Air Quality Standard Permit for Concrete Batch Plants

Effective Date July 10, 2003

This air quality standard permit authorizes concrete batch plant facilities which meet all of the conditions listed in paragraphs (1) through (3) and one of paragraphs (4), (5) or (6). If a standard permit registration is based on paragraphs (4), (5), or (6) and changes are proposed which change the paragraph under which the facility will be constructed and operate, the concrete batch plant must reapply for a new standard permit.

(1) Administrative Requirements

(A) Any concrete batch plant authorized under this standard permit shall be registered in accordance with 30 TAC 116.611, Registration to Use a Standard Permit. Owners or operators shall submit a completed current PI-1S-CBP, Table 20 and a Concrete Batch Plant Standard Permit checklist. Facilities which meet the conditions of this standard permit do not have to meet the emissions and distance limitations listed in 30 TAC 116.610(a)(1), Applicability.

(B) Registration applications shall also comply with 30 TAC § 116.614 "Standard Permit Fees" when the registration is required to complete public notification under paragraph two of this standard permit.

(C) No owner or operator of a concrete batch plant shall begin construction and/or operation without obtaining written approval from the executive director. The time period in 30 TAC § 116.611(b) (45 days) does not apply to facilities registering under this permit. Those facilities which are not required to comply with the public notification requirements of paragraph two should receive approval within 45 days after receipt of the registration request by the executive director. Start of construction of any facility registered under this standard permit shall comply with 30 TAC § 116.115 (b)(2)(A) and commence within 18 months of written approval from the TNRCC.

(D) Any concrete batch plant which has registered but not constructed or filed a registration request for a permit-by-rule filed under 30 TAC §§ 106.201, 106.202, or 106.203 (relating to Permanent and Temporary Concrete Batch Plants [Previously SE 71]; Temporary Concrete Batch Plants [Previously SE 93]; and Specialty Batch Plants [Previously SE 117]) prior to the effective date of this permit will be processed under those rules.

(E) Applicants are not required to submit air dispersion modeling as a part of any concrete batch plant standard permit application.

(F) Records shall be maintained on-site for the following:

(i) production rates for each hour of operation which demonstrate compliance with the most applicable of paragraphs (4)(A), (5)(B) and (C), or (6)(C) and (D); and

(ii) production and other records as required by 30 TAC §§ 101.6-101.7 and by (1)(F)(i) of this standard permit shall be kept for lesser of either the most recent rolling 24-month period or the duration of operation at a given site.

(2) Public Notice

Unless the facility is to be a temporary concrete plant, as defined in paragraph five of this permit, which is located in, or contiguous to, the right-of-way of a public works project, public notice must be conducted. Notification must follow the requirements in 30 TAC Chapter 39, Subchapters H & K. In addition, sign posting must be performed following the requirements of 30 TAC § 39.604. The signs shall be headed by the words "PROPOSED AIR QUALITY STANDARD PERMIT".

(3) General Requirements

(A) All cement/flyash storage silos and weigh hoppers shall be equipped with a fabric or cartridge filter or vented to a fabric or cartridge filter system.

(B) Fabric filters and collection systems shall meet all of the following:

(i) any fabric or cartridge filter, any fabric or cartridge filter system, and any suction shroud shall be maintained and operated properly with no tears or leaks;

(ii) all filter systems (including any central filter system) shall be designed to meet at least 0.01 outlet grain loading (grains/dry standard cubic foot);

(iii) all filter systems, mixer loading, and batch truck loading emissions control devices shall meet a performance standard of no visible emissions exceeding 30 seconds in any six-minute period as determined using U.S. Environmental Protection Agency (EPA) Test Method (TM) 22; and

(iv) when cement or flyash silos are filled during non-daylight hours, the silo filter system exhaust shall be sufficiently illuminated to enable a determination of compliance with the visible emissions requirement in (3)(B)(iii) of this permit.

(C) Conveying systems for the transfer of cement/flyash shall meet all of the following:

(i) conveying systems to and from the storage silos shall be totally enclosed, operated properly, and maintained with no tears or leaks; and

(ii) these systems, except during cement/flyash tanker connect and disconnect, shall meet a performance standard of no visible emissions exceeding 30 seconds in any six-minute period as determined using EPA TM 22.

(D) A warning device shall be installed on each bulk storage silo. This device shall alert operators in sufficient time prior to the silo reaching capacity during loading operations, so that the loading operation can be stopped prior to filling to such a level as to potentially adversely impact the pollution abatement equipment. Any filling of the silo resulting in failure of the abatement system , or visible emissions in excess of paragraph (3)(B)(iii) of this standard permit, must be documented and reported following the requirements of 30 TAC § 101.6 or 30 TAC § 101.7, as appropriate.

(E) Dust emissions from all in-plant roads and traffic areas associated with the operation of the concrete batch plant must be minimized at all times by at least one of the following methods:

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

(ii) treated with dust-suppressant chemicals;

(iii) watered; or

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

(F) All stockpiles shall be sprinkled with water, dust-suppressant chemicals, or covered, as necessary, to minimize dust emissions.

(G) Spillage of materials used in the batch shall be immediately cleaned up and contained or dampened so that dust emissions are minimized.

(4) Additional Requirements for Concrete Batch and Specialty Batch Concrete, Mortar, Grout Mixing, or Pre-cast Concrete Products Plants

(A) Site production shall not exceed 30 cubic yards per hour.

(B) As an alternative to the requirement in paragraph (3)(A) of this section, the cement/flyash weigh hopper may be vented inside the batch mixer.

(C) Dust emissions at the batch mixer feed shall be controlled by one of the following:

(i) a spray device which eliminates visible emissions;

(ii) a pickup device delivering air to a fabric or cartridge filter;

(iii) an enclosed batch mixer feed such that no visible emissions occur; or

(iv) conducting the entire mixing operation inside the enclosed process building such that no visible emissions from the building occur during mixing activities.

(D) Except for incidental traffic, vehicles used for the operation of the concrete batch plant may not be operated within 25 feet of any property line, except for entrance and exit to the site. In lieu of meeting this distance requirement, roads and other traffic areas must be bordered by dust preventive fencing or other barrier along all traffic routes or work areas within the 25-foot specified buffer area. These borders shall be constructed to a height of at least 12 feet.

(5) Additional Requirements for Temporary Concrete Plants

For the purposes of this section, a temporary concrete plant is one that occupies a designated site for not more than 180 consecutive days or supplies concrete for a single project (single contract or same contractor for related project segments), but not other unrelated projects.

(A) Site production shall be limited to no more than 300 cubic yards per hour.

(B) Dust control at the truck drop or mixing point shall comply with one of the following:

(i) Facilities which occupy a site for less than 180 consecutive days and have production rates less than 200 cy/hr may load rotary mix trucks through a discharge spout equipped with a water fog ring having low-velocity fog nozzles spaced to create a continuous fog curtain that minimizes dust emissions. If a water fog ring is used at the truck drop point, the visible emissions limitations (and associated compliance determination methods) of subsection (3)(B)(3) and (4) must be met.

(ii) All other facilities must use a suction shroud and fabric filter /cartridge filter system. The suction shroud or other pickup device shall be installed at the batch drop point (drum feed for central mix plants) and vented to a fabric or cartridge filter system with a minimum of 4,000 actual cubic feet per minute of air and must meet subsection (3)(B).

(C) All of the following applicable distance limitations must be met. For concrete batch plants which supply concrete for a single public works project, the "property line" measurements for purposes of compliance with this standard permit and 30 TAC § 111.155 shall be made to the outer boundaries of the designated public property, roadway project and associated rights-of-way.

(i) The suction shroud baghouse exhaust or truck drop point shall be located at least 100 feet from any property line.

(ii) For those facilities with a water fog ring, the truck drop point shall be a minimum of 300 feet from the nearest non-industrial receptor.

(iii) 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) may not be located or operated, respectively, within the following specified distances from any property line:

(iv) for those facilities with production rates less than or equal to 200 cubic yards per hour, at least 25 feet; and

(v) for those facilities with production rates more than 200 and less than or equal to 300 cubic yards per hour, at least 50 feet.

(D) In lieu of meeting the distance requirements for roads and stockpiles of (5)(C)(iii), the following may be followed:

(i) roads and other traffic areas within the buffer distance must be bordered by dust suppressing fencing or other barrier along all traffic routes or work areas. These borders shall be constructed to a height of at least twelve (12) feet; and

(ii) stockpiles within this buffer distance must be contained within a three-walled bunker which extends at least two (2) feet above the top of the stockpile.

(E) The owner or operator of a temporary concrete plant that has previously been determined by the commission to be in compliance with the technical requirements of the standard permit in effect at the time of registration, which supplies concrete to a public works project and is located in or contiguous to the right of way of that public works project may, in lieu of the registration requirement in subsection(1)(A) of this standard permit, register by notifying the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction in writing at least 30 calendar days prior to locating at the site. The notification shall include the owner and, if applicable, the operator's name, address, and phone number as well as the physical description of the site, scaled plot plan of site with location of equipment authorized by this standard permit, concrete plant serial number, account number or regulated entity number, expected hours of operation, expected date of arrival on site and expected date to vacate the site, a completed Table 20,

and a Concrete Batch Plant Standard Permit Checklist. Temporary concrete plants that do not supply concrete to a public works project must apply for a new registration under subsection (1)(A) of this standard permit in order to relocate at a new site.

(6) Additional Requirements for Other Concrete Plants

(A) Site production shall be limited to no more than 300 cubic yard per hour.

(B) A suction shroud or other pickup device shall be installed at the batch drop point (drum feed for central mix plants) and vented to a fabric or cartridge filter system with a minimum of 4,000 actual cubic feet per minute of air.

(C) 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) shall be paved with a cohesive hard surface that can be maintained intact and shall be cleaned. All batch trucks and material delivery trucks shall remain on paved surface when entering, conducting primary function, and leaving the property. Other traffic areas must comply with the control requirements of paragraph (3)(E).

(D) The following distance limitations must be met:

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

(ii) 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) may not be located or operated, respectively, within the following specified distances from any property line:

(iii) for those facilities with production rates less than or equal to 200 cubic yards per hour, at least 25 feet; and

(iv) for those facilities with production rates more than 200 and less than or equal to 300 cubic yards per hour, at least 50 feet.

(E) In lieu of meeting the distance requirements for roads and stockpiles of (5)(C)(ii), the following may be followed:

(i) roads and other traffic areas within the buffer distance must be bordered by dust suppressing fencing or other barrier along all traffic routes or work areas. These borders shall be constructed to a height of at least 12 feet; and

(ii) stockpiles within this buffer distance must be contained within a three-walled bunker which extends at least two feet above the top of the stockpile.