

Proposed Air Quality Standard Permit for Temporary Public Works Projects

Effective Date: *[To be determined pending adoption]*

(1) Applicability

- (A) This air quality standard permit authorizes certain temporary concrete batch plants for public works that meet all of the conditions listed in this standard permit. Temporary concrete batch plants that are authorized under this standard permit shall also comply with section (8) for relocation requirements. If a temporary concrete batch plant operates under this standard permit and operational changes are proposed that would change the requirements, the owner or operator shall meet the requirements of Title 30 Texas Administrative Code (30 TAC) §116.615(2).
- (B) A temporary concrete batch plant authorized under this standard permit must be located in or contiguous to the right-of-way of the public works project.
- (C) 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 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, at the site.
- (D) 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.
- (E) Facilities that meet the conditions of this standard permit do not have to meet the emissions and distance limitations in 30 TAC §116.610(a)(1).

(2) Definitions

- (A) Auxiliary storage tank – Storage containers used to hold raw materials for use in the batching process not including petroleum products and fuel storage tanks.
- (B) Concrete batch plant - For this 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.
- (C) Central mix plant (also known as wet mix) – A concrete batch plant where sand, aggregate, cement supplement, and water are all combined and mixed in a central mix drum before being transferred to a transport truck.
- (D) Off-site receptor – Includes any off-site building which is in use as a single or multi-family residence, school, day-care, hospital, business, or place of worship at the time

the temporary concrete batch plant is registered under this standard permit. A residence is a structure primarily used as a permanent dwelling. A business is a structure that is occupied for at least eight hours a day, five days a week. This term does not include structures occupied or used solely by the owner or operator of the temporary concrete batch plant. The site property extends to the outer boundaries of the designated public property roadway project, and associated right-of-way.

- (E) 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.
- (F) 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 THSC, §382.056, Notice of Intent to Obtain Permit or Permit Review; Hearing.
- (G) Setback distance - The minimum distance from the nearest suction shroud fabric/cartridge filter exhaust (truck mix plant), drum feed fabric/cartridge filter exhaust (central mix plant), cement/fly ash storage silos, and/or engine to the nearest off-site receptor.
- (H) Site - The total of all stationary sources located on one or more contiguous or adjacent properties, that are under common control of the same person (or persons under common control).
- (I) Stationary internal combustion engine - For this 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.
- (J) Temporary concrete batch plant - For this 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.
- (K) Traffic areas - For this standard permit, it is an area within the temporary 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.
- (L) Truck mix plant – A concrete batch plant where sand, aggregate, cement, cement supplement, and water are all gravity fed from the weigh hopper into mixer trucks. The concrete is mixed on the way to the site where the concrete is to be poured.

(3) Administrative Requirements

- (A) The owner or operator of any temporary 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 PI-1S-CBP, Concrete Batch Plant Standard Permit Registration Application.
- (B) No owner or operator of a temporary concrete batch plant shall begin construction or operation without obtaining written approval from the executive director.
- (C) The time period in 30 TAC §116.611(b) does not apply to owners or operators registering plants under this standard permit.
- (D) Owners or operators of temporary concrete batch plants seeking registration under this standard permit are exempt from public notice requirements.
- (E) 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.
- (F) Owners or operators are not required to submit air dispersion modeling as a part of this standard permit registration.
- (G) 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 rates for hourly and annual operations that demonstrate compliance, as applicable;
 - (iv) all repairs and maintenance of abatement systems and other dust suppression controls;
 - (v) 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) monthly 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 (4)(E) of this standard permit;

- (xi) type of fuel used to power engines authorized by this standard permit;
 - (xii) demonstration of compliance with subsection (4)(K) of this standard permit; and
 - (xiii) actual hours of operation.
- (H) Owners or operators shall document and report abatement equipment failure or visible emissions deviations in excess of paragraph (4)(B)(iii) in accordance with 30 TAC Chapter 101, General Air Quality Rules as appropriate.

(4) General Requirements

- (A) Owners or operators shall vent all cement/fly ash storage silos, weigh hoppers, and auxiliary storage tanks to a fabric/cartridge filter or to a central fabric/cartridge filter system.
- (B) Owners or operators shall maintain fabric or cartridge filters and collection systems in good working condition 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 in Appendix A-7 to Part 60 - Test Methods 19 through 25E; 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 (4)(B)(iii) of this standard permit.
- (C) When transferring cement/fly ash, 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 in Appendix A-7 to Part 60 - Test Methods 19 through 25E, except during cement and fly ash 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 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 storage 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)(G) of this standard permit. Silo and auxiliary storage 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 one or more of the following methods:
 - (i) watering them;
 - (ii) treating them with dust-suppressant chemicals as described in the application of aqueous detergents, surfactants, and other cleaning solutions in the Air Permits Division List of De Minimis Facilities or Sources; 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.
- (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 conducted in accordance with EPA TM 22 in Appendix A-7 to Part 60 - Test Methods 19 through 25E, 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 TM 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 temporary concrete batch plant operating under this standard permit at least 550 feet from any crushing plant or hot mix asphalt plant at the time the application is submitted. The owner or operator shall measure from the closest point on the temporary concrete batch plant to the closest point of any other facility. If the owner or operator cannot meet this distance, then the owner or operator shall not operate the temporary concrete batch plant at the same time as the crushing plant or hot mix plant.
- (J) Concrete additives shall not emit volatile organic compounds (VOCs).
- (K) All sand and aggregate shall be washed prior to delivery to the site.

- (L) Any claim under this standard permit shall comply with the following:
 - (i) 30 TAC §116.604, Duration and Renewal of Registrations to Use Standard Permits;
 - (ii) 30 TAC §116.605(d)(1), Standard Permit Amendment and Revocation; and
 - (iii) 30 TAC §116.614, Standard Permit Fees.
- (M) The owner or operator of any temporary concrete batch plant authorized by this standard permit shall comply with 30 TAC §101.4, Nuisance.

(5) Engines

- (A) This standard permit authorizes emissions from a stationary compression ignition internal combustion engine (or combination of engines) of no more than 1,000 total horsepower (hp).
- (B) Owners or operators of temporary concrete batch plants that include one or more stationary compression ignition internal combustion engines shall comply with additional applicable engine requirements in 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 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.
- (E) Emissions from the engine(s) shall not exceed the applicable Tier 4 exhaust standard for NO_x in 40 CFR Part 1039, Control of Emissions from New and In-Use Nonroad Compression-Ignition Engines. A copy of the manufacturer's specifications shall be kept at the site.
- (F) There are no restrictions to engine operations if the engines will be on-site for less than 12 consecutive months.

(6) 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.

(7) Operational Requirements

- (A) The owner or operator shall limit site production to no more than 200 cubic yards in any one hour for truck mix plants and 300 cubic yards in any one hour for central mix plants.

Total site production shall be limited to no more than 350,000 cubic yards in any rolling 12-month period.

- (B) The facilities shall be limited to a maximum operating schedule of 12 hours (consecutive or non-consecutive) during any 24-hour period.
- (C) The owner or operator shall install and properly maintain a suction shroud at the truck mix batch drop point or a total enclosure of the central mix drum feed exhaust and vent the captured emissions to a fabric/cartridge filter system with a minimum of 5,000 actual cubic feet per minute (acfm) of air.
- (D) For truck mix plants, the owner or operator shall shelter the drop point by an intact three-sided enclosure with a flexible shroud hanging from above the truck, or equivalent dust collection technology that extends below the mixer truck-receiving funnel.
- (E) The owner or operator shall maintain the following minimum setback distances:
 - (i) The suction shroud fabric/cartridge filter exhaust (truck mix plant), drum feed fabric/cartridge filter exhaust (central mix plant), cement/fly ash storage silos, and/or engine shall be located at least 100 feet from the nearest off-site receptor.
 - (ii) Stationary equipment (excluding the suction shroud fabric/cartridge filter exhaust, cement/fly ash storage silos, and engine), stockpiles and vehicles used for the operation of the temporary concrete batch plant on in-plant roads (except for incidental traffic and the entrance and exit to the site), shall be located at least 50 feet from the nearest off-site receptor.

(8) Relocation Requirements

- (A) The TCEQ executive director may approve the relocation of a temporary concrete batch plant that has previously been determined by the commission to be in compliance with the technical requirements of the public works standard permit version adopted at registration and also meets all of the following conditions:
 - (i) The temporary concrete batch plant is a registered portable facility;
 - (ii) The owner or operator provides the information listed under subsection (8)(B); and
 - (iii) The temporary concrete batch plant 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.
- (B) For relocations meeting subsection (8)(A) of this standard permit, the owner or operator must submit to the executive director 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, 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 setback distances to off-site receptors can be met at the new location;
- (vi) representation of maximum hourly and annual site production;
- (vii) 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; and
- (viii) the proposed date for start of construction and expected date for start of operation; and the expected time period at the proposed site.