any comments during the comment period to support his Hearing Request.

19. Timothy McDaniel
1800 County Road 208
Florence, TX 76527-4235

Request for Reconsideration. Mr. McDaniel did not submit a Hearing Request. Although Mr. McDaniel’s Request for Reconsideration was received on April 4, 2022, after the TCEQ ED’s first preliminary decision but before the TCEQ ED’s Final Decision, it cannot

be granted because the generalized issues raised relating to health and welfare and land use have been fully considered and addressed, and/or is not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 6 and 18.

**20. Karen Milone
208 N Haven Dr
Liberty Hill, TX 78642-2387**

Request for Reconsideration. Ms. Malone did not submit a Hearing Request. Although Ms. Malone's Request for Reconsideration was received on April 4, 2022, after the TCEQ ED's first preliminary decision but before the TCEQ ED's Final Decision, it cannot be granted because the generalized issues raised relating to health and welfare and land use have been fully considered and addressed, and/or is not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 6 and 18.

**21. Henry N. Mulvihill Jr.
PO Box 831945
Richardson, TX 75083-1945**

The only issue raised in Mr. Mulvihill's Hearing Request relates to land use issues, and he offers no personal justiciable interest. Although not mentioned in his Hearing Request, as explained above in the evaluation of the NSGA Hearing Request, Mr. McCormick appears to be a Trustee for property which appears to coincide with the mapping included in **Attachment "A"** as Map Parcel ID No 20 and 21 which is within one mile of the Exflur Facility. However, no documentation verifying that he is the trustee for the property has been provided. Further, TCEQ does not have jurisdiction regarding the only issue raised in his hearing request, as explained in RTC Response 18. Thus, the Hearing Request cannot be granted.

Request for Reconsideration. To the extent Mr. Mulvihill's March 28, 2022 comment could also be construed to include a Request for Reconsideration, it was received after the TCEQ ED's first preliminary decision but before the TCEQ ED's Final Decision, and therefore, it cannot be granted because the generalized issues raised relating to health and welfare, land use and water have been fully considered and addressed, and/or are not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 6, 10 and 18.

**22. Patricia McCormick Mulvihill
North San Gabriel Alliance
8 Lundys Ln
Richardson, TX 75080-2343**

Patricia McCormick Mulvihill's Hearing Request raises generalized health concerns and concerns regarding the use of property for which she claims to be a Co-Trustee, which as explained in the evaluation of the NSGA Hearing Request, and the property appears to coincide with the mapping included in **Attachment "A"** as Map Parcel ID No 20 and 21,

which is within one mile of the Exflur Facility. However, no documentation verifying that Ms. McCormick is the Co-Trustee of the property has been provided. Further, although her only comment submitted on April 1, 2022 raises generalized concerns about air pollution, no mention is made of health concerns. Thus, the Hearing Request is not supported by a timely comment.

Referrable Issues: If the Commission determines that Ms. Mulvihill has submitted sufficient information to demonstrate a personal justiciable interest, that a referrable issue has been supported by a comment, and that an issue could be stated with specificity, the only issue that should be referred is as follows: Whether the Draft Permit is protective of air quality, human health and welfare, and the environment.

Request for Reconsideration. To the extent Ms. Mulvihill's April 1, 2022 comment could also be construed to include a Request for Reconsideration, it was received after the TCEQ ED's first preliminary decision but before the TCEQ ED's Final Decision, but cannot be granted because the generalized issues raised relating to health and welfare, land use and water have been fully considered and addressed, and/or are not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 6, 10 and 18.

**23. Joe J. Pacheco
201 Cowboy Trl
Liberty Hill, TX 78642-3954**

Mr. Pacheco raises issues generally relating to air emissions and water contamination. Although the Hearing Request was timely received on October 12, 2022, it cannot be granted because the Hearing Requester is not an affected person because the only personal justiciable interest stated is based on purported property ownership, which based on the address provided is described in the mapping included in **Attachment "A"** as Map Parcel ID No 22, is several miles south of the Exflur Facility.

**24. Chris Peyton
121 Night Bloom Path
Liberty Hill, TX 78642-2365**

Chris Peyton raises issues generally relating to air emissions and water contamination. Although the Hearing Request was timely received on October 12, 2022, it cannot be granted because the Hearing Requester is not an affected person because the only personal justiciable interest stated is based on purported property ownership, which is admittedly 14 miles from the Exflur Facility, and based on the address provided is described in the mapping included in **Attachment "A"** as Map Parcel ID No 23.

**25. Renee Peyton
121 Night Bloom Path
Liberty Hill, TX 78642-2365**

Rene Peyton raises issues generally relating to air emissions and water contamination. Although the Hearing Request was timely received on October 12, 2022, it cannot be granted because the Hearing Requester is not an affected person because the only personal justiciable interest stated is based on purported property ownership, which is admittedly 14 miles from the Exflur Facility, and based on the address provided is described in the mapping included in **Attachment “A”** as Map Parcel ID No 24.

**26. Jennifer Spies
8907 Rustic Cv
Austin, TX 78717-4853**

Request for Reconsideration. Ms. Spies did not submit a Hearing Request. Although Ms. Spies’s Request for Reconsideration was timely received on June 21, 2022, it cannot be granted because the generalized issues raised including relating to pollution, water contamination, and chemicals were fully considered and addressed, and/or is not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 10, 18, 20, 21, and 24.

**27. Sandra Lee Thurman
190 County Road 208
Florence, TX 76527-4472**

The only issue raised in Ms. Thurman’s Hearing Request relates to RTC Response 5 regarding the effect of the emissions on the air quality and health of people, and sensitive populations was determined by comparing the maximum modeled emissions to the state and federal air quality standards. Ms. Thurman’s address coincides with the mapping included in **Attachment “A”** as Map Parcel ID No 26 which is within one mile of the property where the Exflur Facility would be located, which is owned by Damon and Sandra Thurman according to the WCAD. However, no documentation has been provided to demonstrate property ownership. Further, Ms. Thurman’s only comment submitted on April 7, 2022 focused on the use of chemicals, land use, and water issues, but did not expressly state discernable concerns regarding air quality, and certainly not the same, specific concerns expressed in the Hearing Request relating to air quality. Thus, the Hearing Request cannot be granted.

Referrable Issues: If the Commission determines that Ms. Thurman’s comment supports her Hearing Request, the only issues that should be referred is as follows: (i) Whether the Draft Permit is protective of air quality, human health and welfare, and the environment, including for sensitive receptors, and (ii) Whether the air dispersion modeling and evaluation of the surrounding area was complied with applicable requirements.

Request for Reconsideration. To the extent Ms. Thurman’s April 7, 2022 comment could also be construed to include a Request for Reconsideration, it cannot be granted because the generalized issues raised relating to the use of chemicals, land use and water have been fully considered and addressed, and/or are not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 10, 17, 21 and 25.

28. Brittany D. Varner
P.O. Box 1532
Liberty Hill, TX 78642-1532

Ms. Varner’s Hearing Request raises generalized issues relating to air emissions, water issues, health issues, and land use. Ms. Varner’s address coincides with the mapping included in **Attachment “A”** as Map Parcel ID No 27, which is within one mile of the property boundary where the Exflur Facility is located, which the WCAD indicates is owned by Hunter Wayne and Brittany Danielle Varner. However, since Ms. Varner’s only comment submitted on April 13, 2022 did not expressly state discernable concerns regarding air quality, and certainly not the same, specific concerns expressed in the Hearing Request relating to air quality. Further, TCEQ does not have jurisdiction in a minor NSR air application to address land use or water, as explained in RTC Response 10 and 18. Thus, the Hearing Request cannot be granted.

Referrable Issues: If the Commission determines that Ms. Varner is an affected person, and the Hearing Request is not too generalized, the only referrable issue is: Whether the Draft Permit is protective of air quality, human health and welfare, and the environment, including for sensitive receptors.

29. Harold Charles Wardlaw
19910 Park Rnch
San Antonio, TX 78259-1934

Mr. Wardlaw’s Hearing Request raises generalized issues relating air emissions, water issues, health issues, and land use. Mr. Wardlaw’s claimed property interest appears to be the same property interest claimed in the McCormick Ranch FLP, which is purportedly located 0.9 miles from Exflur’s proposed site. This appears to be the same property described in the NSGA as the property in which Margaret Peggy Anne McCormick Wardlaw has an interest, and appears to coincide with the mapping included in **Attachment “A”** as Map Parcel ID No 32. However, no supporting documentation has been provided to make a sufficient demonstration regarding an ownership interest in the property, which according to the WCAD is owned by the McCormick Children’s Family Limited Partnership.

Referrable Issues: If the Commission determines that Mr. Wardlaw has made a sufficient demonstration of property ownership, and the Hearing Request is not too generalized, the only referrable issue is: Whether the Draft Permit is protective of air quality, human health and welfare, and the environment, including for sensitive receptors.

Request for Reconsideration. To the extent Mr. Wardlaw's March 31, 2022 comment or his October 13, 2022 Hearing Request could also be construed to include a Request for Reconsideration, it cannot be granted because the generalized issues raised relating to the use of chemicals, land use and water have been fully considered and addressed, and/or are not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 10, 17, 21 and 25.

**30. Peggy Anne Wardlaw
19910 Park Ranch
San Antonio, TX 78259-1934**

Ms. Peggy Anne Wardlaw raises generalized air and water concerns, and questions whether the health effects evaluation was correctly conducted. The property interest claimed by Ms. Peggy Anne Wardlaw in the Hearing Request appears to be the same property interest claimed by Margaret Peggy Anne McCormick Wardlaw who is identified as a NSGA member as explained above. This property is described as Map Parcel ID No 32 in the mapping included in **Attachment "A"**, which according to the WCAD is owned by FLP. Another parcel of property which appears to coincide with the property described in the Hearing Request is described as Map Parcel ID No 28, 29 in the mapping included in **Attachment "A"**, which according to the WCAD is owned Margaret Wardlaw. It is not clear whether the Margaret Wardlaw described in the WCAD records is the same as the Margaret Peggy Anne McCormick Wardlaw identified as a NSGA member and/or is the same as the Peggy Anne Wardlaw described in this Hearing Request. No supporting documentation has been provided to make a sufficient demonstration regarding ownership of and/or interests in either parcel of property.

Referrable Issues: If the Commission determines that Ms. Wardlaw has made a sufficient demonstration of property ownership, and the Hearing Request is not too generalized, the only referrable issues are: (i) Whether the Draft Permit is protective of air quality, human health and welfare, and the environment, including for sensitive receptors, and (ii) Whether the state and federal health effects evaluations were properly conducted.

**31. Shannon White-Shubert and Mike Shubert
3404 Cortina Ln
Round Rock, TX 78681-2417**

Ms. White-Shubert's Hearing Request raises generalized issues relating to protection of human health, animal health and trees, land use, nuisance, and emergency response. Ms. White-Shubert address coincides with the mapping included in **Attachment "A"** as Map Parcel ID No 30, which is within one mile of the property boundaries where the Exfluror Facility is located. TCEQ does not have jurisdiction in a minor NSR air application to address land use or emergency response, as explained in RTC Response 18 and 22.

Referrable Issues: If the Commission determines that Shannon White-Shubert and Mike Shubert are affected persons, and the Hearing Request is not too generalized, the only referrable issues are: (i) Whether the Draft Permit is protective of air quality, human health

and welfare, and the environment, including for sensitive receptors, and (ii) Whether the emissions limits in the Draft Permit will create a nuisance as defined by TCEQ's rules which will interfere with the normal use and enjoyment property.

Request for Reconsideration. Ms. White-Shubert's October 13, 2022 Request for Reconsideration cannot be granted because the issues raised are generalized issues relating to protection of human health, animal health and trees, land use, nuisance, and emergency response, which have been fully considered and addressed, and/or are not relevant and material to an application for a minor NSR air permit. *See e.g.*, RTC Responses 5, 10, 17, 18, 21, 22 and 25.

**32. Haziel McCormick Williams
19926 Park Holw
San Antonio, TX 78259-1924**

Haziel McCormick Williams raised general health issues and compliance history, land use, and water pollution issues. Haziel McCormick Williams who submitted a stand-alone Hearing Request on October 13, 2022 appears to be the same Haziel McCormick Williams that NSGA is claiming as a member, as described above in the evaluation of the NSGA Hearing Request. The property interests are purportedly 0.7 and 0.9 miles from the emissions points for the Exflur Facility, and appear to coincide with Map Parcel ID No 31 in the mapping included in **Attachment "A"**, which according to the WCAD are both owned by Haziel Roberta McCormick Williams. However, this Hearing Request cannot be granted because Haziel McCormick Williams' only written comment submitted on March 29, 2022 only raised an incident at Exflur's Round Rock site from 2014.

III. CONCLUSION AND PRAYER

Potential impacts of the air emissions from the Exflur Facility even within one mile from the Exflur Facilities are expected to be indiscernible based on the Fraiser Affidavit. Impacts further from the site would be even less discernible. Thus, denial of all Hearing Requests would be supported by science. However, past Commission precedent has granted Hearing Requests if there is a demonstrated property interest within one mile of the emissions points, and if all other requisites for a Hearing Request have been met. Based on the foregoing, Exflur respectfully requests that the that the Commission take the following actions:

1. If the Commission determines that the following have sufficiently demonstrated that they have a personal justiciable interest through their claimed property ownership interests, and/or have sufficiently submitted a Hearing Request with issues fairly and discernibly raised in a timely filed comment, then the Hearing Requests from the following could be granted:

NSGA
Elizabeth Ann Friou
Suzanne Johnson
Charles McCormick
Patricia McCormick Mulvihill
Sandra Lee Thurman
Brittany D. Varner
Harold Charles Wardlaw
Peggy Anne Wardlaw
Shannon White-Shubert and Mike Shubert

2. Deny the Hearing Requests from the following because they have not demonstrated that they have a personal justiciable interest, and/or have not submitted a Hearing Request with issues fairly and discernibly raised in a timely filed comment:

Nicole Elizabeth Bauer
Anne & Thomas Beville, Jr.
Terry G. Cook
Ms. Sheryl Marie Farley
Kelley Heath
Catherine Johnston
Erin McCormick
Joyce McCormick
Nickolas McCormick
Henry N. Mulvihill Jr.
Joe J. Pacheco
Chris Peyton
Renee Peyton
Hazel McCormick Williams

3. Deny all Requests for Reconsideration, including from the following:

NSGA
Nicole Elizabeth Bauer
Ms. Sheryl Marie Farley
Jillian Gabriel
Richard Grabish
Alycen Malone
Timothy McDaniel
Karen Milone
Henry N. Mulvihill Jr.
Patricia McCormick Mulvihill
Jennifer Spies
Sandra Lee Thurman
Brittany D. Varner

Harold Charles Wardlaw
Shannon White-Shubert and Mike Shubert

4. If one or more of the Hearing Requests submitted by one or more of the Hearing Requesters identified by the issue below is granted a hearing, refer the issue to a contested case hearing:
- a. Whether the Draft Permit is protective of air quality, human health and welfare, and the environment. (NSGA) (Elizabeth Friou) (Suzanne Johnson) (Patricia McCormick Mulvihill) (Sandra Lee Thurman) (Brittany D. Varner) (Harold Charles Wardlaw) (Peggy Anne Wardlaw) (Shannon White-Shubert and Mike Shubert)
 - b. Whether the Draft Permit complies with federal and state air quality standards relating to protecting animal life, vegetation, and property. (NSGA) (Elizabeth Friou)
 - c. Whether the air dispersion modeling and evaluation of the surrounding area complies with applicable requirements. (NSGA) (Sandra Lee Thurman)
 - d. Whether emissions were calculated in accordance with the appropriate methodologies. (NSGA)
 - e. Whether the BACT analysis was conducted in accordance with applicable TCEQ practices and standards and if the Draft Permit includes BACT. (NSGA)
 - f. Whether the allowance of chemical flexibility in the Draft Permit is appropriate based on any applicable TCEQ standards. (NSGA)
 - g. Whether emission rates are dependent on a limit on operational hours or there are issues associated with the air quality analysis that require a limitation on the hours of operation. (NSGA)
 - h. Whether the Draft Permit's monitoring and recordkeeping requirements are adequate to ensure compliance can be demonstrated with the emission limitations set forth in the Draft Permit. (NSGA) (Elizabeth Friou)
 - i. Whether the applicant's compliance history supports issuance of the Draft Permit in accordance with TCEQ's compliance history rules. (NSGA)
 - j. Whether the Draft Permit appropriately requires the permit holder to comply with EPA regulations on Chemical Accident Prevention, including a Risk Management Plan. (NSGA)
 - k. Whether the emissions limits in the Draft Permit will create a nuisance as defined by TCEQ's rules, which will interfere with the normal use and enjoyment of property. (Elizabeth Friou) (Shannon White-Shubert and Mike Shubert)

- l. Whether an exhaust monitoring system that measures and records emissions in real time with alarms to alert emergency services be installed? (Charles McCormick)
 - m. Whether the state and federal health effects evaluations were properly conducted. (Peggy Anne Wardlaw)
5. Limit the duration of any hearing to a maximum of 180 days, if a contested case hearing is granted.

Respectfully Submitted,



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COUNSEL FOR
EXFLUOR RESEARCH CORPORATION

CERTIFICATE OF SERVICE

I hereby certify that on November 21, 2022, the foregoing Exfluor Research Corporation's Response to Hearing Requests and Requests for Reconsideration was e-filed with the Chief Clerk of the Texas Commission on Environmental Quality and, in compliance with 30 Tex. Admin. Code § 1.11 and 30 Tex. Admin. Code 55.209(d), a copy was served to the Executive Director, the director of the Office of Public Assistance, the director of the TCEQ Office of External Relations, the TCEQ Office of Public Interest Counsel and all persons who filed hearing requests and provided addresses.

By:  _____
Derek Seal

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FOR ALTERNATIVE DISPUTE
RESOLUTION
via electronic mail:

Kyle Lucas
Texas Commission on Environmental
Quality
Alternative Dispute Resolution, MC-222
P.O. Box 13087
Austin, Texas 78711
Tel: (512) 239-0687
Fax: (512) 239-4015
kyle.lucas@tceq.texas.gov

FOR THE CHIEF CLERK:

Docket Clerk
Texas Commission on Environmental
Quality
Office of Chief Clerk, MC-105
P.O. Box 13087
Austin, Texas 78711
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Fax: (512) 239-3311
www.tceq.texas.gov/goto/efilings

REQUESTER(S):

See attached list.

REQUESTER(S)

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Anne & Thomas Beville
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Liberty Hill, TX 78642-4378

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Commissioner, Williamson County Precinct 1
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Renee Peyton
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San Antonio, TX 78259-1934

Peggy Anne Wardlaw
19910 Park Rnch
San Antonio, TX 78259-1934

Shannon White-Shubert
3404 Cortina Ln
Round Rock, TX 78681-2417

Haziel McCormick Williams
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San Antonio, TX 78259-1924

Attachment A
Windolph Affidavit

**TCEQ DOCKET NO. 2022-1552-AIR
AFFIDAVIT OF JOERG WINDOLPH, P.E.
WAID ENVIORNMENTAL**

**STATE OF TEXAS
COUNTY OF TRAVIS**

**§
§**

BEFORE ME, the undersigned notary public, on this day personally appeared Joerg Windolph, P.E. Principal Engineer, Waid Environmental, who is known to me to be the person whose name is subscribed below, and who after being duly sworn by me, did upon his oath, state as follows:

1. My name is Joerg Windolph. I am over 21 years of age, am of sound mind, and am fully competent to make this affidavit. Each and every statement contained in this affidavit is based upon my personal knowledge, and each and every statement is true and correct.
2. I am a Principal Engineer at Waid Corporation, dba Waid Environmental (“**Waid**”), which is an engineering and environmental services firm founded in 1978. My specialized experience has over my career included preparing or directing or overseeing the preparation of hundreds of applications for air new source review (“**NSR**”) permits required by both the federal and Texas Clean Air Acts, including case-by-case permits, standard permits, and permits by rule, for all types of industry across Texas, and working with Texas Commission on Environmental Quality (“**TCEQ**”) staff regarding their processing of those applications.
3. Under my supervision and direction, Waid prepared the “**Application**” for proposed Permit No. 165848 (“**Permit**”) submitted to TCEQ by Exfluor Research Corporation (“**Exfluor**”) which would authorize emissions from a new specialty chemical manufacturing facility in Williamson County, Texas (“**Exfluor Facility**”). As part of the Application, Waid conducted an Air Quality Modeling Analysis (“**Modeling**”).
4. I was awarded a degree of Bachelor of Science in Chemical Engineering from the University of Texas in Austin on December 21, 1991. I hold Professional Engineering License No. 85360 from the Texas Board of Professional Engineers and Surveyors (“**Board**”), which I have held since July 23, 1999. I have passed the Board’s National Council of Examiners for Engineering and Surveying examination for the Chemical Branch, which shows I have competency as professional engineer to conduct work relating to chemicals. I have over 30 years of experience in the environmental field, including in performing air permitting work for various industries in Texas, primarily synthetic organic chemical manufacturing, petroleum refining facilities, gas processing plants, bulk petrochemical storage terminals, and printing facilities. That experience includes me conducting or overseeing complex air dispersion modeling analyses in support of those applications, as well as auditing air dispersion modeling analyses conducted by others. I have extensive experience with and knowledge of various air dispersion models (e.g., SCREEN3, ISCST3, ISC-PRIME and AERMOD), and extensive experience conducting air dispersion

modeling using those models and preparing summaries of the results of such modeling. These are the models which are accepted by TCEQ in the air permitting process.

5. I have been with Waid since 1992. Texas and the Southwest are our principal geographical work areas, although we have worked in many other states. We specialize in air quality services, particularly emissions control, permits, and compliance and have conducted over 3,500 air quality projects in the last 5 years. Preparation of air permit applications for submission to agencies such as TCEQ is done by staff members who are knowledgeable of the requirements of both state and federal agencies. Waid offers complete support in all areas of the permitting process, including performing atmospheric dispersion modeling studies. Our modeling environment enables us to perform virtually all regulatory modeling.

6. Steven DeNero, Waid's Senior Air Dispersion Modeler who has extensive experience in conducting air dispersion modeling conducted the Modeling for the Exflur Facility under my direction and supervision. The Modeling calculated the predicted ground level concentrations ("GLCs") at offsite locations and the maximum off-site¹ GLC (" GLC_{max} ") of each regulated pollutant that will be emitted from the Exflur Facility for each relevant averaging period if the Application is approved. The Modeling is summarized in TCEQ's Air Quality Analysis Audit dated November 18, 2021 ("**Modeling Audit**"), attached hereto as part of *JW-EX. 1*. The Modeling was conducted in accordance with standard and accepted modeling protocols, and was accepted by TCEQ, as explained in the Modeling Audit.

7. Waid conducted as part of the Modeling a minor National Ambient Air Quality Standard ("**NAAQS**") evaluation for each pollutant to which the NAAQS applies ("**Criteria Pollutants**"), which is only for Carbon Monoxide ("**CO**"), Nitrogen Dioxide ("**NO₂**"), Particulate Matter with particles that are 10 microns or less in diameter ("**PM₁₀**") and Particulate Matter with particles that are 2.5 microns or less in diameter ("**PM_{2.5}**"). As indicated in Table 1 of the Modeling Audit, the GLC_{max} for all of the NAAQS pollutants were below the established Significant Impact Levels ("**SILs**", "**De Minimis**"), so no further analysis was required or needed.

8. The major NSR program contained in parts C and D of Title I of the Federal Clean Air Act is a preconstruction review and permitting program applicable to new major sources and major modifications at such sources. If a pollutant will be emitted at rates below what the U.S. Environmental Protection Agency ("**EPA**") considered to be significant emission rates, the pollutant is not subject to review under EPA's "**major NSR**" permitting programs; however, the state's "**minor NSR**" permitting program still applies. The minor NSR program is applicable when a source does not trigger major NSR or emits an air contaminant not subject to major NSR review. A minor NAAQS modeling evaluation accompanies a minor NSR permit application. The Exflur Facility is not subject to major NSR review, so a minor NAAQS evaluation is appropriate for the review of this facility's proposed criteria pollutant emissions.

¹ "Off-site" means all area beyond the boundaries of the property on which the Exflur Facility is proposed to be located pursuant to the Application.

9. Waid also performed a State Health Effects Evaluation, and as indicated in Table 2 of the Modeling Audit, the GLC_{max} for all constituents modeled except for fluorine (1-hr Averaging Time), were far below the Effects Screening Level (“*ESL*”) set by TCEQ. For all constituents with modeled concentrations below the *ESLs*, no further analysis was required or needed. The GLC_{max} for fluorine (1-hr Averaging Time) was slightly above the *ESL* and therefore required additional pollutant-specific modeling. This involved a less conservative modeling approach of representing the proposed emission rate from each source at the facility and modeling those sources simultaneously in order to determine the actual location and time of the GLC_{max} . The *ESL*-exceeding concentrations for fluorine were similarly to within 75 meters adjacent to the plant property line. As indicated by Table 3 of the Modeling Audit, the concentrations of fluorine were predicted to exceed the *ESL* up to 99 hours out of a year of 8,760 hours at the location of the GLC_{max} . This fluorine maximum occurs along the western property boundary of the plant. These predicted *ESL*-exceeding concentrations assume that all facilities will be operating for the full year at 100% capacity.

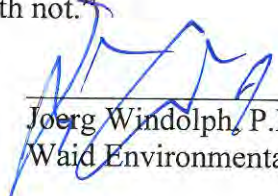
10. In a post-submittal review of the State Health Effects Evaluation, an error was corrected in the modeling analysis for hydrogen fluoride (specifically hydrogen fluoride for air permit review in agricultural areas). The initially submitted analysis was based on the 1-hr Averaging Time. However, the *ESL* threshold of $3.0 \mu\text{g}/\text{m}^3$, per the TCEQ’s Development Support Document (“*DSD*”), is based on a 24-hour average concentration. Accurate comparison to the *ESL* would require 24-hour average based modeling output. This specification can be found in Table 1 of the *DSD* titled “Health- and Welfare-Based Values”. The modeling output files initially submitted for this analysis included 24-hour average values. In updating the analysis to be based on 24-hour impact values instead of the 1-hour impact values yields a hydrogen fluoride GLC_{max} concentration below the *ESL*. Therefore, no concentrations of hydrogen fluoride are expected to exceed the *ESL* at any locations off-property due to emissions from the Exflur Facility.

11. Since no sulfur compounds would be authorized from the Exflur Facility, no State Property Line Standard analysis was required as part of the Application process.

12. I am familiar with the November 9, 2022 letter from the TCEQ Chief Clerk regarding consideration of the hearing requests on the Application by the TCEQ Commissioners on December 14, 2022, which includes a mailing list of persons who submitted a contested case hearing on the Application (“*Hearing Requesters*”). At my direction Waid prepared the mapping attached hereto *as JW-EX. 2* which shows the location of the Exflur Facility in relation to the property interests described by each Hearing Requester (“*Hearing Requester Locations*”). I have over 30 years of experience preparing similar mapping in connection with TCEQ air permit applications. ArcGIS was used by me or under my direct supervision and oversight to identify the location of the facilities associated with the Exflur Facility which would be authorized by the Permit, based on the GPS coordinates represented in the Application, and the location of the interest claimed by each Hearing Requester. The mapping that was prepared was supplemented by information located in the property ownership records electronically available from the Williamson County Appraisal District (“*CAD*”), and confirmed by visual evidence on various aerial mapping tools to identify property parcels. For all of the mapping work that I did not personally conduct, I verified that such work was conducted properly.

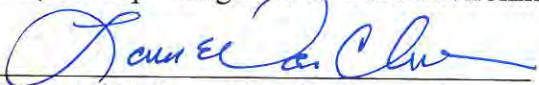
13. The facilities are located within the property footprint at a minimum of 365 feet from the property boundary. The emitting facilities are more than 750 feet from the nearest Hearing Requestor property boundary. Based on atmospheric dispersion modeling following TCEQ and EPA protocols, no air contaminant concentrations were predicted which would be authorized by the Permit that would exceed any state or federal standards or ESL at the Hearing Requester Locations.

Further affiant sayeth not.



Joerg Windolph, P.E.
Waid Environmental

This instrument was acknowledged before me, the undersigned authority, this 21st day of November, 2022, by Joerg Windolph, P.E., Principal Engineer at Waid Environmental, on behalf of said company.



Notary Public in and for the State of Texas



JW-EX.-1
Modeling Audit

TCEQ Interoffice Memorandum

To: Cara Hill
Mechanical/Coatings Section

Thru: Chad Dumas, Team Leader
Air Dispersion Modeling Team (ADMT)

From: Ahmed Omar, P.E.
ADMT

Date: November 18, 2021

Subject: Air Quality Analysis Audit – Exflur Research Corporation (RN110969227)

1. Project Identification Information

Permit Application Number: 165848

NSR Project Number: 331049

ADMT Project Number: 7632

County: Williamson

Published Map: \\tceq4avmgisdata\GISWRK\APD\MODEL_PROJECTS\7632\7632.pdf

Air Quality Analysis: Submitted by Waid Environmental, October 2021, on behalf of Exflur Research Corporation. Additional information was provided November 2021.

2. Report Summary

The air quality analysis is acceptable for all review types and pollutants. The results are summarized below.

A. Minor Source NSR and Air Toxics Analysis

Table 1. Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLCmax ($\mu\text{g}/\text{m}^3$)	De Minimis ($\mu\text{g}/\text{m}^3$)
PM ₁₀	24-hr	0.1	5
PM _{2.5}	24-hr	0.1	1.2
PM _{2.5}	Annual	0.01	0.2
NO ₂	1-hr	7	7.5
NO ₂	Annual	0.1	1
CO	1-hr	10	2000
CO	8-hr	3	500

The GLCmax are the maximum predicted concentrations associated with one year of meteorological data.

TCEQ Interoffice Memorandum

Generic modeling was used for the above analyses; refer to section 3 for more details on the generic modeling.

The justification for selecting the EPA's interim 1-hr NO₂ De Minimis level was based on the assumptions underlying EPA's development of the 1-hr NO₂ De Minimis level. As explained in EPA guidance memoranda¹, the EPA believes it is reasonable as an interim approach to use a De Minimis level that represents 4% of the 1-hr NO₂ NAAQS.

The PM_{2.5} De Minimis levels are the EPA recommended De Minimis levels. The use of the EPA recommended De Minimis levels is sufficient to conclude that a proposed source will not cause or contribute to a violation of a PM_{2.5} NAAQS based on the analyses documented in EPA guidance and policy memorandums².

To evaluate secondary PM_{2.5} impacts, the applicant provided an analysis based on a Tier 1 demonstration approach consistent with the EPA's Guideline on Air Quality Models. Specifically, the applicant used a Tier 1 demonstration tool developed by the EPA referred to as Modeled Emission Rates for Precursors (MERPs). The basic idea behind the MERPs is to use technically credible air quality modeling to relate precursor emissions and peak secondary pollutants impacts from a source. Using data associated with the worst-case source, the applicant estimated 24-hr and annual secondary PM_{2.5} concentrations of 0.0001 µg/m³ and <0.0001 µg/m³, respectively. When these estimates are added to the GLCmax listed in the table above, the results are less than the De Minimis levels.

¹ www.tceq.texas.gov/assets/public/permitting/air/memos/guidance_1hr_no2naaqs.pdf

² www.tceq.texas.gov/permitting/air/modeling/epa-mod-guidance.html

TCEQ Interoffice Memorandum

Table 2. Minor NSR Site-wide Modeling Results for Health Effects

Pollutant	CAS#	Averaging Time	GLCmax ($\mu\text{g}/\text{m}^3$)	GLCmax Location	GLCni ($\mu\text{g}/\text{m}^3$)	GLCni Location	ESL ($\mu\text{g}/\text{m}^3$)
hydrogen fluoride	7664-39-3	1-hr	6	-	<6	-	18
hydrogen fluoride For air permit reviews in agricultural areas	7664-39-3	1-hr	3.9	Eastern Property Line	-	-	3
hydrogen fluoride For air permit reviews in agricultural areas with cattle	7664-39-3	Annual	0.3	-	-	-	0.75
fluorine	7782-41-4	1-hr	3.9	Western Property Line	3.9	Western Property Line	2
perfluoroheptane	335-57-9	1-hr	22	-	<22	-	20000
methanol	67-56-1	1-hr	38	-	<38	-	3900
perfluorooctanoic acid and its inorganic salts	335-67-1	1-hr	<0.01	-	<0.01	-	0.05
bromine	7726-95-6	1-hr	5	-	<5	-	7
hydrogen chloride	7647-01-0	1-hr	4	-	<4	-	190
hydrogen chloride	7647-01-0	Annual	0.1	-	<0.1	-	7.9
carbon tetrafluoride	75-73-0	1-hr	154	-	<154	-	18000
Perfluoro (bis-2-chloroethoxy methane)	Not found	1-hr	7	-	<7	-	200
Perfluorodecalin	306-94-5	1-hr	22	-	<22	-	200
polymers of chlorotrifluoroethylene (PCTFE)	9002-83-9	1-hr	17	-	<17	-	50

TCEQ Interoffice Memorandum

Pollutant	CAS#	Averaging Time	GLCmax ($\mu\text{g}/\text{m}^3$)	GLCmax Location	GLCni ($\mu\text{g}/\text{m}^3$)	GLCni Location	ESL ($\mu\text{g}/\text{m}^3$)
carbonyl fluoride For air permit reviews in agricultural areas with cattle	353-50-4	Annual	0.03	-	<0.03	-	0.71
trifluoroacetic acid For air permit reviews in agricultural areas with cattle	76-05-1	Annual	0.03	-	<0.03	-	0.71

Table 3. Minor NSR Hours of Exceedance for Health Effects

Pollutant	Averaging Time	1 X ESL GLCni
fluorine	1-hr	99

For fluorine, the GLCmax and the GLCni are the same. Pollutant-specific modeling was conducted for fluorine and 1-hr hydrogen fluoride at agricultural areas. For all other pollutants and averaging times, generic modeling was used; refer to section 3 for more details on the generic modeling.

TCEQ Interoffice Memorandum

3. Model Used and Modeling Techniques

AERMOD (Version 21112) was used in a refined screening mode.

A unitized emission rate of 1 lb/hr was used to predict a generic short-term and long-term impact for each source. The generic impact was multiplied by the proposed pollutant specific emission rates to calculate a maximum predicted concentration for each source. The maximum predicted concentration for each source was summed to get a total predicted concentration for each pollutant. Pollutant-specific modeling was conducted for fluorine and 1-hr hydrogen fluoride at agricultural areas.

A. Land Use

Medium roughness and elevated terrain were used in the modeling analysis. These selections are consistent with the AERSURFACE analysis, topographic map, DEMs, and aerial photography. The selection of medium roughness is reasonable.

B. Meteorological Data

Surface Station and ID: Austin, TX (Station #: 13904)
Upper Air Station and ID: Fort Worth, TX (Station #: 3990)
Meteorological Dataset: 2016
Profile Base Elevation: 150.9 meters

C. Receptor Grid

The grid modeled was sufficient in density and spatial coverage to capture representative maximum ground-level concentrations.

D. Building Wake Effects (Downwash)

Input data to Building Profile Input Program Prime (Version 04274) are consistent with the aerial photography, plot plan, and modeling report.

4. Modeling Emissions Inventory

The modeled emission point and volume source parameters and rates were consistent with the modeling report. The source characterizations used to represent the sources were appropriate.

The applicant assumed full conversion of NO_x to NO₂, which is conservative.

Maximum allowable hourly emission rates were used for the short-term averaging time analyses, and annual average emission rates were used for the annual averaging time analyses.

JW-EX.-2
Hearing Requester Locations

Hearing Requester Home and Land Addresses

Williamson County Appraisal District (WCAD) parcel IDs obtained for all Florence, TX land addresses.

Map Parcel ID	Home Address	Home City	Land Address	Land City	Map Reference	WCAD Parcel ID	WCAD Land Owner	Last Name	First/Middle
1	800 Hidden Bear Rd	Liberty Hill	800 Hidden Bear Rd	Liberty Hill	1	-	-	Bauer	Nicole Elizabeth
2	443 CR 278	Liberty Hill	443 CR 278	Liberty Hill	1	-	-	Beville	Anne & Thomas
3	1801 E Old Settlers Blvd	Round Rock	3116 GoldenOak Cir	Round Rock	1	-	-	Cook	Terry G
4	6600 CR 200	Liberty Hill	6600 CR 200	Liberty Hill	1	-	-	Farley	Sheryl Marie
5	5203 Ridge Oak Dr	Austin	2100 CR 209	Florence	1 & 2	R381158 R010200	Ann Wheelock Friou Indiv & As Tr of the Thomas Claborne Friou Family Trust	Friou	Elizabeth Ann
6	105 Lark St	Leander	105 Lark St	Leander	1	-	-	Gabriel	Jillian
7	201 Shady Oaks Trl	Liberty Hill	201 Shady Oaks Trl	Liberty Hill	1	-	-	Grabish	Richard
8	205 Talon Grasp Trl	Leander	205 Talon Grasp Trl	Leander	1	-	-	Heath	Kelley
9	1400 CR 236	Florence	1400 CR 236	Florence	1 & 2	R591137	Suzanne M Johnson	Johnson	Suzanne
10	4960 Highway 138	Florence	4960 Highway 138	Florence	1 & 2	R360767	Catherine Therese & Richard Ryan Johnston	Johnston	Catherine
11	158 Barn Owl Loop	Leander	158 Barn Owl Loop	Leander	1	-	-	Malone	Alycen
12	440 W Pleasantview Dr	Hurst	CR 208	Florence	1 & 2	R599743	Charles Ely McCormick	McCormick	Charles Ely
13	2035 Woodglen Dr	Round Rock	CR 208	Florence	1 & 2	R468144	Charles Oneal McCormick	McCormick	Charles
14	19926 Park Holw	San Antonio	CR 208	Florence	1 & 2	R599742	Erin Marie McCormick	McCormick	Erin
15	1250 CR 208	Florence	1250 CR 208	Florence	1 & 2	R517815, R355941	McCormick, Bryce Philip JR / McCormick, Bryce Philip JR & Carolyn	McCormick	Erin
16	2301 Ohlen Rd	Austin	CR 208	Florence	1 & 2	R600116	Joyce Kelly McCorkmick	McCormick	Joyce
17	1050 CR 208	Florence	1050 CR 208	Florence	1 & 2	R549402	Nicholas James McCormick	McCormick	Nickolas
18	1800 CR 208	Florence	1800 CR 208	Florence	1 & 2	R007465	Timothy Wayne McDaniel	McDaniel	Timothy
19	208 N Haven Dr	Liberty Hill	208 N Haven Dr	Liberty Hill	1	-	-	Milone	Karen
20	PO Box 831945	Richardson	1050 CR 208	Florence	1 & 2	R468145	Henry N Jr & Patricia McCormick Mulvihill Tr. of Mulvihill Childrens Tr.	Mulvihill	Henry N
21	8 Lundys Ln	Richardson	1050 CR 208	Florence	1 & 2	R355959	Henry N Jr & Patricia McCormick Mulvihill Tr. of Mulvihill Childrens Tr.	Mulvihill	Patricia McCormick
22	201 Cowboy Trl	Liberty Hill	201 Cowboy Trl	Liberty Hill	1	R332591	Joe J II & Heather L Pacheco	Pacheco	Joe J
23	121 Night Bloom Path	Liberty Hill	121 Night Bloom Path	Liberty Hill	1	R605075	Renee Deyette & Christopher Scott Peyton	Peyton	Chris
24	121 Night Bloom Path	Liberty Hill	121 Night Bloom Path	Liberty Hill	1	R605075	Renee Deyette & Christopher Scott Peyton	Peyton	Renee
25	8907 Rustic Cv	Austin	8907 Rustic Cv	Austin	1	-	-	Spies	Jennifer
26	190 CR 208	Florence	190 CR 208	Florence	1 & 2	R419736	Damon & Sandra Thurman	Thurman	Sandra Lee
27	PO Box 1532	Liberty Hill	870 CR 236	Florence	1 & 2	R597597	Hunter Wayne & Brittany Danielle Varner	Varner	Brittany D
28	19910 Park Ranch	San Antonio	CR 208	Florence	1 & 2	R549407	Margaret Wardlaw	Wardlaw	Harold Charles

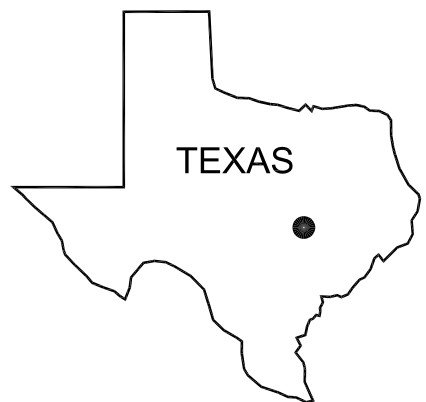
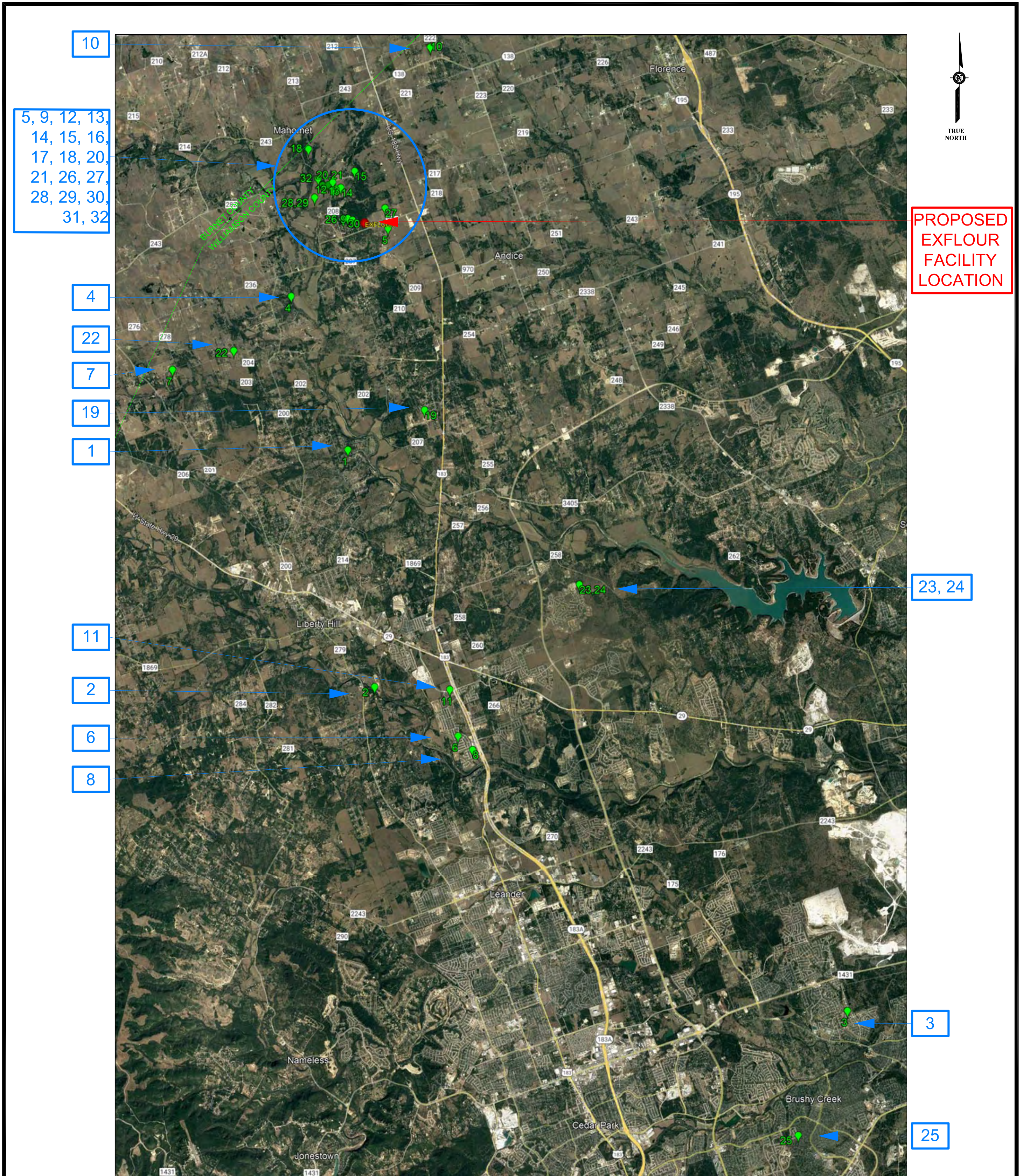
Hearing Requester Home and Land Addresses

Williamson County Appraisal District (WCAD) parcel IDs obtained for all Florence, TX land addresses.

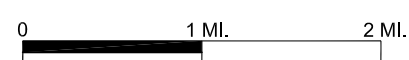
Map Parcel ID	Home Address	Home City	Land Address	Land City	Map Reference	WCAD Parcel ID	WCAD Land Owner	Last Name	First/Middle
29	19910 Park Ranch	San Antonio	1050 CR 208	Florence	1 & 2	R549407	Margaret Wardlaw	Wardlaw	Peggy Anne
30	3404 Corina Ln	Round Rock	1500 CR 236	Florence	1 & 2	R590413	Michael A & Shannon White Shubert	White-Shubert	Shannon
31	19926 Park Holw	San Antonio	CR 208	Florence	1 & 2	R468143, R549397	Haziel Roberta McCormick Williams	Williams	Haziel McCormick
32	-	-	1050 CR 208	Florence	1 & 2	R324265, R355958, R499716, R007468, R468146, R481203, R549417, R549422, R007458, R007459, R007473, R324266, R355927, R355965	McCormick Childrens Family Limited Partnership	-	-

Lands owned by the **McCormick Childrens Family LP** (Map ID 32) are included in this list due to their inclusion via "Margaret Peggy Anne McCormick Wardlaw" in the October 13, 2022 letter from Ms. Lauren Ice

MAP 1



30°47'28.3"N -97°54'11.52"W WGS84
WILLIAMSON COUNTY, TEXAS



WAID ENVIRONMENTAL

EXF1424\AERIALAREAMAP.DWG
11/17/2022

Attachment B
Frasier Affidavit

**TCEQ DOCKET NO. 2022-1552-AIR
AFFIDAVIT OF LUCY FRAISER, PH.D., DABT
FRAISER TOXICOLOGY CONSULTING, LLC**

STATE OF ARKANSAS
COUNTY OF WASHINGTON

§
§

BEFORE ME, the undersigned authority, on this day personally appeared Lucy Fraiser, who after being duly sworn upon her oath stated as follows:

1. My name is Lucy Fraiser. I am over 21 years of age, am of sound mind, and am fully competent to make this affidavit. Each and every statement contained in this affidavit is based upon my personal knowledge, and each and every statement is true and correct.
2. I am a toxicologist. I perform air quality health and welfare evaluations, provide litigation and regulatory support, and prepare soil/water human health and ecological risk assessments. I formed Lucy Fraiser Toxicology Consulting LLC in July 2017, which is a toxicology consulting firm.
3. I have been retained on behalf of Exflur Research Corporation ("**Exflur**") to conduct a public health and welfare effects evaluation related to the potential for health and/or welfare effects from maximum allowable emissions which would be authorized by Proposed Texas Commission on Environmental Quality ("**TCEQ**") Air Quality Permit Number 165848 ("**Permit**"). The Permit was developed by TCEQ staff based on the "**Application**" submitted to TCEQ to authorize Exflur's operations of a proposed chemical manufacturing facility in Williamson County, Texas.
4. The Documents available in the TCEQ Commissioners' Integrated Database relating to the application, including the November 9, 2022 letter from the TCEQ Chief Clerk regarding consideration of the hearing requests on the Application, which includes a mailing list of persons who submitted a contested case hearing on the Application ("**Hearing Requesters**"), have been made available to me for review. In addition, I have reviewed the following documents, as well as data regarding the Application provided to me by representatives of Exflur, or Waid Environmental ("**Waid**"), which prepared the air dispersion modeling for the Application:

TCEQ's Air Quality Analysis Audit for the Application, dated November 18, 2021 ("**Modeling Audit**");

TCEQ's Development Support Document for Hydrogen Fluoride and Other Soluble Inorganic Fluorides, dated September 14, 2015 ("**DSD**");

Affidavit of Joerg Windolph, Principal Engineer at Waid, in the same TCEQ Docket Number listed above for the Application ("**Windolph Affidavit**");

TCEQ's *Modeling and Effects Applicability Review: How to Determine the Scope of Modeling and Effects Review for Air Permits* (APDG 5874) (2018) ("**MERA**");

TCEQ's *Guidelines to Develop Toxicity Factors* (RG-442) (September 2015);

TCEQ Effects Screening Levels ("**ESLs**") from the Texas Air Monitoring Information System (TAMIS) database for Hydrogen Fluoride, Hydrogen Fluoride (Agriculture), Hydrogen Fluoride (Agriculture with Cattle); Fluorine (used as a surrogate for Difluorine); Carbonyl Fluoride, Carbonyl Fluoride (Agriculture), Carbonyl Fluoride (Agriculture with Cattle); Trifluoroacetic acid, Trifluoroacetic acid (Agriculture), Trifluoroacetic acid (Agriculture with Cattle), Perfluorohexane, Perfluoroheptane, Methanol, Isopropyl Alcohol, Perfluorooctanoic acid, Bromine, Toluene, Butylated Hydroxytoluene, Acrylic Acid, Hydrogen Chloride, Ethyl acetate, 1,1,2-Trichloro-1,2,2-trifluoroethane, Perfluoropropane, Carbon tetrafluoride, Tetrahydrofuran, and Hydrogen Bromide; and

Additional ESLs in **Exhibit 1**, which were provided to Waid by Mr. Manny Reyna of the TCEQ Toxicology Division in response to a request from Mr. Christopher L. Bauer, a Principal Engineer at Waid, on October 30, 2008.

These are the same type of documents that any toxicologist would be expected to review and rely upon in conducting a public health and welfare effects evaluation.

5. I received a Ph.D. in Toxicology in 1992 from the University of Texas at Austin and a B.A. Degree in Psychology from the University of Texas at Austin in 1984. I am a Diplomate of the American Board of Toxicology ("**DABT**"). The DABT certification is a globally-recognized credential in toxicology. The DABT certification is a certification by the American Board of Toxicology ("**ABT**"), which is the largest professional toxicology credentialing organization in the world. The DABT certification represents competency and commitment to human health and environmental sciences. Becoming certified by the ABT requires a combination of higher education and experience, with rigorous certification (testing) and recertification processes. I am also a member of the American College of Toxicology. I have conducted and managed hundreds of multi-pathway exposure and human health risk assessments and risk-based corrective action evaluations over my 32-year career. Early in my career, I worked in the Toxicology Division of the Texas Natural Resource Conservation Commission ("**TNRCC**"), the predecessor agency to the TCEQ. After leaving the TNRCC in 1998, I worked for a number of different consulting firms as a toxicologist. I started Lucy Fraiser Toxicology Consulting LLC in July 2017. While I work with all environmental media, I specialize in air quality public health and welfare effects evaluations. I have performed these evaluations for many industrial source types and types of pollutants. I have extensive experience performing public health and welfare effects evaluations related to air quality permit applications submitted to the TCEQ and its predecessor agency, the TNRCC. I have conducted health and welfare evaluations for proposed and/or existing emissions from dozens of industrial facilities, including hazardous waste combustion facilities, refineries, electricity generating units, chemical plants, concrete batch plants, rock crushers, cement kilns, and smelters (copper and lead). I have also performed numerous other air quality evaluations in other states not directly related to the air permitting process. I have been qualified as an expert, been deposed, and

have provided expert testimony in contested case hearings, federal civil suits, and state toxic tort litigation involving potential effects of air emissions on public health and welfare on numerous occasions.

6. Applicants for TCEQ air permit applications use air dispersion modeling to predict concentrations of the pollutants from the proposed facilities at “receptors,” which TCEQ modeling guidance defines as locations “where the public could be exposed to an air contaminant in the ambient air.” Air dispersion models predict movement of contaminants in the atmosphere and provide conservative estimates (i.e., overestimates) of air pollutant concentrations at different distances and directions from the emissions source. Exposure occurs when local populations come into contact with pollutants from an emissions release. Therefore, conservatively estimated air concentrations from air dispersion modeling are routinely used to evaluate potential exposures by providing conservatively estimated air concentrations (i.e., overestimated by comparison to actual expected exposure levels) at different locations. The concentration of a pollutant to which a member of the public is potentially exposed is critical to determining whether adverse health or welfare effects will occur. Toxicologists in TCEQ’s Toxicology Division use the results from the air dispersion modeling in their toxicological evaluations of the effects of proposed emissions. The objectives of the analysis are to: 1) establish off-property ground-level concentrations (“*GLCs*”) of contaminants resulting from proposed and/or existing emissions; and 2) evaluate these *GLCs* for their potential to cause adverse health or welfare effects. TCEQ’s effects evaluation process, which relies on air dispersion modeling results, includes three areas of review.

7. The first TCEQ effects evaluation looks at constituents for which the U.S. Environmental Protection Agency (“*EPA*”) has established a National Ambient Air Quality Standard (“*NAAQS*”), also known as “criteria pollutants.” In the State *NAAQS* Analysis, proposed emissions of criteria pollutants from the project are modeled to estimate maximum ground-level concentrations (“*GLC_{max}*”), with the objective of determining whether the project has the potential to cause or contribute to an exceedance of the *NAAQS*. *EPA* establishes each *NAAQS* at a level that is protective of public health and welfare with an adequate Margin of Safety (“*MOS*”). Employing conservative measures in deriving the *NAAQS* helps *EPA* to ensure that there is an adequate *MOS* between exposure concentrations associated with adverse health/welfare effects and the *NAAQS*.

As indicated in Table 1 below, which is from the Modeling Audit, the *GLC_{max}* for each *NAAQS* criteria pollutant to be authorized by the Permit for each applicable Averaging Time were all below the *de minimis* level; therefore, no further evaluation was warranted.

Table 1. Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLCmax ($\mu\text{g}/\text{m}^3$)	De Minimis ($\mu\text{g}/\text{m}^3$)
PM ₁₀	24-hr	0.1	5
PM _{2.5}	24-hr	0.1	1.2
PM _{2.5}	Annual	0.01	0.2
NO ₂	1-hr	7	7.5
NO ₂	Annual	0.1	1
CO	1-hr	10	2000
CO	8-hr	3	500

Thus, the highest modeled criteria pollutant concentrations from proposed Exflur Facility sources at or beyond the fence line were below the *de minimis* NAAQS, otherwise known as Significant Impact Levels (“*SILs*”). Since the *SILs* are set at a small fraction of the health and welfare-protective NAAQS, these criteria pollutants are not expected to pose a health or welfare threat at or beyond the fence line.

8. Next, the second TCEQ effects evaluation is a State Property Line Standard analysis completed for sulfur compounds in which measured or modeled GLC_{max} are compared to TCEQ-derived State Property Line Standards in addition to the federal NAAQS. Since no sulfur compounds would be authorized from the Exflur Facility, no State Property Line Standard analysis was required as part of the Application process.

9. The third TCEQ effects evaluation involves a public health and welfare effects evaluation for constituents lacking a NAAQS or TCEQ State Property Line Standard. For these constituents, an evaluation is conducted in accordance with appendix D of TCEQ’s guidance entitled *Modeling and Effects Applicability Review: How to Determine the Scope of Modeling and Effects Review for Air Permits* (APDG 5874) (2018) (“*MERA*”). In the *MERA* evaluation, modeled GLC_{max} are compared to TCEQ-derived ESLs, which are health and/or welfare-based screening levels (not promulgated standards, such as the NAAQS and State Property Line Standards) used in the TCEQ permitting process. ESLs are only guidelines or screening levels that TCEQ sets at concentrations that correspond to a “no significant risk level.” Therefore, if predicted airborne concentrations of a compound exceed the relevant ESL, adverse health or welfare effects would not necessarily be expected to occur, but a more in-depth review would be triggered. Because they are designed to be preventative in nature, ESLs are set at levels: 1) below the threshold for health effects; 2) corresponding to an insignificant risk; or 3) where odor nuisance or vegetative effects are unlikely.

Setting ESLs at these conservative levels ensures that public health and welfare are protected by incorporating a MOS. TCEQ's MERA guidance establishes a process for determining the scope of air modeling and the extent of the health effects review necessary. Steps 1 through 7 of the MERA consist of conservative procedures used by air permitting engineers to evaluate the potential for health effects of air contaminants. The Toxicology Effects Evaluation Procedure located in Appendix D of the MERA is based on a three-tiered approach, with Tiers I, II, and III representing progressively more complex levels of review.

Tier I involves determining if the off-property GLC_{max} is below the ESL. If the GLC_{max} is below the ESL, adverse health/welfare effects are not expected. If the GLC_{max} is above the ESL, the analysis continues to the next tier. Tier II entails determining if the GLC_{max} occurs on industrial property. If the GLC_{max} occurs on industrial property and is less than or equal to two times the ESL, adverse health and welfare effects are not expected to occur. If the GLC_{max} occurs on non-industrial property (" GLC_{ni} ") and the GLC_{ni} is less than the ESL, adverse health/welfare effects are not expected to occur. If either the GLC_{max} on industrial property is greater than two times the ESL or the GLC_{ni} is greater than the ESL, the analysis continues to the next tier. Limiting the number of hours that an ESL can be exceeded by a particular magnitude reduces the likelihood of repeated exposure to concentrations above the ESL (which are set at levels that do not pose a significant risk) and further reduces the likelihood of health or welfare effects. Short-term ESLs are designed to be protective of more than a single 1-hour exposure and, therefore, as long as the frequency of those exceedances is limited, adverse health and welfare effects are not expected. A case-by-case Tier III Analysis is only conducted by TCEQ toxicologists for compounds that do not satisfy Tier I or Tier II criteria.

For constituents eliminated during the MERA process or in Tier I or II of the Toxicology Effects Evaluation Procedure, steps which only require comparing modeled air concentrations (i.e., GLC_{max} and GLC_{ni}) to ESLs (or multiples of the ESL), there is no need for a more detailed review by the Toxicology Division. In other words, the MERA process and Tier I and II of the Toxicology Effects Evaluation Procedure represent screening procedures by which a permit applicant can demonstrate that emissions of non-criteria pollutants from a facility will be protective of the public's health and welfare.

Table 2 shown below, which is from the Modeling Audit except that the 1-hr GLC_{max} for hydrogen fluoride (specifically, hydrogen fluoride for air permit review in agricultural areas) has been replaced by the 24-hr GLC_{max} for hydrogen fluoride in agricultural areas, which was obtained from the modeling output files ("exfluor_ag.out"), an excerpt (provided by Waid) of which is provided in **Exhibit 2**. This correction was made to Table 2 from the Modeling Audit because the ESL for hydrogen fluoride in agricultural areas ($3.0 \mu\text{g}/\text{m}^3$) reflects the 24-hr threshold that causes perceptible foliar injury in Conifers, per the TCEQ's Development Support Document ("**DSD**"). Therefore, the appropriate comparison is to the 24-hr GLC_{max} .

Table 2. Minor NSR Site-wide Modeling Results for Health Effects

Pollutant	CAS#	Averaging Time	GLC _{max} (µg/m ³)	GLC _{max} Location	GLC _{ni} (µg/m ³)	GLC _{ni} Location	ESL (µg/m ³)
hydrogen fluoride	7664-39-3	1-hr	6	-	<6	-	18
hydrogen fluoride For air permit reviews in agricultural areas	7664-39-3	24-hr	1.1	Eastern Property Line	-	-	3
hydrogen fluoride For air permit reviews in agricultural areas with cattle	7664-39-3	Annual	0.3	-	-	-	0.75
fluorine	7782-41-4	1-hr	3.9	Western Property Line	3.9	Western Property Line	2
perfluoroheptane	335-57-9	1-hr	22	-	<22	-	20000
methanol	67-56-1	1-hr	38	-	<38	-	3900
perfluorooctanoic acid and its inorganic salts	335-67-1	1-hr	<0.01	-	<0.01	-	0.05
bromine	7726-95-6	1-hr	5	-	<5	-	7
hydrogen chloride	7647-01-0	1-hr	4	-	<4	-	190
hydrogen chloride	7647-01-0	Annual	0.1	-	<0.1	-	7.9
carbon tetrafluoride	75-73-0	1-hr	154	-	<154	-	18000
Perfluoro (bis-2-chloroethoxy methane)	Not found	1-hr	7	-	<7	-	200
Perfluorodecalin	306-94-5	1-hr	22	-	<22	-	200
polymers of chlorotrifluoroethylene (PCTFE)	9002-83-9	1-hr	17	-	<17	-	50
carbonyl fluoride For air permit reviews in agricultural areas with cattle	353-50-4	Annual	0.03	-	<0.03	-	0.71
trifluoroacetic acid For air permit reviews in agricultural areas with cattle	76-05-1	Annual	0.03	-	<0.03	-	0.71

As reflected in Table 2, except for fluorine (1-hr Averaging Time), the modeled concentrations for constituents to which the Public Health and Welfare Effects Evaluation applies are well below applicable ESLs. Thus, no health or welfare impacts are expected for those constituents modeled to be well below the ESL.


The modeled 1-hr GLC_{max} for difluorine/fluorine (3.9 µg/m³) is slightly above the short-term ESL (2 µg/m³). The GLC_{max} occurs immediately adjacent to the western Exflur property line in an uninhabited and undeveloped area where human exposure potential is extremely limited. Short-term ESLs are designed to be protective of more than a single 1-hour exposure and, therefore, as long as the frequency of those exceedances is limited, adverse health and welfare effects are not expected. Additional modeling indicated that concentrations of difluorine/fluorine were predicted to exceed the ESL for at most 99 out of 8,760 hours in a year (about 1% of the time) at the location of the GLC_{max}. Given the limited number of hours that the difluorine/fluorine ESL is exceeded, the small magnitude of the exceedance (less than two-fold), and the unpopulated area in which exceedances occur, the likelihood of health or welfare effects is extremely small.

Thus, the proposed emissions from the new Exflur Facility do not pose an adverse health or welfare effect because of the small magnitude of the modeled GLC_{max} and the highly conservative nature of the ESLs.

10. As explained above, the maximum levels of pollutants to be authorized by the Application are a fraction of the state and federal standards and the state ESLs, which are conservatively designed to be protective of public health and welfare. The only exception is for difluorine/fluorine (1-hr Averaging Time) which was subject to additional review that indicated that emissions are not expected to pose a public health or welfare threat.

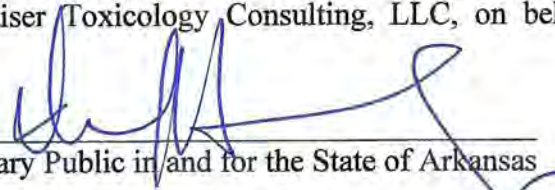
11. Based on the mapping of the "**Hearing Requester Locations**" as described in the Windolph Affidavit, I would not expect discernible impacts on Hearing Requesters who claim an interest within one mile of Exflur's Facility from any pollutant for which authorization is requested by the Application. At greater distances than one mile, potential impacts are expected to be even less.

Further affiant sayeth not."



Lucy Fraiser
Fraiser Toxicology Consulting, LLC

This instrument was acknowledged before me, the undersigned authority, this 21st day of November, 2022, by Lucy Fraiser, Fraiser Toxicology Consulting, LLC, on behalf of said company.



Notary Public in and for the State of Arkansas



Exhibit 1:
Additional ESLs

Compounds for which ESLs are needed

Compound	CAS #	Formula	S.T. ESL (ug/m3)	L.T. ESL (ug/m3)
Polychlorotrifluoroethylene (PCTFE)	9002-83-9	[CF ₂ CClF] _n	50 (as PM); 1000 (as vapor)	5 (as PM); 100 (as vapor)
1,10-decanediol	112-47-0	HO(CH ₂) ₁₀ OH	50	5
Perfluorodecanoic acid	335-76-2	CF ₃ (CF ₂) ₈ CO ₂ H	14	1.4
Perfluorohexane	335-57-9	C ₆ F ₁₄	200	20
Perfluorodecalin	306-94-5	C ₁₀ F ₁₈	200	20
Trifluoroacetyl fluoride (Perfluoroacetyl fluoride)	354-34-7	CF ₃ -COF	200	20
perfluorobutyl fluoride		CF ₃ (CF ₂) ₂ -COF	200	20
perfluoropentyl fluoride		CF ₃ (CF ₂) ₃ -COF	200	20
perfluorohexyl fluoride		CF ₃ (CF ₂) ₄ -COF	200	20
perfluoroheptyl fluoride		CF ₃ (CF ₂) ₅ -COF	200	20
perfluorooctyl fluoride		CF ₃ (CF ₂) ₆ -COF	200	20
perfluorononyl fluoride		CF ₃ (CF ₂) ₇ -COF	200	20
perfluorodecyl fluoride		CF ₃ (CF ₂) ₈ -COF	200	20
perfluorosuccinyl fluoride		FOC-(CF ₂) ₂ -COF	200	20
perfluoroglutaryl fluoride		FOC-(CF ₂) ₃ -COF	200	20
perfluoroadipoyl fluoride		FOC-(CF ₂) ₄ -COF	200	20
perfluorosebacyl fluoride		FOC-(CF ₂) ₆ -COF	200	20
Perfluorodisopropyl cyclohexane			200	20
Perfluoro-t-butylcyclohexane			200	20
Perfluorodimethyl naphthalene (also known as perfluoroperhydrodimethyl naphthalene)			200	20
92 Solvent (Ethane, 1,1'-[difluoromethylenebis(oxy)]bis[2-chloro-1,1,2,2-tetrafluoro-])	130085-19-7	CF ₂ ClCF ₂ OOCF ₂ OOCF ₂ Cl	200	20

Exhibit 2:
24-hr GLC_{max} for Hydrogen Fluoride
(hydrogen fluoride for air permit review in agricultural areas)

Health Effects Analysis - MERA Step 3 & Step 7
 Determining Conservative Impact with Unit Impact Scaling

Scaled Impact Determination Sample Calculation

Hourly Hydrogen Fluoride Impact of EPN EP3-1
 = 24-hr Unit Impact EP3-1 ($\mu\text{g}/\text{m}^3$) / (lb/hr) * EP3-1 Hourly HF ER (lb/hr)
 = 19.466 ($\mu\text{g}/\text{m}^3$) / (lb/hr) * 0.01
 = 0.14 $\mu\text{g}/\text{m}^3$

Hourly Hydrogen Fluoride Impact of EPN FUG3-1
 = 24-hr Unit Impact EP3-1 ($\mu\text{g}/\text{m}^3$) / (lb/hr) * EP3-1 Hourly HF ER (lb/hr)
 = 7.636 ($\mu\text{g}/\text{m}^3$) / (lb/hr) * 0.13
 = 0.96 $\mu\text{g}/\text{m}^3$

	EP3-1	EP3-2	EP3-3	EP3-4	FUG3-1	FUG3-2	FUG3-3	FUG3-4
Full Grid	19.59	12.47	12.61	9.28	7.64	11.93	12.09	12.30
Ag Grid	19.47	6.85	6.82	7.64	7.16	6.99	7.08	7.08

24-hour UIM ($\mu\text{g}/\text{m}^3$) / (lb/hr)

See "Exfluor.out"
 See "Exfluor_Ag.out"

AERMOD Predicted Impacts ($\mu\text{g}/\text{m}^3$) - Scaled Hourly Impact

Non-Criteria Pollutant (Agriculture)	24-hr ESL ($\mu\text{g}/\text{m}^3$)		Hourly Impact ($\mu\text{g}/\text{m}^3$)				Short-Term Total	Impact Exceeds ESL?
	EP3-1	EP3-2	EP3-3	FUG3-1	FUG3-2	FUG3-3		
Hydrogen Fluoride (Agriculture)	0.14	-	-	0.96	-	-	1.11	FALSE