



OFFICE OF THE
HARRIS COUNTY ATTORNEY
CHRISTIAN D. MENELEE

May 30, 2024

Via Email: Kelly.Keel@tceq.texas.gov

Kelly Keel, Executive Director
Office of the Executive Director
Texas Commission on Environmental Quality
12100 Park 35 Circle, Building F
Austin, Texas 78753

Re: Harris County's Petition for Rulemaking

Dear Ms. Keel,

On behalf of Harris County, please find the attached Petition for Rulemaking requesting that TCEQ adopt a requirement in 30 Tex. Admin. Code Chapter 116, Subchapter F, Standard Permits that requires updated protectiveness reviews when the Environmental Protection Agency implements a new National Ambient Air Quality Standard.

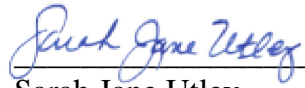
If you have any questions, please contact me at sarah.ultey@harriscountytexas.gov or (832) 596-7986.

Sincerely,

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cc: Via Email
Dr. Latrice Babin, Director, Harris County Pollution Control Services Department

**BEFORE THE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

Petition for Rulemaking

Pursuant to the Texas Government Code § 2001.021 and 30 Texas Administrative Code (T.A.C.) § 20.15, Harris County, Texas (Harris County) petitions the Texas Commission on Environmental Quality (TCEQ) to adopt a requirement in 30 T.A.C. Chapter 116, Subchapter F, Standard Permits that TCEQ must conduct an updated protectiveness review analysis for standard permits for facilities subject to National Ambient Air Quality Standard (NAAQS) no later than one year after the Environmental Protection Agency’s (EPA) implementation of a new NAAQS. *Harris County has identified at least 15 (out of 21 total) standard permits that have not been updated since the NAAQS was lowered for a criteria pollutant emitted by that type of industry.* Until TCEQ adopts this necessary rule, its standard permit program will continue to lag behind applicable NAAQS allowing numerous facilities that will potentially emit dangerous levels of criteria pollutants above NAAQS to be permitted. In support of its petition, Harris County would show the following:

1. Petitioner is an Interested Person

Harris County was created as a body corporate and politic under the laws of the State of Texas and is recognized as a legal subdivision of the State of Texas. Vernon's Ann. Texas Const. Art. 9, § 1 and 11, § 1. Accordingly, as a legal subdivision of the State of Texas, Harris County is an interested person pursuant to 30 T.A.C. § 20.15(a)(3) and Tex. Gov't. Code § 2001.021(d)(3).

2. Name and Address of Petitioner

Harris County
1001 Preston
Houston, Texas 77002

Please contact Harris County regarding this Petition for Rulemaking through Sarah Jane Utley, Environmental Division Director, Harris County Attorney’s Office, 1019 Congress, 15th Floor, Houston, Texas 77002.

3. Explanation of the Proposed Rule

A. TCEQ Standard Permits

The Texas Clean Air Act (TCAA) requires a permit for the construction of a new facility or the modification of an existing facility that may issue air contaminants.¹ TCEQ is authorized to issue standard permits for the construction or modification of new or existing facilities with similar operations, processes, and emissions.² To be issued, standard permits must be enforceable, include adequate monitoring, apply best available control technology (“BACT”) and there must be “no

¹ Tex. Health & Safety Code § 385.0518(a); 30 Tex. Admin. Code § 116.110.

² Tex. Health & Safety Code § 385.05195

indication that the emissions from the facility will contravene the intent of [the TCAA], including protection of the public's health and physical property.³

B. National Ambient Air Quality Standards

The Federal Clean Air Act (FCAA) requires EPA to identify air pollutants that may reasonably be anticipated to endanger human health and the environment. The pollutants identified by EPA are called criteria pollutants. EPA must establish NAAQS for criteria pollutants at levels that are protective of public health and welfare.⁴ While EPA sets standards for criteria pollutants, the states determine how those standards are to be met. Thus, to implement NAAQS, states create State Implementation Plans (SIPs) that demonstrate to EPA how federal standards will be achieved.⁵ As long as national standards are met, the state may select any mix of control devices that it chooses. An important part of how Texas' SIP satisfies the NAAQS is by the implementation of the standard air permit program.

EPA is required to assess NAAQS every five years. EPA must lower NAAQS if the scientific evidence suggests that any existing NAAQS are no longer protective of human health and the environment.⁶ NAAQS will be lowered or amended when new technical analysis shows that the current acceptable concentrations of a criteria pollutant are more dangerous than when previously adopted, warranting a reduced NAAQS. For example, in 2012, EPA lowered the NAAQS primary standard for particulate matter with a diameter of 2.5 micrometers or less (PM_{2.5}) from an annual rate of 15 micrograms per cubic meter (µg/m³) to 12 µg/m³.⁷ More recently, EPA once again lowered the annual primary standard for PM_{2.5} to 9µg/m³.⁸ EPA lowered the PM_{2.5} NAAQS because since 2012 “thousands of new scientific studies have demonstrated the dangers of soot exposure [and] [s]trengthening the primary annual PM_{2.5} standard is expected to address disparities [that] would result in significant public health benefits.”⁹

C. Non-Criteria Pollutants

For certain non-criteria pollutants, the TCEQ Toxicology Division develops effects screening levels (ESL), which are used to evaluate the potential for health effects from air contaminant exposure.¹⁰ Acute exposure is evaluated using short-term ESL based on a one-hour averaging

³ Tex. Health & Safety Code §§ 382.051(b)(3), 382.05195(a).

⁴ 42 U.S.C. § 7409.

⁵ 42 U.S.C. § 7410.

⁶ 42 U.S.C. § 7409(d).

⁷ 78 Fed. Reg. 3,086 (Jan. 15, 2013) (Codified 40 C.F.R. Parts 50, 51, 52, 53 and 58).

⁸ EPA, *Timeline of Particulate Matter (PM) National Ambient Air Quality Standards (NAAQS)*, EPA.GOV, <https://www.epa.gov/pm-pollution/timeline-particulate-matter-pm-national-ambient-air-quality-standards-naaqs> (last updated Feb. 7, 2024).

⁹ EPA Press Office, *EPA Proposes to Strengthen Air Quality Standards to Protect the Public from Harmful Effects of Soot*, EPA.GOV (Jan. 6, 2023), <https://www.epa.gov/newsreleases/epa-proposes-strengthen-air-quality-standards-protect-public-harmful-effects-soot>.

¹⁰ See TCEQ, *About Air Monitoring Comparison Values*, <https://www.tceq.texas.gov/toxicology/amcv> (last visited Aug. 11, 2022); also TCEQ, *About Effects Screening Levels*, <https://www.tceq.texas.gov/toxicology/esl/ESLMain.html> (last visited Aug. 11, 2022).

period.¹¹ Chronic exposure is evaluated with a long-term ESL based on an annual averaging period.¹² If ambient levels of contaminants exceed an ESL, a more in-depth review of the proposed facility's impact on public health is required.¹³

D. TCEQ Protectiveness Reviews

When TCEQ promulgates a standard permit, it must demonstrate that emissions from any facility operating under the standard permit will not cause or contribute to exceedances of the NAAQS, exceed a state property line standard or adversely affect human health or the environment. This process of demonstrating safety and compliance with the NAAQS is commonly referred to as a protectiveness review.¹⁴ During a protectiveness review, TCEQ evaluates air dispersion modeling of emissions from a generic, hypothetical facility and determines if the maximum predicted concentrations of air pollutants predicted at or beyond the property line is less than the respective NAAQS and, therefore, a facility operating under similar conditions is presumably protective.¹⁵ Total emissions for each criteria pollutant in each permit evaluation must meet NAAQS.¹⁶ The control measures imposed by the standard permit can take various forms, such as buffer distances (for example, setback distances for a baghouse), emissions control technologies (such as requiring all emissions to be funneled through a special filter), throughput or production limits, and mandatory best practices (like paving all the main traffic areas of a facility as a way of controlling dust).

Unfortunately, the TCEQ has not always updated their standard permits or performed updated protectiveness reviews when NAAQS or ESLs are changed. TCEQ needs to investigate how changes to the NAAQS, or an applicable ESL, will affect each standard permit because the protectiveness review for each permit is the fundamental basis for demonstrating that facilities will not cause or contribute to an exceedance of the NAAQS or adversely affecting human health and the environment. If a standard is lowered, previous protectiveness reviews may no longer demonstrate that public health is being protected. In some circumstances, an update may be as simple as utilizing updated numbers in an old algorithm and adjusting emission control measures accordingly.

This appears to be a common deficiency for standard permits. **Exhibit A** is a timeline that charts which standard permits have not been updated since the latest revision of the NAAQS for criteria pollutants that facilities covered by the respective standard permit are known to emit. In many cases, NAAQS have been updated *multiple times* since the standard permit was last updated.¹⁷

¹¹ *Id.*

¹² *Id.*

¹³ Interoffice Memorandum on Toxicology Factor Database Screening Levels.

¹⁴ TCEQ, Air Quality Modeling Guidelines, APDG 6232, Air Permits Division (Nov. 2019) at 10 ("TCEQ Air Quality Modeling Guidelines").

¹⁵ TCEQ Air Quality Modeling Guidelines at 17.

¹⁶ TCEQ, Interoffice Memorandum on Toxicology Factor Database Screening Levels (Mar. 8, 2018), <https://www.tceq.texas.gov/assets/public/implementation/tox/esl/special%20notations.pdf>.

¹⁷ The County is basing this assertion on documents TCEQ provided in response to Public Information Act requests made by Harris County Attorney's Office for protectiveness reviews.

Accordingly, Harris County is petitioning TCEQ to adopt a rule that requires a timely updated protectiveness review after any changes to NAAQS or ESLs. This critical and common-sense rule will also ensure that TCEQ assesses whether all current standard permits remain protective of human health and the environment after a NAAQS is changed.

4. Proposed Rule Language

The following language should be added to 30 Tex. Admin. Code § 116.605:

(h) No later than one year from the date that the Environmental Protection Agency (EPA) publishes a new National Ambient Air Quality Standard (NAAQS) for a criteria pollutant in the Federal Register, the Texas Commission on Environmental Quality shall complete an update to the protectiveness review analysis for each air quality standard permit promulgated under Tex. Health & Safety Code § 382.051(b)(3) in which that criteria pollutant is implicated to account for the updated standard.

(i) TCEQ shall update appropriate air quality standard permits to address all findings from the updated protectiveness review analysis performed pursuant to subsection (h).

5. Statement of Authority for the Proposed Rule

The TCEQ has the authority to adopt the proposed rule amendment based on the following statutory provisions:

- Tex. Health & Safety Code § 382.051(b)(3), which establishes the Commission's authority to issue a standard permit for similar facilities.
- Tex. Health & Safety Code § 382.017, which establishes the Commission's authority to adopt rules for purposes of air permitting.
- Tex. Health & Safety Code § 382.05195(e), which establishes the Commission's duty to make rules establishing procedures for the amendment of a standard permit.

6. Injury or Inequity that could result from the Failure to adopt the Proposed Rule

Harris County has struggled with NAAQS attainment since the early 1990s. In 1992, Harris County was determined to be in severe nonattainment for the 1997 1-hour ozone NAAQS.¹⁸ In 2004, Harris County was determined to be in severe nonattainment for the 1997 8-hour ozone NAAQS.¹⁹ In 2012, Harris County was listed as severe nonattainment for the 2008 8-hour ozone NAAQS.²⁰ In 2018, Harris County was listed as being in severe nonattainment for the 2015 8-hour Ozone NAAQS.²¹ Harris County remains in serious nonattainment for both the 2008 and 2015 Ozone NAAQS (the 1997 1-hour and 8-hour ozone NAAQS was revoked). Moreover, Harris

¹⁸ EPA, *Texas Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants*, EPA.GOV, https://www3.epa.gov/airquality/greenbook/anayo_tx.html (last updated Apr. 30, 2024).

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

County has long been borderline of violating the NAAQS for PM_{2.5}. To violate the 2012 Annual NAAQS for PM_{2.5}, air monitors must show greater than 12.0 µg/m³, taking the annual arithmetic mean averaged over three years.²² The annual arithmetic mean of PM_{2.5} for 2022 at the North Wayside Monitor in Harris County was 11.8 µg/m³, and for 2023 it was 13.1 µg/m³.²³ The current mean for 2024 is 12.7 µg/m³.²⁴ Based on this monitoring data, Harris County was extremely close to a violation of the 2012 Annual NAAQS for PM_{2.5}. In 2024 the EPA lowered the PM_{2.5} NAAQS to 9.0 µg/m³,²⁵ putting Harris County in nonattainment for the 2024 PM_{2.5} NAAQS.

Texas will continue to fall behind NAAQS if protectiveness reviews for applicable standard permits are not updated when air quality standards are strengthened. New facilities are routinely authorized under outdated permits and many existing facilities operating under permits that have not been proven to be protective of human health and the environment. These flawed standard permits violate the FCAA, TCAA, and Texas' SIP.

A) This rule will ensure TCEQ complies with the Clean Air Act.

Timely updating standard permits to comply with current NAAQS is critical to the intended purpose of FCAA and TCAA. According to FCAA, NAAQS “shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are *requisite* to protect the public health.”²⁶ FCAA requires periodic review of the science upon which NAAQS are based and the standards themselves to ensure the standards are protective of public health.²⁷

The standard permit program is a part of the applicable SIP for Texas under section 110 of the Clean Air Act, 42 U.S.C. 7410, and 40 CFR Part 51 to meet NAAQS.²⁸ Failing to update protectiveness reviews when new NAAQS are promulgated impacts Texas' SIP compliance because prior reviews might not sufficiently prove facilities permitted under the standard permit meet current NAAQS. Additionally, the “[p]rotection of public health and welfare” is a general condition applicable to holders of standard permits. Emissions from facilities permitted by TCEQ must comply with the TCAA, including the protection of health and property of the public.²⁹ If protectiveness reviews supporting standard permits are not based on current scientific literature for criteria pollutants and NAAQS, the standard permits are at risk of failing to protect public health. By not updating the protectiveness reviews for standard permits, permit holders to operate

²² *Timeline of Particulate Matter (PM) National Ambient Air Quality Standards (NAAQS)*, supra note 8.

²³ TCEQ, *CAMS 405 Yearly Summary Report*, TCEQ.TEXAS.GOV, https://www.tceq.texas.gov/cgi-bin/compliance/monops/yearly_summary.pl (last visited May 14, 2024).

²⁴ *Id.*

²⁵ *Timeline of Particulate Matter (PM) National Ambient Air Quality Standards (NAAQS)*, supra note 8.

²⁶ 42 U.S.C. § 7409(b)(1)(emphasis added).

²⁷ 42 U.S.C. § 7409(d).

²⁸ 40 C.F.R. § 52.2270.

²⁹ 30 Tex. Admin. Code § 116.615(1); Tex. Health & Safety Code Ann. § 382.002 (The policy of this state and the purpose of this chapter are to safeguard the state's air resources from pollution by controlling or abating air pollution and emissions of air contaminants, consistent with the protection of public health, general welfare, and physical property, including the esthetic enjoyment of air resources by the public and the maintenance of adequate visibility.).

facilities that are exceeding NAAQS or ESLs.

TCEQ by rule shall establish procedures for the amendment of a standard permit.³⁰ There is currently no rule in 30 Tex. Admin. Code § 116.605 (Standard Permit Amendment and Revocation) that establishes when a standard permit must (or even should) be amended. Section 116.605 merely provides factors that the TCEQ will consider when determining *whether* to amend or revoke a standard permit. These factors include a) whether a condition of air pollution exists, b) the applicability of other state or *federal standards that apply or will apply to the types of facilities covered by the standard permit*, c) requests from the regulated community or the public to amend or revoke a standard permit consistent with the requirements of the TCAA and d) whether the standard permit requires best available control technology.³¹ TCEQ rules allow an owner or operator to register under standard permit for a term not to exceed ten years.³² But the underlying standard permits do not have an expiration date – in contrast to other permits issued by TCEQ (e.g., Title V permits authorize operations for up to 5 years;³³ New Source Review permits authorize operations for up to 15 years³⁴).

Under the current regulatory framework, TCEQ is under no obligation to amend standard permits and standard permits do not have expiration dates. The rules need to specify when TCEQ must amend the permits. Promulgating a rule that requires TCEQ to timely update relevant protectiveness review analyses remedies this deficiency and ensures the standard permit program reflects applicable NAAQS determined by EPA to be necessary for the protection of public health within a reasonable amount of time.

EPA has updated the primary NAAQS for PM_{2.5} *three times* since the Concrete Batch Plant with Enhanced Controls, Temporary Hot Mix Asphalt Plant, Permanent Hot Mix Asphalt Plant, Municipal Solid Waste Landfill, Boiler, and the Animal Carcass Incinerator standard permits were last revised. These permits all implicate PM_{2.5}. Two of the above listed permits have not been updated since 2003. For these reasons, Harris County request that TCEQ promulgate a rule providing a deadline to complete such reviews.

B) Failure to adopt this rule poses continued risk of negative health consequences for Harris County residents, especially those in already overburdened communities.

Failure to adopt this rule would have real-world health consequences for Harris County residents. Minority and low-income residents are particularly vulnerable because these communities often bear the disproportional brunt of environmental harm and pollution in Harris County, including many textbook environmental justice (EJ) communities. Harris County is home to 4.7 million people, is the most populous county in Texas and along the Gulf of Mexico and is one of the most ethnically diverse places in the country. In addition to containing Houston, the fourth largest city in the country, Harris County is home to a large concentration of industry, oil refineries, chemical plants, and the Port Houston – the nation’s largest port for waterborne tonnage. Heavy commuter

³⁰ Tex. Health & Safety Code Ann. § 382.05195(e).

³¹ 30 Tex. Admin. Code § 116.605(d)(3).

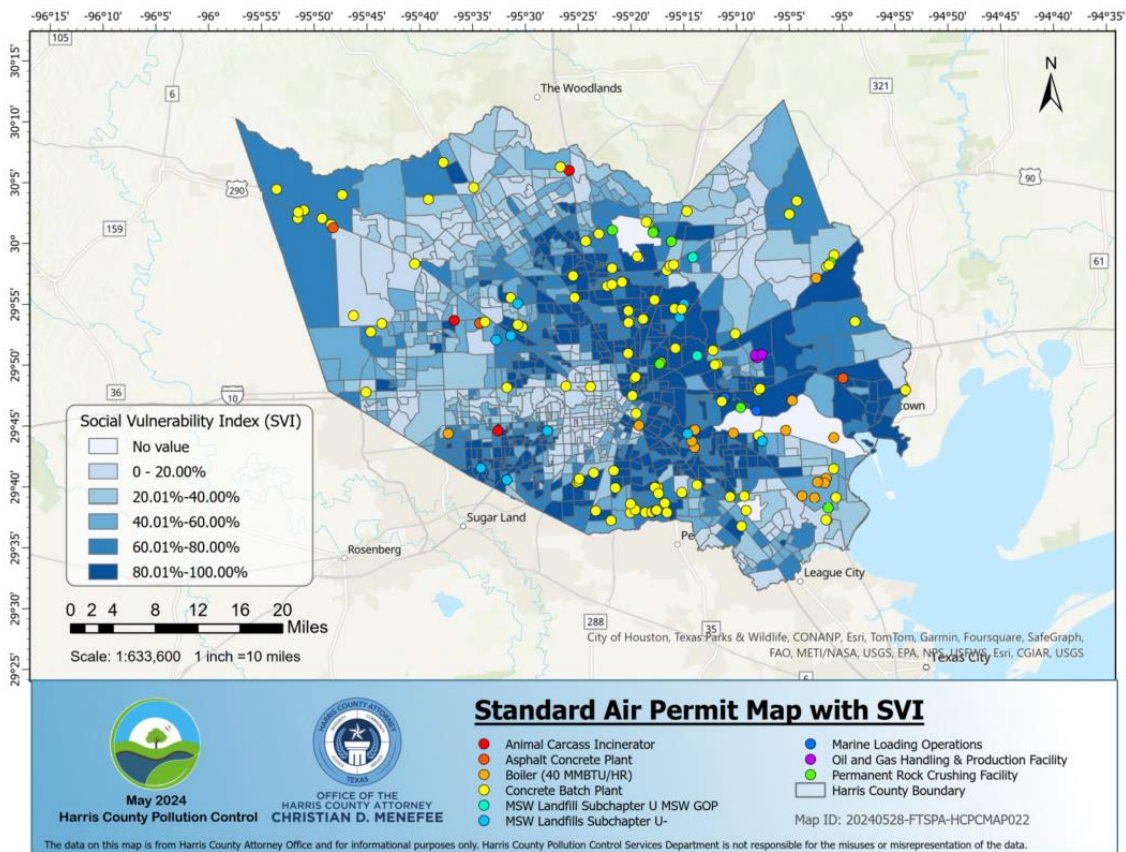
³² 30 T.A.C. § 116.604.

³³ 30 T.A.C. § 122.502(d).

³⁴ 30 T.A.C. § 116.315(d).

traffic, heightened presence of industry, emissions events and chemical disasters, smog, and other factors all contribute to poor air quality. Houston is the largest U.S city without zoning laws, which further compounds air quality problems for the communities that are literally at the fence-line of industry. Some EJ communities live within very close proximity to upwards of 15 industrial and toxic waste facilities.³⁵

Some communities have multiple facilities operating under various air quality standard permits. If the permits these facilities are operating under are based on outdated standards and science, nearby residents are potentially suffering the compounded effect of multiple facilities emitting pollutants beyond NAAQS. This situation has persisted for years, if not decades. A map detailing the locations of these standard permits can be found below. *See Map 1.* Please note that this map is not inclusive of every facility operating under a standard permit in Harris County.



Map 1: Standard Air Permits active in Harris County measured against the Social Vulnerability Index.

³⁵ Double Jeopardy in Houston: Acute and Chronic Chemical Exposures Pose Disproportionate Risks for Marginalized Communities, Union of Concerned Scientists & Texas Environmental Justice Advocacy Service, 14 (2016) <https://www.ucsusa.org/sites/default/files/attach/2016/10/ucs-double-jeopardy-in-houston-full-report-2016.pdf>.

Facilities that operate under the various air quality standard permits are dispersed throughout Harris County. Some neighborhoods are overburdened with multiple facilities sited close to each other. For example, there are four standard permits registered to facilities (two municipal solid waste landfills and two concrete batch plants) located within two miles of the Carverdale Community Center. Carverdale is a historically Black community that has engaged in high profile advocacy efforts to combat environmental injustice issues.³⁶ To protect the health of the Carverdale community (and all Texas residents), TCEQ must ensure its standard permits always comply with the most updated NAAQS.

The Concrete Batch Plant with Enhanced Controls is an example of a standard permit that has gone decades without a protectiveness review. The standard permit was promulgated in 2004 based on a protectiveness review performed in 2000. In 2000, the PM_{2.5} NAAQS had been promulgated less than three years prior. At that time, assessing PM_{2.5} was accomplished by using PM₁₀ as a surrogate. When TCEQ performed its protectiveness review for the Concrete Batch Plant with Enhanced Controls standard permit, it used PM₁₀ as a surrogate for PM_{2.5}. In the subsequent 24 years, a protectiveness review has not been performed for PM_{2.5} itself. Therefore, TCEQ has never conducted a protectiveness review that proves businesses operating under the Concrete Batch Plant with Enhanced Controls standard permit comply with the applicable NAAQS and are not a health risk to nearby citizens. The failure of Texas standard permits to comply with the NAAQS violates the express provisions of FCAA.

Several studies corroborate that poor air quality in the Houston area disproportionately effects the health of minority and low-income populations. For example, one study found that levels of NO₂, linked to higher rates of several health issues, were 32% higher for Houston's Latino residents, 19% higher for Black residents, and 15-28% higher for residents living below the poverty line.³⁷ Another study found that Black children in Houston were twice as likely to suffer from asthma compared to white children of the same age, and Hispanic children had 22% higher odds of having asthma than white children.³⁸ A 2006 Report from the Houston Mayor's Task Force on the Health Effects of Air Pollution identified that the nine Houston "super neighborhoods" along the Houston Ship Channel, which contains several majority Black and/or Latino neighborhoods, were "far more vulnerable to health risks than others in Greater Houston" on "the basis of location alone."³⁹

EPA has noted that high pollution disproportionately burdens our EJ communities. In denying Texas' request for a 1-year extension of the ozone NAAQS attainment date for the HGB Ozone Nonattainment Area, EPA in part based their decision on their "consideration of existing pollution burdens for some communities within the area."⁴⁰ EPA has noted that communities residing and

³⁶ Lucio Vasquez, Community members push back against proposed Carverdale landfill expansion, Houston Public Media, (June 29, 2022) <https://www.houstonpublicmedia.org/articles/news/energy-environment/2022/06/29/427908/community-members-push-back-against-the-proposed-carverdale-landfill-expansion>.

³⁷ Krystal Vasquez, *Measuring Houston's environmental injustice from space*, Env't Health News, (July 20, 2021) <https://www.ehn.org/environmental-justice-houston-2653843877.html>.

³⁸ Amy McCaig, *Black Children in Houston at higher risk for asthma*, Rice U., (Mar. 20, 2017) <https://news2.rice.edu/2017/03/20/black-children-in-houston-at-higher-risk-for-asthma/>.

³⁹ A Closer Look at Air Pollution in Houston: Identifying Priority Health Risks, 21 (2006) <http://www.greenhoustontx.gov/reports/UTreport.pdf>.

⁴⁰ 87 FR 60927.

working near violating ozone monitors in the Houston area and the Houston Ship Channel are exposed to “a significant and disproportionate burden of ozone pollution and other sources of pollution (e.g., vehicle traffic and particulate matter emissions) compared to the greater Houston area and the U.S. as a whole.”⁴¹ These troubling circumstances are made worse by TCEQ’s permits that are meant to minimize this burden but are potentially dangerous because the permits are premised on outdated science and not proven to be protective of human health.

Even though the burden of air pollution is often disproportionately felt by certain communities in Harris County, the negative health effects of air pollution can affect all our residents, especially those who live close to emissions sources. Each criteria pollutant implicated by TCEQ’s standard air quality permits is associated with a plethora of serious health and environmental effects.

1. Particulate Matter (PM)

According to the American Lung Association, people at the greatest risk from particulate pollution exposure include infants, children, and teens; people with lung disease, especially asthma, but also people with chronic obstructive pulmonary disease; people with cardiovascular disease; people of color; current or former smokers; people with low incomes; and people who are obese.⁴² The health effects linked to particulate matter exposure include:

- Premature death in people with heart or lung disease
- Nonfatal heart attacks
- Irregular heartbeat
- Aggravated asthma
- Decreased heart function
- Irritation of airways, coughing, difficulty breathing

Sensitive populations, which include people with heart or lung diseases, children, and older adults, are the most impacted by particulate matter exposure. PM_{2.5} is also the leading cause of reduced visibility or haze and negatively affects ecosystems and the climate.⁴³

2. Nitrogen Dioxide (NO₂)

Populations that are particularly at risk include pregnant people, minors, adults older than 65, people with pre-existing medical conditions such as asthma, chronic obstructive pulmonary disease (COPD), cardiovascular disease, diabetes, and lung cancer, people who have been smokers, and people of color. Evidence suggests longer exposure to elevated concentrations of NO₂ may contribute to the development of cancer.⁴⁴ Other health effects linked to NO₂ exposure include:

⁴¹ 87 FR 60929.

⁴² Particulate Pollution, American Lung Association, (last visited Mar. 3, 2023) <https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/particle-pollution>.

⁴³ Particulate Matter (PM) pollution, Health and Environmental Effects of Particulate Matter (PM), U.S. EPA, (last visited Mar. 3, 2023) <https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>.

⁴⁴ Nitrogen Dioxide, American Lung Association, (last visited Mar. 3, 2024) <https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/nitrogen-dioxide>.

- Irritated airways
- Aggravation of respiratory diseases
- Coughing, wheezing, and difficulty breathing⁴⁵
- Greater likelihood of emergency department and hospital admissions.
- Increased chronic kidney disease risk⁴⁶

NO₂ reacts with other chemicals in the air to form both PM and ozone. The NO₂ NAAQS was last revised in 2010. It has been more than a decade since this revision, yet nine standard permits that implicate NO₂ have not been updated since. The dates in which these nine permits were last updated range from 2003 to 2008. Five standard permits that implicate NO₂ were updated two months after the 2010 NAAQS revision, and it is thus unlikely that the permit reflects the most recent NAAQS given this short period.

3. Sulfur Dioxide (SO₂)

Short-term exposures to SO₂ can harm the human respiratory system and make breathing difficult, including wheezing, shortness of breath, and chest tightness. People with asthma, particularly children, are sensitive to these effects of SO₂.⁴⁷ The SO₂ NAAQS was last revised in June 2010. It has been nearly 14 years since this revision, and yet nine standard permits that implicate SO₂ have not been update in the time since. The dates in which these permits were updated range from 2003 to April 2010.

A failure to implement the proposed rule would impact TCEQ's ability to adequately protect the health of Texans (especially those who live close to a business operating under a standard air quality permit) from the consequences of air pollution exposure listed above. Additionally, the failure to implement a time limit to conduct a protectiveness review analysis after NAAQS are lowered has thus far allowed facilities to indefinitely emit pollutants that exceed air quality standards.

7. Conclusion

To meet FCAA and TCAA obligations TCEQ must avoid permitting facilities based on compliance with outdated air quality standards that are established to ensure public health is protected. TCEQ must do this by updating standard permit protectiveness reviews when NAAQS or ESLs change. TCEQ recently conducted a protectiveness review for the Concrete Batch Plant standard permit for the first time in over 10 years and, as a result, made numerous modifications to the standard permit to ensure protection of nearby citizens. The Concrete Batch Plant standard

⁴⁵ Nitrogen Dioxide (NO₂) Pollution, Basic Information about NO₂, U.S EPA, (last visited Mar. 4, 2024) <https://www.epa.gov/no2-pollution/basic-information-about-no2>.

⁴⁶ American Lung Association, *supra* note 23.

⁴⁷ Sulfur Dioxide (SO₂) Pollution, Sulfur Dioxide Basics, U.S EPA, <https://www.epa.gov/so2-pollution/sulfur-dioxide-basics>; Sulfur Dioxide, American Lung Association (last visited Mar. 4, 2024), <https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/sulfur-dioxide> (last visited Mar. 4, 2024).

permit needs to be updated—as do many standard permits—to demonstrate compliance with the recently reduced PM_{2.5} NAAQS, and TCEQ has shown it is capable. TCEQ needs to adopt adequate regulatory framework that requires these updates for its standard permitting program to comply with the FCAA and TCAA. Failure to adopt the needed framework has direct, tangible impacts on Harris County residents living nearby these potentially dangerous facilities. Harris County, therefore, respectfully requests TCEQ adopt a rule requiring a completed update to protectiveness reviews for each standard permit within one year of a published change to the NAAQS.

EXHIBIT

A

Permitting Timeline

