Amendments to the Concrete Batch Plants Air Quality Standard Permit

Summary Document

I. Executive Summary

Protectiveness

The Texas Commission on Environmental Quality (TCEQ or commission) adopts amendments to the air quality standard permit for concrete batch plants. While the standard permit is protective of public health, the TCEQ initiates the amendments to account for the 2006 AP-42 emission factors and engine requirements as promulgated by the United States Environmental Protection Agency (EPA). The pollutants of concern at concrete batch plants are particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$) and particulate matter less than or equal to ten microns in diameter (PM_{10}).

On February 11, 2010, the EPA no longer allowed use of the 1997 policy that granted sources and permitting authorities to use a demonstration of compliance with the National Ambient Air Quality Standards (NAAQS) requirements for PM_{10} as a surrogate for meeting the NAAQS requirements for $PM_{2.5}$. The amendments to this standard permit include controls, which will meet the requirements for $PM_{2.5}$ and reference federal engine requirements. The federal engine requirements regulate hazardous air pollutants, PM, and nitrogen oxides (NO_x) that engines emit at varied amounts. Based on the size of the engines used at concrete batch plants, particulate matter, volatile organic compounds, carbon monoxide, lead, nitrogen dioxide, formaldehyde, and sulfur dioxide are emitted, but not at levels of concern. On-site engine requirements are in section IV of this Summary Document, and section (6), Engines, of the standard permit.

The amendments to the standard permit will be effective for standard permits issued on or after December 21, 2012. These amendments include revisions identified since the last review of the concrete batch plant standard permit, including the addition of separate applicability, definitions, and planned maintenance, startup, and shutdown (MSS) sections, and other minor corrections or edits. The commission adds definitions of terms to avoid confusion and to improve enforceability. The amendments include the removal of references to the concrete batch plant permits by rule (PBRs) as they are no longer available for new or modified facilities. Those plants still under these PBRs would not be registering for a standard permit until there is a change in the facility that makes the facility no longer applicable to the PBR. In this case, the facility would need to apply for a different method of authorization.

Recordkeeping

The amendments include new requirements for owners or operators to keep copies of material data safety sheets for all additives and other chemicals that are used and additional dust suppression records. The amendments to the standard permit also clarify and expand recordkeeping requirements for relocations, and temporary plants.

Public Notice

The amendments condense the public notice section to reference the notice requirements in Title 30 Texas Administrative Code (30 TAC) Chapter 39, Public Notice. The specific sign posting requirements that the adoption deletes from the standard permit are part of the public notice requirements that 30 TAC Chapter 39 fully explains. Applicants also receive detailed public notice guidance as part of the standard permit registration process.

Best Available Control Technology (BACT)

The commission made the following changes to account for BACT:

- updated production limits and control methods;
- removed fog rings as control options;
- included a new filter requirement that considers standards for PM_{10} and $PM_{2.5}$;
- increased the flow rate required for suction shroud fabric filter baghouses from 4000 actual cubic feet per minute (acfm) to 5000 acfm
- added requirements regarding warning devices and automatic shut-off devices that signal full storage silos;
- added a requirement that addresses visible emissions;
- added a distance requirement to the nearest rock crusher, concrete crusher, or hot mix asphalt plant to avoid potential cumulative emissions higher than the permit limit;
- prohibited owners or operators from using concrete additives that emit VOCs.

Maintenance Startup and Shutdown

Planned maintenance activities will be authorized either under permit by rule or claimed under 30 TAC§ 116.119, De Minimis Facilities or Sources. Emissions from planned startup and shutdown activities will be authorized by this permit.

Emissions will also be generated during startup and shutdown of the facility. Startup and shutdown emissions are indistinguishable from production emissions. Although there may be minor emissions associated with startup and shutdown, particulate emission factors used to quantify production emissions are considered to have enough conservatism to include any incidental increases that may be attributed to startup and shutdown. In addition, emissions from planned startup and shutdown of combustion units should not result in any quantifiable hourly emissions change for products of combustion. Although there may be transitional and incidental spikes before units stabilize during startups (5 to 15 minutes), overall products of combustion are expected to be within hourly range limits for normal loads during production operations. In addition, owners or operators cannot use the amended standard permit in conjunction with permits for the same facility issued under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification unless the owner or operator uses the permit for planned maintenance.

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

The amendments to the standard permit provide a preconstruction authorization that may be used for any concrete batch plant complying with the standard permit requirements and do not relieve the owner or operator from any other applicable provision of the Texas Health and Safety Code (THSC), Texas Water Code, TCEQ rules, or any additional state or federal regulations. The commission considered other means of permitting these plants such as creating a PBR or using a case-by-case new source review (NSR) permit. In the interest of maintaining flexibility, amending the current standard permit is the most logical course of action. The location pattern of concrete batch plants around the state follows high population density and construction. Although the plants are located throughout the state, many are along the Interstate 35 corridor. Owners or operators of large concrete batch plants sometimes also operate other facilities such as asphalt and rock crusher plants at the same site. Because of the number of authorizations that the Air Permits Division (APD) processes, it is necessary to maintain and improve the standard permit. Since October of 2011, APD processed 65 concrete batch plant standard permits. The average number of these permits over the last five years was 94 per year. In the past year, three concrete batch plants applied for a case-by-case NSR permit. In the past 5 years, there were a total of 18 concrete batch plant case-by-case NSR permits processed.

III. Overview of Amendments to the Air Quality Standard Permit

The commission adopts amendments to the air quality standard permit authorizing concrete batch plants under authority of the Texas Health and Safety Code, § 382.05195, Standard Permit, and 30 TAC Chapter 116, Subchapter F, Standard Permits. The commission adopts these amendments to account for the 2006 AP-42 emission factors, to address 24-hour $PM_{2.5}$, annual $PM_{2.5}$ NAAQS, and to include engine emission and operation requirements. The standard permit amendments authorize concrete batch plants, including permanent concrete batch plants, specialty concrete batch plants under

30 cubic yards per hour, and temporary concrete plants. Those facilities that cannot meet the standard permit conditions or a Concrete Batch Plants with Enhanced Controls air quality standard permit may apply for a case-by-case review of an air quality permit under 30 TAC § 116.111, General Application.

IV. Permit Condition Analysis and Justification

The amendments to this standard permit require owners or operators of concrete batch plants to comply with the updated 2006 AP-42 emission factors, maintain filter system control efficiency, keep additional records, abide by MSS requirements, discontinue the use of water fog rings for dust control, and maintain a copy of the manufacturer's specifications for suction shrouds or other pickup devices. Due to the nature of the materials used, dust control measures for capturing PM_{10} also capture $PM_{2.5}$. Concrete batch plants shall meet the applicable conditions of the standard permit.

Applicability

Section (1) of the amended standard permit outlines the applicability requirements. Subsection (A) summarizes the authorized permit conditions. Subsection (B) specifies that emission increases already prohibited by an issued NSR permit for the site cannot be authorized by this standard permit. Subsection (C) states that the owner or operator of the authorized concrete batch plant is also subject to all applicable state or federal regulations.

Definitions

Section (2) contains definitions of auxiliary tank, concrete batch plant, cohesive hard surface, dust suppressing fencing or other barrier, permanent concrete batch plant, related project segments, right-of-way of a public works project, site, specialty concrete batch plant, stationary internal combustion engine, temporary concrete batch plant, and traffic areas. The addition of a definition section presents a clear and consistent standard permit format that improves enforceability. The definition of auxiliary tank was added to clarify that petroleum product and fuel storage tanks are not applicable to the requirements in this standard permit referencing auxiliary tank. Cohesive hard surface, dust suppressing fencing or other barrier, and traffic areas are included to specify road dust control requirements. The definition of concrete batch plant is included to clarify applicability of the standard permit. The definitions of permanent, specialty, and temporary concrete batch plants are included to clearly distinguish between the types of plants as there are distinct requirements for each type. The definition of related project segments is included since it is in other terms in section (2).The definition of right-of-way of a public works project references 30 TAC § 116.20, Portable Facilities Definitions, since it is directly related to the standard permit. The definition of site in the standard permit restates the definition found in 30 TAC Chapter 122, Federal Operating Permits Program. The definition of stationary internal combustion engine is included to help clarify applicability of stationary engine requirements.

Administrative Requirements

The commission adopts minor word usage changes, grammar edits, and reference updates to clarify the intent of subsection (3)(A)-(D). Subsections (3)(E) and (3)(F) clarify when owners or operators must comply with the most recent version of the concrete batch plant standard permit (CBPSP). In subsection (3)(G), owners or operators of temporary concrete plants seeking registration and those already registered for this standard permit that qualify for relocation using subsection (8)(F), are exempt from public notice requirements in section (4) of this standard permit. Those that are exempt from public notice seeking registration should receive a final decision within 45 days of the executive director's receipt of the registration request. The standard permit effective July 10, 2003 requires certain concrete batch plants to be registered using the PBR. Since owners or operators of new plants will no longer register under obsolete PBRs, the amendment deletes the PBR references in subsection (3)(I). The commission also adds recordkeeping requirements in subsection (3)(J). These additions include: references to 30 TAC § 101.201, Emissions Event Reporting and Recordkeeping Requirements and 30 TAC § 101.211, Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements, production rates, repair and maintenance of abatement systems, material data safety sheets, road cleaning, stockpile dust suppression, warning device system tests, visible emissions observations, demonstration of compliance with the engine section, and the type of fuel used in engines. The commission removes references to 30 TAC § 101.6 and § 101.7 as these sections no longer exist. The commission also adds a requirement to document abatement equipment failure or visible emissions.

Public Notice

The commission references the notice requirements in 30 TAC Chapter 39 to avoid confusion and maintain consistency. This chapter includes newspaper publication, sign posting, and other requirements. The THSC, § 382.058, Notice of and Hearing on Construction of Concrete Plant Under Permit by Rule, Standard Permit, or Exemption requires concrete batch plant standard permits to comply with 30 TAC Chapter 39.

General Requirements

The amendments include applicable filter efficiency requirements that ensure $PM_{2.5}$ levels meet the newly promulgated federal standards.

Subsection (B) discusses filter and collection system requirements, visible emission standards, and lighting requirements. The amendments include a change to the efficiency requirements of filter systems in order to achieve BACT and specifically address $PM_{2.5}$.

Subsections (C) and (D) include requirements for silo loading operations. The amendments remove outdated 30 TAC Chapter 101 references, separate the requirements into different paragraphs, and add additional descriptions to aid in enforcement. The amendments also include a more detailed description of requirements regarding automatic shut-off systems to prevent overfill of bulk storage silos.

Subsection (E) includes a reference to more information regarding dust suppressant chemicals.

The amendments to subsections (E), (F), and (G) are minor word usage, grammar edits and reference changes.

Subsection (H) prohibits visible emissions from exceeding a cumulative 30 seconds in any six-minute period. Including these visible emissions requirements should influence the use of best management practices (BMPs), such as road dust control required in the permit. Including this requirement will also provide a method for determining how well the BMPs are controlling a potential nuisance condition.

Subsection (I) indicates a 550 feet limit from the concrete batch facility to the nearest rock crusher, concrete crusher, or hot mix asphalt plant to reduce the potential for cumulative effects from both plants operating simultaneously and to be protective of the $PM_{2.5}$ and PM_{10} NAAQS based on the results of the modeling. The distance requirement also helps to maintain consistency with other standard permits.

Subsection (J) states that owners or operators of sites that operate more than one concrete batch plant shall comply with site production limits because this standard permit does not prevent multiple concrete batch operations at a single site.

Subsection (K) prohibits concrete additives from emitting VOCs.

Subsection (L) lists out the references to applicable standard permit renewal, fee, contested case hearing, and public notice requirements.

Section (6) authorizes stationary compression ignition internal combustion engines and cites the potentially applicable Code of Federal Regulations (CFRs) for emission requirements. An exemption for an owner or operator of a concrete batch plant is the operation of a nonroad engine as defined in 40 CFR § 89.2, Definitions. A portable or transportable engine that remains at a single location for less than or equal to 12 consecutive months, is not considered a stationary source, and does not require authorization under 30 TAC Chapter 106, Permits by Rule, 30 TAC Chapter 116, or 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds. Requirements in this section reflect modeling assumptions about engines commonly used at concrete batch plants. Based on the review of an average of 94 concrete batch plant standard permits per year, the APD's working knowledge is that many concrete batch plants that

have engines use a diesel compression ignition internal combustion engine up to 1,000 horsepower (hp) as a source of power. Owners or operators must maintain and operate all engines according to the manufacturer's instructions.

Maintenance, Startup, and Shutdown (MSS) Activities

Section (7) of this standard permit addresses emissions from planned startup and shutdown activities from those facilities authorized by this standard permit. Startup and shutdown emissions are not distinguishable from production emissions.

Owners or operators are also required to maintain records of planned maintenance activities authorized by a PBR or with 30 TAC § 116.119, De Minimis Facilities or Sources.

Additional Requirements for Temporary Concrete Plants

The commission moves the definition for temporary concrete plant to the definitions section. In addition, the commission adopts minor word usage, grammar edits, numbering, and reference changes to clarify the intent of the requirements.

Subsection (A) includes a new production limit and subsection (B) includes an increased airflow for a suction shroud or other pickup device in order to maintain BACT.

Subsection (C) requires that the owner or operator shelter the truck loading point by an intact three-sided curtain or equivalent dust control technology.

Subsection (D) includes property line distance requirements.

The commission deletes requirements regarding the use of water fog ring equipment used for dust control, since the commission no longer considers it to be BACT. The commission adds clarification of the correct placement of the suction shroud or other pickup device. A change in the cartridge filter system requirements maintains BACT. The commission deletes a reference to 30 TAC § 111.155, since this section of Chapter 111 was repealed on June 11, 2006.

Subsection (E) provides an alternative to distance requirements. This alternative requires the facility to have dust suppressing fencing and other barriers.

Subsection (F) details conditions required for TCEQ to approve an already permitted plant to relocate. In this amendment, the commission has expanded temporary facilities to include registered facilities that are moving to a site in which any facility has been located at the site at any time during the previous two years, and the site was subject to public notice. This facility is not necessarily specific to a particular batching operation.

Subsection (G) lists the recordkeeping requirements for relocating a plant.

Additional Requirements for Permanent Concrete Plants

Subsection (A) includes a new production limit to specify the intended production rate of a facility that owners or operators can register using this standard permit. The

commission changes the title from "Additional Requirements for Other Concrete Plants" to "Additional Requirements for Permanent Concrete Plants" to clarify the type of plants that the section references.

Subsection (B) includes a new minimum actual cubic feet per minute requirement for the filter system. This change maintains BACT. Also, minor word usage, grammar edits, numbering, and reference changes clarify the intent of the requirements. The commission moves the road dust requirements for consistency.

The commission adds the requirement of having an intact three-sided curtain or equivalent dust control technology below the mixer truck- receiving funnel in subsection (C) for improved capture efficiency.

Subsection (D) includes property line distance requirements.

Subsection (E) provides an alternative to distance requirements. This alternative requires the facility to have dust suppressing fencing and other barriers.

Subsection (F) requires permanent concrete batch plants to pave roads for traffic dust control. All other areas of the permanent concrete batch plant can use the options in subsection (5)(E) of the standard permit.

Additional Requirements for Specialty Concrete Batch Plants

The amendments remove the option of using a fog ring for dust control because TCEQ no longer considers it BACT. Also, TCEQ adopts minor word usage, grammar edits, and reference changes to clarify the intent of the requirements.

V. Protectiveness Review

TCEQ calculated emission rates using emission factors and methodology from the following documents: EPA AP-42 Chapter 11.12, Concrete Batching; the background document for Chapter 11.12, Concrete Batching Background Document; and EPA AP-42 Chapter 12.2.4, Aggregate Handling and Storage Piles. The commission derived the emission rate calculations from the plant production rate and the average material composition of concrete provided in Chapter 11.12. The commission estimated emissions using an average concrete production rate of 300 cubic yards per hour. The commission calculated emission rates as if the site produced emissions from all emission points at all times during operation. The commission estimated emission rate calculations for the plant stockpiles using the emission factors listed in the EPA document, Development of Emission Factors for Fugitive Dust Sources. Emission rate calculations for the engine and generator were estimated using Model Year 2000 Tier 1 EPA emission standards for engines with power greater than 560 kilowatts (751 hp). The commission calculated the emission rates as if the engine runs at all times during operation.

Site wide PM_{10} is 37 percent of the total PM and $PM_{2.5}$ is 5.9 percent of total PM. This does not include emissions from engines. The commission considers all engine particulate to be $PM_{2.5}$. Engine particulate is 16 percent of the total particulate. The

commission evaluated nickel since it has the highest short-term emission rate and lowest effects screening level (ESL) out of all trace metals. The permit allows a generator-set engine not to exceed 1000 hp. The fuel used in a typical generator-set is diesel. All off-road engines are required to use the same ultra-low sulfur diesel fuel (15 parts per million) as mobile transportation engines. As diesel fuel is a petroleum distillate containing hydrocarbons; TCEQ does not expect it to contain lead and expects it to contain only traces of other metals. While formaldehyde is a contaminant, the commission modeled it for engines of 1000 hp and its emissions were negligible based on modeling results. The commission does not expect these engines to be major sources of hazardous air pollutants.

TCEQ performed an air quality analysis (AQA) in support of the concrete batch plant standard permit protectiveness review. The AQA included dispersion modeling of a model concrete batch plant at two maximum hourly production levels, 30 cubic yards per hour (cu. yd/hr) and 300 cu. yd/hr. The AQA considered for the 30 cu. yd/hr plant an annual production of 262,800 cubic yards per year (cu. yd/yr) and considered for the 300 cu. yd/hr plant a daily production limit of 6,000 cubic yards per day and annual production of 2,190,000 cu. yd/yr. 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. The analysis represented the operating schedule of facilities or activities at the site as 24 hours per day. The air contaminants evaluated were carbon monoxide, nitrogen dioxide (NO_2), sulfur dioxide, PM_{10} and $PM_{2.5}$, nickel particulate, and formaldehyde.

The commission performed the AQA using the ISCST3 (version 02035) model. Modelers have been using the ISC model in permitting for more than 20 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 commission 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 the current EPA preferred refined dispersion model, AERMOD, would have required considering site-specific 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 commission used ISCST3 as a screening technique in the context of this protectiveness review, 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 AQA 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. To streamline the AQA, the commission used surface meteorological data from Austin and upper-air 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.

Downwash structures were not included in the analysis 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 commission represented emissions from all material handling activities as a series of co-located circular area sources 100 feet in diameter at 5, 10, 15, and 20 feet high. The model assumes that all material handling emissions are well distributed throughout the site; therefore, an area source is appropriate. The modeling includes material handling activities 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 model represents emissions from baghouses as a single point source 40 feet high with no vertical momentum or buoyancy. The model represents emissions from engines using the commission's existing data as specified in the description of section (6) of this standard permit.

An emission rate of 1.0 pound per hour (lb/hr) predicts a generic impact for each source. Modelers used generic modeling (independent of time and space) as a first step. If the emissions easily passed the first step, the analysis was complete. The modeling was further refined for the remaining pollutants and to consider time and location of predicted high concentrations. Modelers multiplied the generic impact by each air contaminant-specific emission rate to calculate a maximum predicted concentration for each source and for all pollutants. Modelers added the maximum predicted concentration for each source together to get a total predicted concentration.

The commission performed air contaminant-specific modeling for the 24-hour PM_{10} and $PM_{2.5}$, and 1-hour NO_2 NAAQS demonstrations. The air contaminant-specific modeling considered the form of the applicable NAAQS, i.e. high sixth high over 5 years for PM_{10},

5-year average of the high first highs for $PM_{2.5}$ and 5-year average of the 98th percentile of the maximum 1-hour daily concentrations for NO_2, including EPA's proposed PM rule published in the Federal Register 77 FR 38890.

The commission modeled NO_2, using a NO_2/NO_x ratio of 0.5. EPA's March 1, 2011 guidance memo states, "Although well-documented data on in-stack NO_2/NO_x 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_x to NO_2 conversion to take place. Therefore, an in-stack ratio of 0.5 is reasonable for this analysis.

The commission modeled maximum hourly emission rates for 1-hour, 3-hour, and 8-hour standards. The commission modeled 30 cu. yd/hr plant, emission rates for 24-hour standards based on maximum hourly production. For the 300 cu. yd/hr plant, the commission modeled emission rates for 24-hour standards based on maximum daily production of 6,000 cu. yd/day, which is the maximum hourly rate multiplied by (6,000/7,200), where 6,000 cu. yd/day is the daily production limit and 7,200 cu. yd/day is the theoretical maximum daily production at 300 cu. yd/hr. The commission modeled annual emission rates based on annual maximum production rates.

The AQA evaluated both rural and urban dispersion coefficients. The commission reported the higher concentration of the two options as the maximum predicted concentration. The commission selected the flat terrain option since the majority of the emissions are fugitive emissions that would closely follow the terrain.

The results of the review for all pollutants show that the standard permit is protective. The modeling and toxicology report are available to the public upon request. Contact TCEQ regarding modeling and toxicology information requests at (512)239-1250.

VI. Public Notice and Comment Period

In accordance with 30 TAC § 116.603, Public Participation in Issuance of Standard Permits, the TCEQ published notice of this standard permit in the *Texas Register* and newspapers of the largest general circulation in the following metropolitan areas: Austin; Dallas; and Houston. The date for these publications was August 27, 2012. The public comment period ran from the date of publication until October 5, 2012.

VII. Public Meetings

The commission held a public meeting on October 3, 2012, 10:00 a.m., at TCEQ Building E, Room 201E, 12100 Park 35 Circle, Austin, Texas.

VIII. Analysis of Comments

The commission received written comments from Roger Albert with Associated General Contractors of Texas (AGC), Janet Krolczyk with CEMEX Construction Materials South, LLC (CEMEX), Ralph Richards with Jobe Materials, L.P. (Jobe), Sonya C. Alcocer-Charles with Martin Marietta Materials (MMM), Rich Szecsy with Texas Aggregates and Concrete Association (TACA), and Thomas P. Zais with Ready Mix TXI Operations, L.P. (TXI) suggesting technical changes to the concrete batch plant standard permit amendment. The commission also received an oral comment from Chris Pepper with the Texas Aggregates and Concrete Association regarding the timing of submitting renewal applications.

MMM and TACA asked TCEQ to clarify when they would expect newly constructed or modified facilities to use the new standard air permit.

The amendments to the standard permit will be effective for standard permits issued after December 21, 2012. The commission has updated the technical summary and permit to state when newly constructed or modified facilities and renewals will be applicable to the amended standard permit.

MMM and TACA asked TCEQ to clarify when owners or operators applying for amendments or renewals would be required to use the new standard air permit.

Applicants for new concrete batch plant standard permits (CBPSPs) issued after December 21, 2012 will be required to register and comply with the 2012 amended CBPSP. Applicants for renewals issued in the period between December 21, 2012 and December 22, 2014 will register for the 2012 amended CBPSP, but will not be required to comply with the new CBPSP requirements until December 22, 2014. Applicants for renewals issued after December 22, 2014 will be required to register and comply with the 2012 amended CBPSP. The commission has updated the technical summary and permit to state when newly constructed or modified facilities and renewals will be applicable to the amended standard permit.

TACA requests that TCEQ state all of the previous permitting options that may continue to operate under historical authorizations so long as the owner or operator does not modify the plant.

The commission has updated the technical summary and permit to state when newly constructed or modified facilities and renewals will be applicable to the amended standard permit. The technical summary also includes a discussion about when plants can operate using historical authorizations.

Jobe asked if public notice and reregistering is required for facilities that undergo operational changes that change whether the facility is temporary, permanent, or specialty.

If a facility undergoes an operational change that affects whether it is a temporary, permanent, or specialty concrete plant, re-registration is required. Public notice is also required unless the facility is changing to a facility type for which public notice is not required (such as a temporary concrete plant that is located in, or contiguous to, the right-of-way of a public works project). No change was made as a result of this comment.

MMM, TACA, and TXI requested a definition of auxiliary tank.

TCEQ added a definition of auxiliary tank that excludes diesel or fuel storage tanks.

TACA and TXI asked for updates to the definitions of the different types of concrete batch plants for clarity.

TCEQ updated the definitions to replace "plant" with "concrete batch plant." TCEQ did not remove "but not for other unrelated projects" from the definition of temporary concrete plant because it is integral to the definition. TCEQ has maintained the 180 day site limit in the definition of temporary concrete batch plant because if this definition were limited to only count days when the plant is in production, as suggested by the commenters, the facility might be present at the site for substantially longer than 180 days. Although TCEQ acknowledges that many factors can cause project delays, in general, TCEQ believes that a 180-day site limit is reasonable and consistent with the length of time that a temporary project implies.

AGC requested the addition of a definition for contiguous.

Determining the definition for contiguous is part of site designation. Site designation is outside the scope of this rulemaking. For more information on determining site designation, see the TCEQ guidance document regarding site designation at www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/site.pdf . **No change was made as a result of this comment.**

AGC and CEMEX asked TCEQ to add "stabilized base material" as an acceptable surface in the definition of cohesive hard surface.

TCEQ did not add "stabilized base material" as an acceptable cohesive hard surface because it was unclear what its definition would be. If a material used is capable of remaining intact and being clean, then it fits the definition of cohesive hard surface. TCEQ kept "in plant road surface" in the definition in the interest of being consistent with Texas Department of Transportation (TXDOT) rules and because it was intended to be any area of the facility. No change was made as a result of this comment.

AGC, Jobe, and TACA asked about specific scenarios regarding the definition of site.

Determining site designation is outside the scope of this rulemaking. For more information on determining site designation, see the TCEQ guidance document regarding site designation at www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/site.pdf. **No change was made as a result of this comment.**

CEMEX requested that the commission replace the definition of traffic areas with three new definitions: main traffic areas, auxiliary traffic areas, and unpaved surface areas.

TCEQ did not make the requested change in the interest of being consistent with TXDOT rules and because road dust control requirements are applicable to all areas of a concrete batch plant. No change was made as a result of this comment.

MMM stated that the recordkeeping requirements in subsection (3)(J) would require an undue amount of time, effort, and money for owners or operators of concrete batch plants.

The 30 TAC §101.201, §101.211, and visible emissions recordkeeping requirements were already applicable, but not specifically written in the CBPSP effective July 10, 2003. The production rate recordkeeping requirement was already in the CBPSP effective July 10, 2003. The recordkeeping requirements concerning repairs and maintenance, Material Safety Data Sheets, silo warning device or shut-off system tests, federal engine requirement applicability, and engine fuel use are new, but TCEQ expects that these records would be part of best business practices at a well-operated plant. No change was made as a result of this comment.

AGC requested that paragraph (3)(J)(i) and (3)(J)(ii) specify all recordkeeping required by 30 TAC §101.201 and §101.211.

Referencing other rules is sometimes necessary in the interest of maintaining correct and concise requirements. There are a variety of different recordkeeping requirements in 30 TAC §101.201 and §101.211 and not all concrete batch plants will be applicable to all of them. No change was made as a result of this comment.

Jobe asked if paragraphs (3)(J)(vi) and (vii) related to recordkeeping could be clarified, modified, or deleted since watering roads and stockpiles is not required to be on a specific schedule.

To provide flexibility for owners or operators in determining when roads and stockpiles need treatment to avoid visible emissions, TCEQ did not create a specific recordkeeping schedule. Maintaining appropriate dust control records supports a determination of compliance with the requirement, and is a valuable tool that can be used in addressing dust complaints. Investigations into potential nuisance conditions may include records of local weather, tape-lift sampling, and plant records of dust control. In the interest of maintaining flexibility for owners and operators

while also maintaining TCEQ's enforcement options, TCEQ is maintaining the recordkeeping requirements found in paragraphs (3)(J)(vi) and (vii). No change was made as a result of this comment.

TACA asked if the filter control efficiency requirement was consistent with the pickup device's suction capacity requirement. MMM and TACA asked TCEQ to clarify why the control efficiency requirements were changed in the amendment.

According to TCEQ experience and common industry standards, these two requirements are compatible. The control efficiency requirements used in the amendment were based on recent BACT used in several case-by-case new source review air permitting. No change was made as a result of this comment.

TACA requested that portable, temporary tanks that are small and completely enclosed (pigs) not be required to be equipped with fabric filters.

The standard permit does not require auxiliary storage tanks to be equipped with fabric filters; however, when transferring raw materials any emissions must be routed to a fabric filter. No change was made as a result of this comment.

AGC, CEMEX, MMM, and TACA requested that TCEQ leave the dust control options for traffic areas as they existed in the CBPSP effective July 10, 2003.

After re-evaluating dust control options for traffic areas at temporary sites, TCEQ has changed the standard permit to reinstate the requirements, as they existed in the CBPSP effective July 10, 2003.

CEMEX commented that the dust control requirements in subsection (5)(E) contradicts the permanent concrete batch plant dust control requirements in subsection (9)(F).

These subsections do not contradict one another. The dust control requirements for permanent concrete batch plants are intended to be a permanent solution for high traffic areas. The requirements in subsection (9)(F) requires certain areas of permanent concrete batch plants to be paved. The requirements in (5)(E) provide options other than paving for controlling dust in the rest of the plant. No change was made as a result of this comment.

TACA appreciated that the concrete batch plant standard permit allow co-location of rock crushers, hot mix asphalt plants, and concrete batch plants, but requested a site-specific demonstration in the standard permit that would show individual production rates and site size.

The commission appreciates the support. The restriction included in the CBPSP is that the rock crusher or hot mix asphalt plant must either be 550 feet away from the concrete batch plant or the operations cannot be running simultaneously. The commission included these restrictions to avoid potential cumulative emissions that would be higher than the permit limit and to allow for a more flexible production limit. Owners or operators who are interested in operating with different restrictions may apply for a case-by-case new source review permit. No change was made as a result of this comment.

MMM asked for clarification as to whether TCEQ considers a stockpile part of a concrete batch plant in determining distance.

TCEQ considers stockpiles to be part of a concrete batch plant to avoid cumulative effects. No change was made as a result of this comment.

CEMEX, Jobe, MMM, TACA, and TXI asked if a small amount of VOCs that would comply with de minimis requirements could be allowed in concrete additives.

In modeling for the standard permit, TCEQ did not consider VOC emissions. Since the ESL values for VOCs could vary over a wide range, it would be difficult to provide a protective and flexible production limit. However, TCEQ altered the amendment to state that the additives shall not emit VOCs instead of stating that the additives shall not contain them. If a facility emits VOCs in their concrete additives, the owner or operator can apply for a case-by-case new source review permit.

AGC, Jobe, MMM, TACA, and TXI requested a production limit that is greater than 12 hours and is based on variables such as type of plant, property line distance, and presence of engines.

After adjusting the modeling parameters, the commission has changed the 12-hour production limit to a 24-hour production limit. This 24-hour production limit should provide flexibility to owners or operators of all types of concrete batch plants regardless of property line distance or the presence of engines. The recordkeeping requirement for production rates was expanded to include a rate per day to demonstrate compliance with the 24-hour limit.

MMM and TACA requested that the permit base the production limit on each concrete batch plant rather than each site.

As long as multiple plants on a site can meet the production limits when owners or operators combine their emissions, they are potentially applicable to the CBPSP. However, the amendment continues to restrict production by site rather than by plant in the same way as it did in the CBPSP effective July 10, 2003. The commission included these restrictions to avoid potential cumulative emissions that would be higher than the permit limit. No change was made as a result of this comment.

TACA requested a different production limit for sites with multiple concrete batch plants registered under one standard air permit. They also requested varied production limits based on distance to the nearest property line, whether or not they used dust suppressing fencing or barriers, and whether or not the plant had engines on site.

In order to consider a greater number of concrete batch plants, to avoid potential cumulative emissions that would be higher than the permit limit, and to create a simple standard permit, the commission limited the CBPSP to one production limit. Owners or operators interested in multiple production limits better suited for their unique operation can apply for a case-by-case new source review permit. No change was made as a result of this comment.

MMM stated that dust control technologies used to shelter the drop point would represent an additional cost to construct and maintain.

The CBPSP effective July 10, 2003 and the amended standard permit require dust control technologies that are BACT. The amended standard permit has been updated to consider equivalent dust control technologies used in sheltering the drop point such as boots, rubber skirting, and telescopic chutes.

AGC, TACA, and TXI requested that subpart (8)(C) be expanded to include other dust control technologies to be used to shelter the drop point.

TCEQ has updated the amended standard permit to consider equivalent dust control technologies used in sheltering the drop point such as boots, rubber skirting, and telescopic chutes by adding the words "or equivalent dust control technology".

AGC suggested adding a clarification that the offset distance requirements do not apply to the common property boundary between the site and public right-of-way.

This exemption is already included in subsection (8)(D) and the definition of right-of-way of a public works project. No change was made as a result of this comment.

TACA requested that small concrete batch plants be exempt from the distance requirement for suction shrouds and ancillary equipment.

The distance requirement is necessary for proper control of visible emissions in the standard permit. No change was made as a result of this comment.

AGC commented that the alternatives in subsection (8)(E) are not feasible for temporary operations.

The alternatives provided in subsection (8)(E) have been in place in the concrete batch plant standard permit that was effective July 10, 2003. Even if these alternatives may not be feasible for every project, they may still provide a useful alternative for some temporary concrete plants that are otherwise unable to meet the standard permit due to buffer distance issues. No change was made as a result of this comment.

TACA requested that TCEQ clarify public notice requirements for temporary plants that relocate.

TCEQ updated the technical summary description of paragraph (8)(F)(ii) to clarify which portable entities would need to go through public notice.

IX. Statutory Authority

TCEQ adopts this standard permit under Texas Health and Safety Code (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 Texas Clean Air Act; THSC, § 382.051, Permitting Authority of the Commission: Rules, which authorizes the commission to issue permits, including standard permits for similar facilities; THSC, § 382.0513, Permit Conditions, which authorizes the commission to establish and enforce permit conditions consistent with THSC, § 382.05195, Standard Permit, which authorizes the commission to issue and amend standard permits according to the procedures set out in that section.

Amendments to the Air Quality Standard Permit for Concrete Batch Plants

Effective Date December 21, 2012

(1) Applicability

(A) This air quality standard permit authorizes concrete batch plant facilities that meet all of the conditions listed in sections (1) through (7) and one of sections (8), (9), or (10). If a concrete batch plant operates using sections (8), (9), or (10) of this standard permit and operational changes are proposed that would change the applicable section, the owner or operator shall reregister for the concrete batch plant standard permit prior to operating the change.

(B) This standard permit does not authorize emission increases of any air contaminant that is specifically prohibited by a condition or conditions in any permit issued under Title 30 Texas Administrative Code (30 TAC) Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, at the site.

(C) This standard permit does not relieve the owner or operator from complying with any other applicable provision of the Texas Health and Safety Code (THSC), Texas Water Code, rules of the Texas Commission on Environmental Quality (TCEQ), or any additional state or federal regulations.

(2) Definitions

(A) Auxiliary tank - storage containers used to hold raw materials for use in the batching process not including petroleum products and fuel storage tanks.

(B) Cohesive hard surface - An in-plant road surface preparation including, but not limited to: paving with concrete, asphalt, or other similar surface preparation where the road surface remains intact during vehicle and equipment use and is capable of being cleaned. Cleaning mechanisms may include water washing, sweeping, or vacuuming.

(C) Concrete batch plant - For the concrete batch plant standard permit, it is a plant that consists of a concrete batch facility and associated abatement equipment, including, but not limited to: material storage silos, aggregate storage bins, auxiliary storage tanks, conveyors, weigh hoppers, and a mixer. Concrete batch plants can add water, Portland cement, and aggregates into a delivery truck, or the concrete may be prepared in a central mix drum and transferred to a delivery truck for transport. This definition does not include operations that meet the requirements of 30 TAC § 106.141, Batch Mixer or 30 TAC § 106.146, Soil Stabilization Plants.

(D) Dust suppressing fencing or other barrier - A manmade obstruction that is at least 12 feet high that is used to prevent fugitive dust from stationary equipment stockpiles, in-plant roads, and traffic areas from leaving the plant property.

(E) Permanent concrete batch plant - For the concrete batch plant standard permit, it is a concrete batch plant that is not a temporary or specialty concrete batch plant.

(F) Related project segments - For plants on a Texas Department of Transportation right-of-way, related project segments are one contract with multiple project locations or one contractor with multiple contracts in which separate project limits are in close proximity to each other. A plant that is sited on the right-of-way is usually within project limits. However, a plant located at an intersection or wider right-of-way outside project limits is acceptable if it can be easily associated with the project.

(G) Right-of-way of a public works project - Any public works project that is associated with a right-of-way. Examples of right-of-way public works projects are public highways and roads, water and sewer pipelines, electrical transmission lines, and other similar works. A facility must be in or contiguous to the right-of-way of the public works project to be exempt from the public notice requirements listed in Texas Health and Safety Code, § 382.056, Notice of Intent to Obtain Permit or Permit Review; Hearing.

(H) Site - The total of all stationary sources located on one or more contiguous or adjacent properties, which are under common control of the same person (or persons under common control).

(I) Specialty concrete batch plant - For the concrete batch plant standard permit, it is a concrete batch plant with a low production concrete mixing plant that manufactures concrete less than or equal to 30 cubic yards per hour (cu yd/hr). These plants are typically dedicated to manufacturing precast concrete products, including but not limited to burial vaults, septic tanks, yard ornaments, concrete block and pipe, etc. This does not include small repair projects using mortar, grout, gunite, or other concrete repair materials.

(J) Stationary internal combustion engine - For the concrete batch plant standard permit, it is any internal combustion engine that remains at a location for more than 12 consecutive months and is not defined as a nonroad engine according to 40 Code of Federal Regulations (CFR) 89.2, Definitions.

(K) Temporary concrete batch plant - For the concrete batch plant standard permit, it is a concrete batch plant that occupies a designated site for not more than 180 consecutive days or that supplies concrete for a single

project (single contract or same contractor for related project segments), but not for other unrelated projects.

(L) Traffic areas - For the concrete batch plant standard permit, it is an area within the concrete batch plant that includes stockpiles and the area where mobile equipment moves or supplies aggregate to the batch plant and trucks supply aggregate and cement.

(3) Administrative Requirements

(A) The owner or operator of any concrete batch plant seeking authorization under this standard permit shall register in accordance with 30 TAC § 116.611, Registration to Use a Standard Permit. Owners or operators shall submit a completed, current form PI-1S Registrations for Air Standard Permit, Table 11, Fabric Filters, Table 20, Concrete Batch Plants, and a Concrete Batch Plant Standard Permit checklist.

(B) Owners or operators shall also comply with 30 TAC § 116.614, Standard Permit Fees, when they are required to complete public notice under section four of this standard permit.

(C) No owner or operator of a concrete batch plant shall begin construction or operation without obtaining written approval from the TCEQ executive director.

(D) The time period in 30 TAC § 116.611(b) (45 days) does not apply to owners or operators registering plants under this standard permit.

(E) Beginning December 21, 2012, all new and modified sources must comply with this standard permit.

(F) Renewals shall comply with this standard permit on the later of:

(i) December 21, 2014; or

(ii) the date the facility's registration is renewed.

(G) Owners or operators of temporary concrete plants seeking registration and those already registered for this standard permit that qualify for relocation under subsection (8)(F) are exempt from public notice requirements in section (4) of this standard permit.

(H) During start of construction, the owner or operator of a plant shall comply with 30 TAC § 116.120(a)(1), Voiding of Permits, and commence construction within 18 months of written approval from the Executive Director.

(I) Owners or operators are not required to submit air dispersion modeling as a part of this concrete batch plant standard permit registration.

(J) Owners or operators shall keep written records on site for a rolling 24-month period. Owners or operators shall make these records available at the request of TCEQ personnel or any air pollution control program having jurisdiction. Records shall be maintained on-site for the following including, but not limited to:

(i) 30 TAC § 101.201, Emissions Event Reporting and Recordkeeping Requirements;

(ii) 30 TAC § 101.211, Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements;

(iii) production rate for each hour and day of operation that demonstrates compliance with subsection (8)(A),(9)(A), or (10)(A) of this standard permit, as applicable;

(iv) all repairs and maintenance of abatement systems;

(v) Material Safety Data Sheets for all additives and other chemicals used at the site;

(vi) road cleaning, application of road dust control, or road maintenance for dust control;

(vii) stockpile dust suppression;

(viii) silo warning device or shut-off system tests;

(ix) quarterly visible emissions observations and any corrective actions required to control excess visible emissions;

(x) demonstration of compliance with subsection (6)(B) of this standard permit; and

(xi) type of fuel used to power engines authorized by this standard permit.

(K) Owners or operators will document and report abatement equipment failure or visible emissions deviations in excess of paragraph (5)(B)(iii) in accordance with 30 TAC Chapter 101, General Air Quality Rules as appropriate.

(4) Public Notice

The owner or operator shall follow the notice requirements in 30 TAC Chapter 39, Public Notice, unless a temporary concrete batch plant is exempted from public notice under 30 TAC § 116.178(b), Relocations and Changes of Location of Portable Facilities.

(5) General Requirements

(A) Owners or operators shall vent all cement/flyash storage silos, weigh hoppers, and auxiliary storage tanks to a fabric/cartridge filter or to a central fabric/cartridge filter system except as allowed by subsection (10)(B).

(B) Owners or operators shall maintain fabric or cartridge filters and collection systems by meeting all the following:

(i) operating them properly with no tears or leaks;

(ii) using filter systems (including any central filter system) designed to meet a minimum control efficiency of at least 99.5 percent at particle sizes of 2.5 microns and smaller;

(iii) meeting a performance standard of no visible emissions exceeding 30 seconds in any six-minute period as determined using United States Environmental Protection Agency (EPA) Test Method (TM) 22; and

(iv) sufficiently illuminating silo filter exhaust systems when cement or fly ash silos are filled during non-daylight hours to enable a determination of compliance with the visible emissions requirement in paragraph (5)(B)(iii) of this standard permit.

(C) When transferring cement/flyash, owners or operators shall:

(i) totally enclose conveying systems to and from storage silos and auxiliary storage tanks, operate them properly, and maintain them with no tears or leaks; and

(ii) maintain the conveying system using a performance standard of no visible emissions exceeding 30 seconds in any six-minute period as determined using EPA TM 22, except during cement and flyash tanker connect and disconnect.

(D) The owner or operator shall install an automatic shut-off or warning device on storage silos.

(i) An automatic shut-off device on the silo shall shut down the loading of the silo or auxiliary storage tank prior to reaching its capacity during loading operations, in order to avoid adversely impacting the pollution abatement equipment or other parts of the loading operation.

(ii) If a warning device is used, it shall alert operators in sufficient time to prevent an adverse impact on the pollution abatement equipment or other parts of the loading operation. Visible warning devices shall be kept free of particulate build-up at all times.

(iii) Silo and auxiliary tank warning devices or shut-off systems shall be tested at least once monthly during operations and records shall be kept indicating test and repair results according to subsection (3)(J) of this standard permit. Silo and auxiliary tank loading and unloading shall not be conducted with inoperative or faulty warning or shut-off devices.

(E) Owners or operators shall control emissions from in-plant roads and traffic areas at all times by:

(i) watering them; or

(ii) treating them with dust-suppressant chemicals as described in the application of aqueous detergents, surfactants, and other cleaning solutions in the de minimis list; or

(iii) covering them with a material such as, (but not limited to), roofing shingles or tire chips and used in combination with (i) or (ii) of this subsection; or

(iv) paving them with a cohesive hard surface that is maintained intact and cleaned.

(F) Owners or operators shall use water, dust-suppressant chemicals, or cover stockpiles, as necessary to minimize dust emissions.

(G) Owners or operators shall immediately clean up spilled materials. To minimize dust emissions, owners or operators shall contain, or dampen spilled materials.

(H) There shall be no visible fugitive emissions leaving the property. Observations for visible emissions shall be performed and recorded quarterly. The visible emissions determination shall be made during normal plant operations. Observations shall be made on the downwind property line for a minimum of six minutes. If visible emissions are observed, an evaluation must be accomplished in accordance with U.S. Environmental Protection Agency (EPA) Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, TM 22, using the criteria that visible emissions shall not exceed a cumulative 30 seconds in duration in any six-minute period. If visible emissions exceed the Test Method 22 criteria, immediate action shall be taken to eliminate the excessive visible emissions. The corrective action shall be documented within 24 business hours of completion.

(I) The owner or operator shall locate the concrete batch plant operating under this standard permit at least 550 feet from any crushing plant or hot mix asphalt plant. The owner or operator shall measure from the closest point on the concrete batch plant to the closest point on any other facility. If the owner or operator cannot meet this distance, then the owner or

operator shall not operate the concrete batch plant at the same time as the rock crusher, concrete crusher, or hot mix asphalt plant.

(J) When operating multiple concrete batch plants on the same site, the owner or operator shall comply with the appropriate site production limits specified in sections (8), (9), or (10) of this standard permit. If engines are being used for electrical power or equipment operations, then the site is limited to a total of 1,000 hp in simultaneous operation. There are no restrictions to engine operations if the engines will be on site for less than 12 consecutive months.

(K) Concrete additives shall not emit volatile organic compounds (VOCs).

(L) Any claim under this standard permit shall comply with:

(i) 30 TAC § 116.604, Duration and Renewal of Registrations to Use Standard Permits;

(ii) 30 TAC § 116.605(d)(I), Standard Permit Amendment and Revocation;

(iii) 30 TAC § 116.614;

(iv) the public notice processes established in THSC, § 382.055, Review and Renewal of Preconstruction Permit;

(v) the public notice processes established in THSC, § 382.056;

(vi) the contested case hearing and public notice requirements established in 30 TAC § 55.152(a)(2), Public Comment Period; and

(vii) the contested case hearing and public notice requirements established in 30 TAC § 55.201(h)(i)(C), Requests for Reconsideration or Contested Case Hearing.

(6) Engines

(A) This standard permit authorizes emissions from a stationary compression ignition internal combustion engine (or combination of engines) of no more than 1000 total horsepower.

(B) Owners or operators of concrete batch plants that include a stationary compression ignition internal combustion engines shall comply with additional applicable engine requirements in 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 30 TAC Chapter 117, Control of Air

Pollution from Nitrogen Compounds, and any other applicable state or federal regulation.

(C) Engine exhaust stacks shall be a minimum of eight feet tall.

(D) Fuel for the engine shall be liquid fuel with a maximum sulfur content of no more than 0.0015 percent by weight and shall not consist of a blend containing waste oils or solvents.

(7) Planned Maintenance, Startup, and Shutdown (MSS) Activities

This standard permit authorizes operations including planned startup and shutdown emissions. Maintenance activities are not authorized by this standard permit and will need separate authorization, unless the activity can meet the conditions of 30 TAC § 116.119, De Minimis Facilities or Sources.

(8) Additional Requirements for Temporary Concrete Plants

(A) The owner or operator shall limit site production to no more than 300 cubic yards in any one hour and no more than 6,000 cubic yards per day.

(B) The owner or operator shall use a suction shroud or other pickup device at the batch drop point (drum feed for central mix plants) and vent it to a fabric or cartridge filter system operating with a minimum of 5,000 actual cubic feet per minute (acfm) of air.

(C) For truck mix plants, the owner or operator shall shelter the drop point by an intact three-sided curtain, or equivalent dust control technology that extends below the mixer truck-receiving funnel.

(D) The owner or operator shall maintain the following minimum plant buffer distances from any property line, except for temporary concrete plants approved to operate in the right of way of a public works project:

(i) The suction shroud baghouse exhaust shall be at least 100 feet from any property line.

(ii) The owner or operator shall not locate or operate stationary equipment, stockpiles, or vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site) within 50 feet from any property line.

(E) In lieu of meeting the buffer distance requirement for roads and stockpiles in subsection (8)(D) of this standard permit owners or operators shall:

(i) construct dust suppressing fencing or other barriers as a border around roads, other traffic areas and work areas;

(ii) construct these borders to a height of at least 12 feet; and

(iii) contain stockpiles within a three-walled bunker that extends at least two feet above the top of the stockpile.

(F) The appropriate TCEQ regional office may approve, without the need of public notice referenced in section (4) of this standard permit, the relocations of a temporary concrete batch plant that has previously been determined by the commission to be in compliance with the technical requirements of the concrete batch plant standard permit version adopted at registration that provides the information listed under subsection (8)(G) and meets one of the following conditions:

(i) A registered portable facility and associated equipment are moving to a site for support of a public works project in which the proposed site is located in or contiguous to the right-of-way of the public works project; or

(ii) A registered portable facility is moving to a site in which a portable facility has been located at the site at any time during the previous two years and the site was subject to public notice.

(G) For relocations meeting subsection (8)(F) of this standard permit, the owner or operator must submit to the regional office and any local air pollution control agency having jurisdiction at least 12 business days prior to locating at the site:

(i) The company name, address, company contact, and telephone number;

(ii) The regulated entity number (RN), customer reference number (CN), applicable permit or registration numbers, and if available, the TCEQ account number;

(iii) The location from which the facility is moving (current location);

(iv) A location description of the proposed site (city, county, and exact physical location description);

(v) A scaled plot plan that identifies the location of all equipment and stockpiles, and also indicates that the required distances to the property lines can be met;

(vi) A scaled area map that clearly indicates how the proposed site is contiguous or adjacent to the right-of-way of a public works project (if required);

(vii) The proposed date for start of construction and expected date for start of operation;

(viii) The expected time period at the proposed site;

(ix) The permit or registration number of the portable facility that was located at the proposed site any time during the last two years, and the date the facility was last located there. This information is not necessary if the relocation request is for a public works project that is contiguous or adjacent to the right-of-way of a public works project; and

(x) Proof that the proposed site had accomplished public notice, as required by 30 TAC Chapter 39. This proof is not necessary if the relocation request is for a public works project that is contiguous or adjacent to the right-of-way of a public works project.

(9) Additional Requirements for Permanent Concrete Plants

(A) The owner or operator shall limit site production to no more than 300 cubic yards in any one hour and no more than 6,000 cubic yards per day.

(B) The owner or operator shall install a suction shroud or other pickup device at the batch drop point (drum feed for central mix plants) and vent it to a fabric/cartridge filter system with a minimum of 5,000 acfm.

(C) For truck mix plants, the owner or operator shall shelter the drop point by an intact three-sided curtain, or equivalent dust control technology that extends below the mixer truck-receiving funnel.

(D) The owner or operator shall maintain the following minimum plant buffer distances from any property line:

(i) The suction shroud baghouse exhaust shall be at least 100 feet from any property line;

(ii) The owner or operator shall not locate or operate stationary equipment, stockpiles, or vehicles used for the operation of the concrete batch plant (except for incidental traffic and the entrance and exit to the site), within 50 feet from any property line.

(E) In lieu of meeting the buffer distance requirements for roads and stockpiles of paragraph (9)(D)(ii) of this standard permit, the owner or operator shall:

(i) construct dust suppressing fencing or other barriers as a border around roads, other traffic areas, and work areas;

(ii) construct these borders to a height of at least 12 feet; and

(iii) contain stockpiles within a three-walled bunker that extends at least two feet above the top of the stockpile.

(F) The owner or operator shall pave all entry and exit roads and main traffic routes associated with the operation of the concrete batch plant (including batch truck and material delivery truck roads) with a cohesive hard surface that can be maintained intact and shall be cleaned. All batch trucks and material delivery trucks shall remain on the paved surface when entering, conducting primary function, and leaving the property. The owner or operator shall maintain other traffic areas using the control requirements of subsection(5)(E) of this standard permit.

(10) Additional Requirements for Specialty Concrete Batch Plants

(A) The owner or operator shall limit site production to no more than 30 cubic yards per hour.

(B) As an alternative to the requirement in subsection (5)(A) of this standard permit, the owner or operator may vent the cement/fly ash weigh hopper inside the batch mixer.

(C) The owner or operator shall control dust emissions at the batch mixer feed so that no outdoor visible emissions occur by one of the following:

(i) using a suction shroud or other pickup device delivering air to a fabric or cartridge filter;

(ii) using an enclosed batch mixer feed; or

(iii) conducting the entire mixing operation inside an enclosed process building.

(D) The owner or operator shall 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 25 feet from any property line.

(E) In lieu of meeting the buffer distance requirement for roads and other traffic areas in subsection (10)(D) of this standard permit, owners or operators shall:

(i) construct dust suppressing fencing or other barriers as a border around roads, other traffic areas, and work areas; and

(ii) construct these barriers borders to a height of at least 12 feet.