

**Proposed Amendments to the Air Quality Standard Permit for Concrete Batch Plants  
Texas Commission on Environmental Quality**

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## **I. Executive Summary**

In accordance with 30 Texas Administrative Code (TAC) §116.605, Standard Permit Amendment and Revocation, the Texas Commission on Environmental Quality (TCEQ or commission) is proposing amendments to the air quality standard permit for concrete batch plants. The commission has performed an updated air quality analysis (AQA) in support of the concrete batch plant standard permit to address public concern about potential health impacts from concrete batch plants registered under the standard permit. The proposed revisions to the standard permit are a result of the updated AQA, ensure that best available control technology is being utilized, and reflect updated operating requirements.

The proposed amendments to the standard permit will be effective for standard permits issued on or after [*effective date TBD*]. This proposal includes the addition of definitions, revisions to operational and setback requirements, improved best management practices, and other minor corrections or edits. The commission is proposing new and revised definitions of certain terms to prevent confusion and to improve the readability and enforceability of the standard permit.

## **II. Explanation and Background of Amendments to Proposed Air Quality Standard Permit**

The commission is proposing amendments to the air quality standard permit for concrete batch plants under the authority of the Texas Clean Air Act (TCAA), Texas Health and Safety Code (THSC), §382.05195, Standard Permit, and 30 TAC Chapter 116, Subchapter F, Standard Permits. As part of the development of standard permits, an AQA, or protectiveness review (PR), is statutorily required to confirm that air permits are protective of human health and the environment; however, routine updates to the PR are not specifically required or mandated by statute or regulation. The commission voluntarily conducted an updated PR based on several factors including the length of time since the last review and increasing public comments and concerns associated with the protectiveness of concrete batch plant permits, including crystalline silica emissions.

## **III. Overview of Amendments to Air Quality Standard Permit**

The revised standard permit will authorize new and existing temporary, permanent, and specialty concrete batch plants. The amendments to the standard permit update the operational requirements, setback distances and other provisions of the standard permit established with the updated PR that was conducted. The updated PR considered representative background concentrations of pollutants authorized by the standard permit throughout the state. Updated operational requirements include a maximum annual production limit of 650,000 cubic yards (yd<sup>3</sup>) per year for all temporary and permanent plants and a reduction in the maximum hourly production limits. In addition, operational requirements for specialty plants were updated to include a maximum annual production limit of 131,400 yd<sup>3</sup> per year and a setback distance of 100 feet from the batch mixer feed to any property line. The proposed amendments also include increased setback distances for some areas of the state, options for additional controls, and updated best management practices.

While this standard permit authorizes concrete batch plants, it is not intended to authorize all possible operating scenarios. Those facilities that cannot meet the standard permit may apply for a case-by-case new source review air permit.

## **IV. Permit Condition Analysis and Justification**

The following demonstrates how each section of this standard permit is enforceable and how the commission can adequately monitor compliance with the permit conditions.

### ***Applicability***

Section (1) of the standard permit outlines applicability for use of the standard permit. Subsection (A) is proposed to be updated to include minor word usage, grammar edits, and reference changes to clarify the intent of the requirements and account for the proposed reorganization and renumbering of portions of the standard permit.

### ***Definitions***

Section (2) of the standard permit contains definitions for use in the standard permit. A revision to subsection (A) is proposed to update the definition of auxiliary tank to include the word storage to be consistent with the definition throughout the standard permit. Proposed subsection (H) would add the definition of setback distance, which is proposed to mean the minimum distance required from the nearest suction shroud filter exhaust and/or engine to any property line. To account for the addition of this definition of setback distance, the subsequent definitions in Section (2) are proposed to be renumbered as (I) through (M).

### ***Administrative Requirements***

The commission proposes to make minor word usage changes, grammar edits, and reference updates to clarify the intent of Section (3), subsections (A), (G), and paragraph (J)(iii). Subsection (A) is proposed to be updated to include the requirements for owners/operators to submit the PI-1S-CBP form when applying to register under this standard permit. A minor change to subsection (G) is proposed to update a cross-reference that is affected by the reorganization of the standard permit. Paragraph (J)(iii) is proposed to require owners/operators of both temporary and permanent concrete plants to keep records of hourly and annual production operations to demonstrate compliance with the standard permit. The requirement for records of daily operations have been removed since there is no longer a daily production limit requirement in the standard permit. Paragraph J(viii) is proposed to include monthly testing for silo warning devices or shut-off systems.

### ***General Requirements***

The commission proposes to make minor word usage changes, grammatical edits, and reference updates in Section (5), subsections (A), (D), (E), (I), and (J). Proposed updates to paragraph (D)(iii) include adding the word storage for clarification and consistency. In addition, proposed updates to subsection (J) include adding a requirement that owners/operators shall comply with specific setback limits specified in Sections (8) or (9) of this standard permit when operating multiple concrete batch plants on the same site. Plants are currently required to comply with the appropriate site production limits in Sections (8) or (9).

Subsection (J) is proposed to remove the current engine requirement language and move those provisions to Section (6), under new subsection (F). The current standard permit limits owners/operators of sites that operate more than one concrete batch plant to comply with site production limits because the standard permit does not prevent multiple concrete batch operations at a single site.

Proposed subsection (L) would require all sand and aggregate to be washed prior to delivery at a plant. The emission calculations used in the development of the standard permit account for washed sand and aggregate; therefore, the requirement was added. This requirement is consistent with the authorization for concrete batch plants permitted under a case-by-case permit. Current subsection (L) is proposed to be renumbered as subsection (M).

## **Engines**

Section (6) authorizes stationary compression ignition internal combustion engines and cites the potentially applicable Code of Federal Regulations (CFRs) for emission requirements. Proposed subsection (E) would add a requirement that emissions from any engine(s) on-site not exceed 2.61 grams per horsepower-hour (g/hp-hour) of nitrogen oxides (NO<sub>x</sub>), per manufacturer's specifications. This requirement was added to ensure that emissions from any engine located on-site would meet the 1-hour nitrogen dioxide (NO<sub>2</sub>) National Ambient Air Quality Standard (NAAQS). Note that engines may be subject to other, more stringent, emission limitations which must also be met, in addition to the proposed limit of 2.61 g/hp-hour. All engines must be maintained and operated according to the manufacturer's instructions. A requirement from subsection (5)(J) stating that engines being used for electrical power or equipment operations are limited to a site-wide total of 1,000 horsepower (hp) in simultaneous operation and that there is no restriction to engine operations if the engine will be on-site for less than 12 consecutive months is proposed to be moved to new subsection (6)(F).

## **Operational Requirements for Permanent and Temporary Concrete Plants**

The commission proposes to combine the operating requirements for permanent and temporary plants in proposed Section (8), Operational Requirements for Permanent and Temporary Plants. Proposed Section (8) would contain some content carried over from existing Sections (8) and (9), combined with additional content to implement the findings of the recently completed AQA. The relocation requirements for temporary plants, which are currently located in subsections (8)(F) and (G), are proposed to be moved to new Section (10). Also, the commission proposes minor word usage, grammatical edits, numbering, and reference changes to clarify the intent of the requirements.

Subsection (A) includes updated wording that discusses the maximum hourly production rate, minimum setback distances for the suction shroud fabric/cartridge filter exhaust and/or engine, and the newly updated production rate and setback distance tables. The site production limit of 6,000 yd<sup>3</sup> per day was removed because it is no longer necessary based on the updated protectiveness review.

In addition, updated subsection (A) includes three different production rate and setback tables specific to plant location. The current standard permit requires the owner/operator maintain a minimum buffer distance of 100 feet from any property line and allows hourly site production up to 300 yd<sup>3</sup> in any one hour. The updated tables list new production rates and setback distances required depending on where the concrete batch plant is located in the state. Setback distance requirements throughout the state are based on the representative background concentration applied in the updated PR.

Proposed paragraph (A)(i) requires a single concrete batch plant to operate under the requirements in subsection (8)(E) and comply with the applicable production rate and setback distances found in Table 1. If the concrete batch plant is located in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, or Waller Counties then the hourly production rate is limited to 200 yd<sup>3</sup> per hour and the minimum setback distance is 200 feet from any property line. If the concrete batch plant is located in Cameron or Hidalgo Counties, then the hourly production is limited to 200 yd<sup>3</sup> per hour and the minimum setback distance is 300 feet from any property line. For all other counties with applicable operating scenarios in Table 1, the hourly production rate is limited to 200 yd<sup>3</sup> per hour and the minimum setback distance is 100 feet from any property line.

Proposed paragraph (A)(ii) requires that a single concrete batch plant must comply with the production rate and setback distance found in Table 2 and operate under the requirements in subsection (8)(E) and subsection (8)(F). If an owner/operator chooses to add an enclosure as defined in subsection (8)(F) to a concrete batch plant located in any area of the state, which also operates under the requirements in subsection (8)(E), the hourly production rate is limited to 200 yd<sup>3</sup> per hour and the minimum setback distance is 100 feet from any property line.

Proposed paragraph (A)(iii) requires multiple concrete batch plants operating at the same site to comply with the production rate and setback distances found in Table 3 depending on plant location and operate under the requirements in subsection (8)(F). If the concrete batch plant is located in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, or Waller Counties then the hourly production rate (total for all plants) is limited to 300 yd<sup>3</sup> per hour and the minimum setback distance is 200 feet from any property line. If the concrete batch plant is located in Cameron or Hidalgo Counties, then the hourly production (total for all plants at the site) is limited to 300 yd<sup>3</sup> per hour and the minimum setback distance is 200 feet from any property line. For all other counties with applicable operating scenarios in Table 3, the hourly production rate (total of all plants) is limited to 300 yd<sup>3</sup> per hour and the minimum setback distance is 100 feet from any property line.

Subsection (B) was updated to apply only to temporary plants due to the reorganization of the standard permit to create this section for both permanent and temporary plants.

Subsection (C) is proposed to include a new requirement for an owner/operator to be limited to a maximum production rate of no more than 650,000 yd<sup>3</sup> per year in any rolling 12-month period. An annual production cap was added to ensure that concrete batch plants operating under the standard permit meet the annual particulate matter of 2.5 microns or less (PM<sub>2.5</sub>) NAAQS with the addition of background concentration during the PR.

Proposed subsection (D) adds a requirement to properly maintain the suction shroud at the batch drop point. Subsection (E) proposes additional language for truck mix plants to shelter the drop point by an intact three-sided enclosure and to add a flexible curtain that hangs from above the truck, or equivalent dust collection technology that extends below the mixer truck-receiving funnel. The addition of the flexible curtain hanging from above the truck was added for improved capture efficiency at the suction shroud.

New subsection (F) is proposed to include language for the partial enclosure requirement mentioned in the production and setback distance tables in paragraphs (8)(A)(ii) and (iii). The partial enclosure can be used by owners/operators to operate with an alternative setback distance as listed in Tables 2 and 3 under paragraphs (A)(ii) and (iii). The proposed language requires the owner/operator of truck mix plants to shelter the truck loading operation with a three-sided solid enclosure or equivalent that extends from the ground level to at least three feet above the truck-receiving funnel. The addition of the partial enclosure option is for additional control to minimize fugitive dust emissions from the truck loading operation. Multiple plants are required to have the partial enclosure and meet the setback distance and hourly production limits.

New subsection (G) is proposed based on public comment to improve best management practices and to reduce the potential generation of nuisance dust and prevent the tracking of sediment onto adjacent roadways. The proposed language includes requirements to either water, sweep, or clean the plant road entrances; use a rumble grate (or equivalent) that is placed at least 50 feet from a public road to dislodge sediment from the wheels and undercarriage of trucks that haul aggregate, cement, and concrete; use a vacuum truck (or equivalent) to clean the plant road entrances; or use a tire-wash system (or equivalent) that is installed to remove sediment from the wheels and undercarriage of trucks that haul aggregate, cement, and concrete. This tire wash system should be located in front of some type of traffic restriction such as a scale, plant gate or a stop sign to encourage its proper use and should be set back at least 50 feet from the public road. This requirement would not authorize the construction of or use of a truck washing system under Texas Water Code Chapter 26.

Subsection (H) is proposed to be updated to limit the location of stationary equipment (excluding the suction shroud fabric/cartridge filter exhaust and engine), stockpiles, and vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site) to no closer than 50 feet less than the applicable minimum setback distance listed in subsection (8)(A) from any property line. For example, if the minimum setback distance for a plant is 200 feet, then the stockpile should be located at least 150 feet away from the nearest property line. This change is a result of the updated AQA.

The proposal includes moving selected dust emission requirements regarding plant roads and traffic areas from the General Requirements section to the Temporary, Permanent, and the Specialty Concrete Batch Plants sections and make minor word usage changes and reference updates. Subsection (I) provides an alternative to the distance requirements of proposed subsection (H). This alternative requires the plant to have dust suppressing fencing and other barriers.

Subsection (J) proposes to clarify that this requirement is intended for the use of permanent plants only. Most of the language in proposed subsection (J) is relocated from existing subsection (9)(F). In addition, minor grammatical changes are proposed.

#### ***Additional Requirements for Specialty Concrete Plants***

Section (9) includes requirements for specialty concrete batch plants. The proposal includes moving the specialty batch plant requirements from Section (10) to Section (9). Subsection (A) is proposed to include a new requirement limiting an owner/operator to a maximum production rate of no more than 131,400 yd<sup>3</sup> per year in any rolling 12-month period. In addition, new subsection (B) is proposed to require the exhaust from the batch mixer feed be at least 100 feet from any property line. Subsection (E) is proposed to be updated to include a requirement that the owner/operator not operate vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site) within a minimum buffer distance of 50 feet from any property line. The requirement was previously 25 feet from any property line. The changes in the specialty plant requirements are a result of the updated AQA.

#### ***Temporary Concrete Plants Relocation Requirements***

Proposed Section (10) contains relocation provisions that are currently in Section (8). The requirements in proposed Section (10) have been updated to include only the conditions required for TCEQ to approve an already permitted plant to relocate. In this proposed amendment, the operational requirements for temporary facilities that were included with the relocation requirements, were moved to be included in newly named Section (8), Operational Requirements for Permanent and Temporary Concrete Plants.

## V. **Protectiveness Review**

TCEQ calculated emission rates using emission factors and methodology from the following sources listed: temporary, permanent, and specialty plants emissions factors (EF) were based on the composition of concrete from EPA AP-42: "Compilation of Air Pollution Emission Factors" (AP-42) Chapter 11.12 Concrete Batching; material handling emissions were based on AP-42 Chapter 11.12 Table 11.12-2, and the "Uncontrolled" factor was used; the control efficiency percentages were based on washed material; the PM<sub>2.5</sub> EF was based on the ratio from the drop point emission factors (k values) found in Aggregate Handling and Storage Piles AP-42 Chapter 13.2.4; and particulate emissions from silo loading were based on a control efficiency of at least 99.5% from the silo baghouse.

Emissions from the central baghouse from a truck mix operation at temporary and permanent plants are calculated using particulate matter (PM) & particulate matter of 10 microns or less (PM<sub>10</sub>) EFs from AP-42 Chapter 11.12 Table 11.12-2. The EF for PM<sub>2.5</sub> is in AP-42 Chapter 11.12 Background Document Table 18.6. Nickel emissions calculated for a truck mix operation are based on factors from AP-42 Chapter 11.12 Table 11.12-8. Particulate emissions from the baghouse stack and fugitive loading emissions are based on a control efficiency of at least 99.5% from the baghouse for PM<sub>2.5</sub>. A 99% capture efficiency was used for the suction shroud. Requirements in the standard permit were updated to include a flexible curtain in subsection (8)(E) in order for an owner/operator to achieve a 99% capture efficiency at the suction shroud. To provide for additional operating scenarios, emissions were also calculated using an additional 85% control efficiency. The 85% control efficiency is achieved by using an enclosure around the truck loading area which will consist of three sides around the truck loading area extending from the ground level to at least three feet above the truck-receiving funnel. New requirements were added into the standard permit under proposed subsection (F) which includes language for the enclosure requirement mentioned in the production and setback distance tables in subsection (8)(A). The enclosure can be used by owners/operators to operate with an alternative setback distance as listed in Tables 2 and 3 under subsection 8(A).

PM & PM<sub>10</sub> emissions from the weigh hopper vented to a baghouse at temporary and permanent plants are from the equation in Chapter 13.2.4 with 10 mph wind speed (from Table 11.12-2 footnote) and a moisture content of 0.25% (minimum moisture content). Nickel emission factors are from AP-42 Chapter 11.12 Table 11.12-8.

Stockpile emissions from permanent, temporary, and specialty plants are based on an EF of a pound of pollutant per acre per day. PM<sub>10</sub> is assumed to be 50% of PM. The PM<sub>2.5</sub>/PM<sub>10</sub> ratio is from the Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Dust Emission Factors (Chapter 13.2).

Specialty plant annual throughput is based on 12 hours per day and 365 days per year of operation. The mixer and weigh hopper loading emissions were calculated by using an enclosed percent control of 90%. Emissions were calculated using a central mix operation. The EF for PM<sub>2.5</sub> is located in AP-42 Chapter 11.12 Background Document Table 18.6. EFs for PM & PM<sub>10</sub> are from the equation in 13.2.4 with 10 mph wind speed (from Table 11.12-2 footnote) and a moisture content of 0.25% (minimum moisture content). Nickel emission factors are from AP-42 Chapter 11.12 Table 11.12-8.

Crystalline silica emission rates are based on a respirable silica content in cement of 1% and a respirable silica content in flyash of 7% for an overall percentage of 1.66% using a cement to flyash ratio of 89 parts of cement to 11 parts of flyash in concrete. The source of the silica content percentages is from a review of various Safety Data Sheets (SDS) for cement and flyash.

Engine emissions are based on Tier 4 NO<sub>x</sub> and PM emission standards in 40 Code of Federal Regulation Chapter 1039. This is assuming a total maximum of 1,000 hp of combined engines on-site.

The TCEQ performed an AQA in support of the concrete batch plant standard permit PR. The AQA included dispersion modeling of a model concrete batch plant at multiple maximum hourly production rates: 30 yd<sup>3</sup> per hour, 100 yd<sup>3</sup> per hour, 150 yd<sup>3</sup> per hour, 200 yd<sup>3</sup> per hour, 250 yd<sup>3</sup> per hour, and 300 yd<sup>3</sup> per hour. For the 30 yd<sup>3</sup> per hour maximum hourly production rate case, the AQA included modeling for an annual production rate of 131,400 yd<sup>3</sup> per year. For all other maximum hourly production rate cases, the AQA included modeling for an annual production rate of 650,000 yd<sup>3</sup> per year. The emission generating facilities or activities included in the AQA are material handling operations, truck loading, stockpiles, cement silos, and an internal combustion engine to generate power for equipment at the site. For all production rates, except for the 30 yd<sup>3</sup> per hour case, the AQA also included modeling for two different control scenarios: partial enclosure of the truck loading activities and no partial enclosure of the truck loading activities. The pollutants evaluated were carbon monoxide (CO), NO<sub>2</sub>, sulfur dioxide (SO<sub>2</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), nickel (Ni) particulate, formaldehyde (CHOH), and silica (SiO<sub>2</sub>).

The TCEQ performed the modeling using the EPA's ISCST3 (version 02035) model. Modelers have been using the ISC model in permitting for more than 30 years. Developers created the model to be easy to use and to address complex atmospheric processes in a relatively simple way that all users can understand. Developers based the ISCST3 model on the Gaussian distribution equation and it is inherently conservative due to the main simplifying assumptions made in its derivation. These assumptions are:

- Conditions are steady-state (for each hour, emissions, wind speed, and direction are constant) and the dispersion from source to receptor is effectively instantaneous;
- There is no plume history as model calculations in each hour are independent of those in other hours;
- Mass is conserved (no removal due to interaction with terrain, deposition, or chemical transformation) and is reflected at the surface; and
- Plume spread from the centerline follows a normal Gaussian distribution and only vertical and crosswind dispersion occurs. The model ignores dispersion downwind.

The TCEQ applied the model in a screening mode to ensure predictions were conservative and applicable for any location in the state. The rationale for using ISCST3 is that the standard permit has statewide applicability. The ISCST3 model handles surface characteristics simplistically, using either rural or urban dispersion coefficients. Using EPA's refined dispersion model, AERMOD, would have required considering site-specific surface characteristics. Rather than the two choices of surface characteristics for ISCST3, AERMOD would have required dozens to capture a sufficient variation across the state. With dozens of choices of surface characteristics, the reasonable worst-case for all concrete batch plants across the state would be unclear. In addition, the TCEQ used ISCST3 as a screening technique in the context of this PR, since the purpose of such techniques is to eliminate the need for more detailed modeling when those sources clearly will not cause or contribute to ambient concentrations in excess of the NAAQS.



The modeling used a polar receptor grid with 36 radials spaced every 10 degrees from true north. Each radial includes a receptor every 100 feet out to 1000 feet from the center point. The modeling used surface meteorological data from Austin and upper-air meteorological data from Victoria for the years 1983, 1984, 1986, 1987, and 1988. Since the analysis is primarily for short-term concentrations, this five-year data set would include worst-case, short-term meteorological conditions that could occur anywhere in the state. The wind directions were set at 10-degree intervals to coincide with the receptor radials. This would provide predictions along the plume centerline, which provides a conservative result.

The modeling was conducted using both rural and urban dispersion coefficients. The higher concentration of the two options was used as the maximum predicted concentration. The modeling used the flat terrain option since the majority of the emissions are fugitive emissions that would closely follow the terrain. Downwash structures were not included in the modeling since no significant structures would likely exist at these types of sites that would influence dispersion. In addition, downwash is not applicable to area sources. The TCEQ represented emissions from all material handling activities, truck loading, and stockpiles as a series of co-located circular area sources 100 feet in diameter at 5, 10, 15, and 20 feet high. The TCEQ assumed these emissions are well distributed throughout the site; therefore, an area source is appropriate. The modeling included emissions from material handling activities, truck loading, and stockpiles that take place from ground level to about 20 feet in height. The circular area minimizes bias of any one wind direction or source orientation. The modeling represented emissions from baghouses as a single point source 40 feet high with no vertical momentum or buoyancy. The modeling represented emissions from engines as a single point source using the TCEQ's existing data as specified in the description of Section (6) of this standard permit.

With the exception of the annual pollutants associated with the 30 yd<sup>3</sup> per hour maximum hourly production rate case and annual PM<sub>2.5</sub> associated with the other maximum hourly production rate cases, maximum hourly emission rates were modeled for the short-term and annual standards and thresholds. For the annual pollutants associated with the 30 yd<sup>3</sup> per hour maximum hourly production rate case, maximum hourly emission rates were modeled for the internal combustion engine; annual average emission rates, based on 131,400 yd<sup>3</sup> per year, were modeled for all other sources. For annual PM<sub>2.5</sub> associated with the other maximum hourly production rate cases, maximum hourly emission rates were modeled for the internal combustion engine; annual average emission rates, based on 650,000 yd<sup>3</sup> per year, were modeled for all other sources. Modeling was initially conducted using an emission rate of 1 pound per hour (lb/hr) to predict a generic impact for each source. The generic impact was multiplied by the pollutant-specific emission rates to calculate a maximum predicted concentration for each source. The maximum predicted concentrations for each source were added together to get a total predicted concentration for each pollutant for comparison with applicable standards/thresholds.

Generic modeling was initially conducted (results added independent of time and space) as a conservative first step. If the results pass this first step for a given pollutant, the analysis was complete. The modeling was further refined for the remaining pollutants and to consider time and location of predicted high concentrations. Pollutant-specific modeling was performed for the PM<sub>10</sub>, PM<sub>2.5</sub>, and 1-hour NO<sub>2</sub> NAAQS demonstrations. The pollutant-specific modeling considered the form of the applicable NAAQS. For all production rates, except for the 30 yd<sup>3</sup> per hour case, additional pollutant-specific modeling for PM<sub>10</sub> and PM<sub>2.5</sub> was performed for two different control scenarios: partial enclosure of the truck loading activities and no partial enclosure of the truck loading

activities. These additional model runs were performed for just PM<sub>10</sub> and PM<sub>2.5</sub> since these two pollutants are associated with the minimum setback distances.

The TCEQ evaluated NO<sub>2</sub> using a NO<sub>2</sub>/NO<sub>x</sub> ratio of 0.5. The EPA's March 1, 2011, guidance memo states, "Although well-documented data on in-stack NO<sub>2</sub>/NO<sub>x</sub> ratios is still limited for many source categories, we also feel that it would be appropriate in the absence of such source-specific in-stack data to adopt a default in-stack ratio of 0.5 as being adequately conservative in most cases and a better alternative to use than the Tier 1 full conversion." Since the maximum concentration location tends to be within 200 feet of the source and travel time of the emissions would be relatively short, there would not be sufficient time for the NO<sub>x</sub> to NO<sub>2</sub> conversion to take place. Therefore, an in-stack ratio of 0.5 is reasonable for this analysis.

The predicted concentrations for criteria pollutants were initially compared to de minimis levels. The predicted concentrations for CO and SO<sub>2</sub> were less than the de minimis levels at all distances. For criteria pollutants with predicted concentrations greater than de minimis levels (NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>), a cumulative analysis of each air pollutant was conducted by adding background concentrations to the model predicted concentrations for comparison with the applicable NAAQS. The results of the cumulative analysis were used to establish minimum setback distances. The predicted concentrations of SO<sub>2</sub> were less than the state property line standard at all distances. The predicted concentrations of Ni, CHOH, and SiO<sub>2</sub> were less than their effects screening levels (ESLs) at all distances. The results of the review for all pollutants show that the standard permit is protective. The modeling report is available for review at:

<https://www.tceq.texas.gov/permitting/air/newsourcereview/2023-amendment-concrete-batch-standard-permit>

## VI. Public Notice and Comment Period

In accordance with 30 TAC §116.603, Public Participation in Issuance of Standard Permits, the TCEQ will publish notice of the proposed amended standard permit in the *Texas Register* and newspapers of the largest general circulation in the following metropolitan areas: Austin, Houston, Dallas, and San Antonio. The date of these publications will be April 14, 2023. The public comment period will end on **June 14, 2023**.

After the public comment period, the TCEQ may revise the standard permit if appropriate. The final amended standard permit will be considered by the commission for adoption. Upon adoption of the standard permit by the commission, the final standard permit and a response to all comments received will be available on the TCEQ's website.

Written comments may be submitted to Gwen Ricco, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to [fax4808@tceq.texas.gov](mailto:fax4808@tceq.texas.gov). Electronic comments may be submitted at: <https://tceq.commentinput.com.comment/search>. File size restrictions may apply to comments being submitted via the TCEQ Public Comment system. All comments should reference Non-Rule Project Number (NRPN) 2022-033-OTH-NR. The comment period closes at midnight on **June 14, 2023**.

Copies of the standard permit can be obtained from the commission's website at <https://www.tceq.texas.gov/permitting/air/newsourcereview/2023-amendment-concrete-batch-standard-permit>. For further information, please contact Mr. Michael Wilhoit, Air Permits Division, at [michael.wilhoit@tceq.texas.gov](mailto:michael.wilhoit@tceq.texas.gov) or (512) 239-1222.

## VII. Public Meeting

The commission will hold a hybrid in-person and virtual public meeting on this proposal in Austin on **Thursday, May 18, 2023, at 10:00 a.m.** in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. The meeting is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the meeting; however, commission staff members will be available to discuss the proposal 30 minutes prior to the meeting. The meeting will be conducted in English and Spanish. Request another language by contacting Mr. Michael Wilhoit, Air Permits Division, at [michael.wilhoit@tceq.texas.gov](mailto:michael.wilhoit@tceq.texas.gov) or (512) 239-1222.

Individuals who plan to attend the meeting *virtually* and want to provide oral comments, want their attendance on record, or want to participate in the informal question-and-answer period prior to the meeting must register by **Tuesday, May 16, 2023**. Instructions for participating in the meeting will be sent on **Wednesday, May 17, 2023**. To register, please email [Rules@tceq.texas.gov](mailto:Rules@tceq.texas.gov) and provide the following information:

1. Subject: Register for NRPN 2022-033-OTH-NR
2. Your Name
3. Title
4. Whom you represent (self or company/client)
5. Mailing Address
6. Phone Number
7. Whether you wish to provide official testimony, want your attendance on the record, or want to participate in the informal question-and-answer period prior to the meeting.

Members of the public who do not wish to participate in the meeting, but would like to view the meeting *virtually* may do so at no cost at:

[https://teams.microsoft.com/join/19%3ameeting\\_ODKyNjQ4OTQtM2E2ZC00ZDQzLWFhNGItMDJIZmYwZDQ3NTgz%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a%22e74a40ea-69d4-469d-a8ef-06f2c9ac2a80%22%2c%22IsBroadcastMeeting%22%3a%22true%22%7d](https://teams.microsoft.com/join/19%3ameeting_ODKyNjQ4OTQtM2E2ZC00ZDQzLWFhNGItMDJIZmYwZDQ3NTgz%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a%22e74a40ea-69d4-469d-a8ef-06f2c9ac2a80%22%2c%22IsBroadcastMeeting%22%3a%22true%22%7d)

Persons who have special communication or other accommodation needs who are planning to participate in the meeting should contact Gwen Ricco, Office of Legal Services at (512) 239-2678 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible in order to allow adequate time to set up accommodations.

The TCEQ will also hold an informational meeting in Houston during the public comment period to answer questions about the proposed amendments. Oral testimony will not be accepted at the informational meeting. Details of the informational meeting (such as date, time, and location) will be posted on the TCEQ website at the link provided below.

Please periodically check

<https://www.tceq.texas.gov/permitting/air/newsourcereview/2023-amendment-concrete-batch-standard-permit> before the meeting date for meeting related updates.

## VIII. Analysis of Comments

Section VIII (Analysis of Comments) will be completed following the end of the public comment period.

**IX. Statutory Authority**

This standard permit is issued under THSC, §382.011, General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC §382.023, Orders, which authorizes the commission to issue orders necessary to carry out the policy and purposes of the TCAA; THSC §382.051, Permitting Authority of the Commission; Rules, which authorizes the commission to issue permits; THSC §382.0513, Permit Conditions, which authorizes the commission to establish and enforce permit conditions consistent with Subchapter C of the TCAA; and THSC §382.05195, Standard Permit, which authorizes the commission to issue and amend standard permits according to the procedures set out in that section.