

SUMMARY DOCUMENT FOR AMENDED AIR QUALITY STANDARD PERMIT FOR TEMPORARY ROCK AND CONCRETE CRUSHERS

I. EXECUTIVE SUMMARY

In accordance with Title 30 Texas Administrative Code (30 TAC) § 116.605, Standard Permit Amendment and Revocation, the Texas Commission on Environmental Quality (TCEQ or commission) is amending the air quality standard permit for temporary rock and concrete crushers. These amendments include several technical and administrative improvements and corrections.

II. EXPLANATION AND BACKGROUND OF AIR QUALITY STANDARD PERMIT

The New Source Review (NSR) Program under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, requires any person who plans to construct any new facility or to engage in the modification of any existing facility which may emit air contaminants into the air of the state to obtain a permit under 30 TAC § 116.111, General Application, or satisfy the conditions of a standard permit, a flexible permit, a permit by rule, or the criteria for a de minimis facility or source, before any actual work is begun on the facility. A standard permit authorizes the construction or modification of new or existing facilities that are similar in terms of operations, processes, and emissions. A standard permit provides an efficient mechanism for qualifying facilities to obtain authorization, as an alternative to a case-specific air quality permit. The standard permit for temporary rock and concrete crushers first became effective on February 14, 2002, and was amended July 5, 2005. The standard permit is applicable to temporarily-sited rock and concrete crushers that process nonmetallic minerals or a combination of nonmetallic minerals, and have a feed hopper throughput that is equal to or less than 250 tons per hour (tph). Facilities covered by this standard permit are often used to produce aggregate materials for road construction, or crush concrete resulting from demolition projects. Temporary rock and concrete crushers may also be used in applications such as commercial and residential construction.

III. OVERVIEW OF AIR QUALITY STANDARD PERMIT AMENDMENTS

During development of the Air Quality Standard Permit for Permanent Rock and Concrete Crushers, a review of the Air Quality Standard Permit for Temporary Rock and Concrete Crushers revealed the need for minor adjustments to this permit. The commission is including technical and administrative amendments to improve readability, flexibility, and enforceability of this standard permit. Requirements concerning emission limits, control requirements, and recordkeeping have not changed substantively.

IV. PERMIT CONDITION ANALYSIS AND JUSTIFICATION

The commission is changing the title of the standard permit to, "Air Quality Standard Permit for Temporary Rock and Concrete Crushers." The opening paragraph requires any permit holder to demonstrate compliance with any or all of the conditions of this standard permit upon request in order to ensure that facilities operating under this permit have the correct authorization.

The commission is adding a definition of the term residence to the general requirements. The term residence is used throughout various statutes and rules of the TCEQ and other state agencies. However, the term is not defined under the Texas Clean Air Act or by air quality-related agency rules. Webster's defines "reside" as, "to live in a place for a permanent or extended time." It further defines "residence" as "the place in which one lives." (Webster's II New College Dictionary, 1995) Texas courts have generally accepted that "residence" means "the place where one actually lives or has his or her home; a person's dwelling place or place of habitation; a dwelling house." (*Owens Corning v. Carter*, 997 S.W.2d 560 (Tex. 1999); *Malnar v. Mechell*, 91 S.W.3d 924 (Tex. App. Amarillo 2002); *Dickey v. McComb Development Co., Inc.* 115 S.W. 3d 42 (Tex. App. San Antonio 2003))

In most situations, whether or not a structure is a residence is generally self-evident. In some cases, however, questions may arise as to the character of a structure located near a facility in determining its compliance with applicable distance requirements. When necessary, a case-by-case determination shall be made by the TCEQ executive director regarding whether or not a structure is in fact a residence. The executive director may consider factors and circumstances specific to the situation in making the determination. Potential factors that may be considered include, but are not limited to:

- Local tax rolls showing the property as a residence
- Utility bills showing a residential rate
- Location of the structure in a neighborhood with any deed restrictions or zoning ordinances on use as a business or other non-residential activity
- Frequency of use of structure as a residence

The commission amends paragraph (1)(D)(iv) to make clear that the exception for recycling does not apply in any county adjacent to a county with a population of greater than 2.4 million people. In subsection (1)(E), the requirement to cover conveyors is narrowed to only those conveyors over 300 feet long. This requirement represents best available control technology (BACT) as required by the Texas Health and Safety Code (THSC). The operation of conveyors less than 300 feet long without covers is not likely to adversely impact off-property receptors.

The commission is adding language to subsections (1)(Q), (2)(E), (2)(H), and (3)(G), which states that the limitations in those subsections do not apply to facilities in storage. The commission amends the requirement in subsection (1)(U) to be consistent with a similar requirement in the Air Quality Standard Permit for Permanent Rock and Concrete Crushers. This subsection limits the owner or operator of a facility authorized by this standard permit from seeking authorization for a crushing facility under THSC, §382.0518, Preconstruction Permit, located at the same site for a period of 12 months from the date of notification. The purpose of this condition is to prevent an applicant for a case-specific NSR permit from using this standard permit to begin construction of the facility prior to issuance of the permit. The commission adds subsection (1)(V) to prevent an applicant for a case-specific NSR permit from using this standard permit to avoid a contested case hearing. Subsection (1)(W) states that maintenance activities are not authorized by this standard permit and require a separate authorization. Additionally, startup and shutdown emissions that exceed those expected during production operations are not included in this authorization and also require a separate authorization.

The amendment to subsection (3)(E) states that the time limits in this condition do not apply to a facility that is located at a public works project and complies with the requirements of subsection (3)(H).

The commission adds subsection (3)(H) to facilitate the use of this standard permit to authorize temporary facilities at a public works site that provides material exclusively to the public works project. It allows a facility to remain at a public works site for the length of the project or related project segments. A project is a public works contract or series of contracts for segments of related work. For crushers on a Texas Department of Transportation right-of-way (ROW) or contiguous to the ROW, related project segments are one contract or one contractor with multiple contracts for a single project. A crusher that is sited on the ROW is usually within project limits. However, a crusher located at an intersection or wider ROW outside project limits is acceptable if it can be easily associated to the project. Subsection (3)(H) is not intended as a means for siting a permanent facility.

V. PROTECTIVENESS REVIEW

The primary pollutant emitted from rock or concrete crushers is particulate matter. The characteristics of these emissions (such as particle size) may vary depending on the type of material being crushed, the specific operation generating the dust (crushing, screening, etc.), and the type of control techniques applied to the source. The only portion of the amendments with the potential to affect off-property impacts is the removal of the requirement to cover conveyors that are less than 300 feet long. The operation of conveyors less than 300 feet long without covers is consistent with current BACT for these facilities. Additionally, emission reductions based on covering all conveyors were not considered in the emission calculations for the original protectiveness review. The commission has previously determined that the 200-foot and 300-foot limits for Tier I and II crushers are protective, and would not result in exceedances of the national ambient air quality standard for particulate matter less than ten microns in diameter. Because existing modeling data is sufficient to support the limited changes in these amendments, a new modeling analysis was not performed.

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 Austin, Houston, and Dallas. The date for these publications was February 15, 2008. The public comment period ran from the date of publication until March 21, 2008. Written comments were received from CSA Materials, Inc. (CSA); Fred M. Bosse representing Southern Crushed Concrete, LLC (SCC); Associated General Contractors (AGC), Harris County Public Health & Environmental Resources (HCPHES); City of Houston Department of Health and Human Services, Bureau of Air Quality Control (BAQC); and the Texas Aggregate and Concrete Association (TACA).

VII. PUBLIC MEETING

A public meeting on the proposed standard permit was held on March 18, 2008, at 1:30 p.m., at the TCEQ, Building E, Room 254S, 12100 Park 35 Circle, Austin, Texas. Oral comments were provided by AGC.

VIII. ANALYSIS OF COMMENTS

CSA commented that the rock for a public works project may not be found within the project ROW and requested that condition 3(H) be revised to allow a crusher for a public works project to operate outside the ROW.

Because this condition gives special consideration regarding time on site to facilities crushing material for a public works project, the facility should be located within the ROW of, or immediately adjacent to, the project being serviced. Staff notes that condition (3)(H) allows the crusher to operate at a site that is contiguous to the ROW.

SCC commented that modeling does not support the stockpile height limitation in condition (1)(K) and that this restriction should be removed.

The stockpile height limitation is not the subject of any proposed changes or revisions and therefore this comment is beyond the scope of the proposed amendments.

BAQC commented that city of Houston personnel have repeatedly observed that few of the crushing operations consistently practice the full set of regulatory requirements necessary to reduce air emissions under the TCEQ permits program. This may result in nuisance conditions beyond the 440 yard set back requirement and BAQC requested that the setback be increased to 1500 feet.

While this comment is beyond the scope of the proposed amendments, it is expected that owners or operators of facilities authorized under this standard permit comply with all of the conditions of the permit or be subject to potential enforcement action.

BAQC requested the inclusion of a requirement that trucks entering or leaving the facility be required to cover their load to prevent particulate emissions from the trucks.

This comment is beyond the scope of the proposed amendments. Additionally, the commission has no statutory authority over the emissions from mobile sources and the Texas Department of Transportation has regulations regarding the covering of open truck beds and trailers.

BAQC commented that compliance history should be a consideration in authorization of these facilities and should be considered grounds for revoking an authorization.

Condition (3)(G) specifies that a registration for this standard permit is subject to a compliance history review and an applicant classified as a poor performer will not be granted authorization under this standard permit. In addition, if after authorization is granted, the facility is found to be out of compliance with the terms and conditions of the standard permit, it will be subject to possible enforcement action.

HCPHES commented that it did not support the proposed change to condition (1)(E), which made the requirement consistent with BACT in that conveyors less than 300 feet long will not be required to have a cover.

The commission is not making a change based on this comment. The operation of conveyors less than 300 feet long without covers is consistent with current BACT for these facilities as required by the THSC. During the original protectiveness review for this

standard permit, no reductions in the emissions calculations were taken for covering all conveyors. This protectiveness review determined that the 200-foot and 300-foot limits for Tier I and II crushers are protective in that off-property concentrations of particulate matter less than ten microns (PM₁₀) would not exceed established effects screening levels and would not result in exceedances of the national ambient air quality standard for PM₁₀.

BAQC and HCPHES requested that recordkeeping requirements include daily records of road cleaning activities and maintenance on abatement systems.

This comment is beyond the scope of the proposed amendments.

HCPHES requested that owners or operators of temporary crushing operations subject to the notification requirement in condition (2)(H) be required to notify local programs as well as the TCEQ regional office.

This comment is beyond the scope of the proposed amendments.

HCPHES commented that, due to population density and incompatible land use issues, the residents of Harris County are particularly negatively impacted from the operation of rock and concrete crushers in close proximity to residences and businesses. Also, HCPHES requested that written site approval from local air programs having jurisdiction be granted before crushing operations are authorized to begin at a site. Additionally, HCPHES requested 21 calendar days to respond to requests for comments from the TCEQ.

This comment is beyond the scope of the proposed amendments.

AGC commented that the definition of residence in condition (1)(A)(iii) refers to a permanent dwelling.

The commission agrees with the comment and is making the change to condition (1)(A)(iii) of this standard permit.

AGC requested to waive condition (1)(Q), which prohibits location of a rock crusher on a site with another crusher. AGC stated that, at a public works project, a secondary crusher may be needed.

This comment is beyond the scope of the proposed amendments; however, staff notes that condition (3)(D) allows a secondary crusher.

AGC commented that increased throughput for Tier II crushers would provide greater flexibility and requested increased rates of 350 tph and 450 tph in a tiered approach.

This comment is beyond the scope of the proposed amendments.

IX. STATUTORY AUTHORITY

The amendments to this standard permit are issued under THSC § 382.05195, which authorizes the commission to issue and amend standard permits according to the procedures set out in that section; § 382.065, which prohibits operation of a concrete crushing facility in certain locations; § 382.011, which authorizes the commission to control the quality of the state's air; and § 382.051, which authorizes the commission to issue permits, including standard permits for numerous similar sources.

Air Quality Standard Permit for Temporary Rock and Concrete Crushers
Effective Date July 31, 2008

This air quality standard permit authorizes temporary crushing operations which meet all of the conditions listed in section (1) and section (2) for Tier I, or section (1) and section (3) for Tier II. It is the permit holder's responsibility to demonstrate compliance with all conditions of this permit upon request by the executive director or any air pollution control agency having jurisdiction.

(1) General Requirements

(A) For the purposes of this standard permit, the following definitions apply:

- (i) a site is defined as one or more contiguous or adjacent properties which are under common control of the same person (or persons under common control).
- (ii) associated sources means sources that are related to the rock or concrete crushing operation, which are not "facilities" as defined under 30 TAC § 116.10. Associated sources include stockpiles and outdoor work areas. Equipment such as screens, belt conveyors, and material storage or feed bins are considered to be facilities and are not associated sources.
- (iii) a residence is a structure primarily used as a permanent dwelling.

(B) Except as provided in subsections (C) and (D), when crushing concrete, the concrete crushing facility shall be operated at least 440 yards from any building which was in use as a single or multi-family residence, school, or place of worship at the time the notification required by section (2) or (3) was filed. The measurement of distance shall be taken from the point on the concrete crushing facility that is nearest to the residence, school, or place of worship toward the point on the building in use as a residence, school, or place of worship that is nearest the concrete crushing facility.

(C) Subsection (B) does not apply to:

- (i) a concrete crushing facility at a location for which the distance requirements of subsection (B) were satisfied at the time the notification required by section (2) or (3) was filed with the commission, provided that the authorization was granted and maintained, regardless of whether a single or multi-family residence, school, or place of worship is subsequently built or put to use within 440 yards of the facility; or
- (ii) structures occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.

(D) Subsection (B) does not apply to a concrete crushing facility that:

- (i) is engaged in crushing concrete and other materials resulting from the demolition of a structure on that site and the concrete and other materials are being crushed primarily for use at that site;
- (ii) operates at that site during one period of no more than 180 calendar days;

- (iii) complies with all applicable conditions stated in commission rules, including operating conditions; and
 - (iv) is not located in a county with a population of 2.4 million or more persons, or in a county adjacent to such a county.
- (E) All screen sides shall be enclosed and all conveyors greater than 300 feet long shall be covered with a half-moon or equivalent enclosure that covers the top of the conveyor to minimize emissions.
- (F) Visible emissions from the crushing facility, associated sources, and in-plant roads associated only with the facility shall not leave the property for a period exceeding 30 seconds in duration in any six-minute period as determined using U.S. Environmental Protection Agency (EPA) Test Method (TM) 22.
- (G) Opacity of emissions from any transfer point on belt conveyors or any screen shall not exceed 10 percent and from any crusher shall not exceed 15 percent, averaged over a six-minute period, and according to EPA TM 9.
- (H) Permanently mounted spray bars shall be installed at the inlet and outlet of all crushers, at all shaker screens, and at all material transfer points and used as necessary to maintain compliance with all commission regulations.
- (I) Dust emissions from all in-plant roads and active work areas that are associated with the operation of the crusher shall 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.
- (J) All stockpiles shall be sprinkled with water, dust-suppressant chemicals, or covered, as necessary, to minimize dust emissions.
- (K) Raw material and product stockpile heights shall not exceed 45 feet.
- (L) The crusher shall be equipped with a runtime meter.
- (M) Written records shall be kept for a rolling 24-month period and shall accompany the crusher to any site at which it operates. These records shall be made available at the request of any personnel from the commission or any air pollution control program having jurisdiction. These written records shall contain the following:
 - (i) hours of operation including daily start and stop time;

- (ii) the throughput per hour of the feed hopper (as determined by an appropriate method based upon physical measurement or calculated using a production factor determined to be acceptable by the commission); and
 - (iii) the date(s) the crusher was placed on site and the date(s) it was removed from the plant site.
- (N) 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.
 - (O) Crushers that are authorized by this standard permit shall meet all applicable conditions of Title 40 Code of Federal Regulations (CFR) Part 60, Subpart A, General Provisions and Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.
 - (P) Only crushers that are processing nonmetallic minerals or a combination of nonmetallic minerals that are described in 40 CFR Part 60, Subpart OOO, shall be authorized by this standard permit.
 - (Q) The crusher and all associated facilities operating under this standard permit shall neither locate (except for crushers in non operational storage that have not commenced construction as considered under the Texas Clean Air Act (TCAA)) nor operate on the same site as any other crusher.
 - (R) This standard permit shall not require compliance with 30 TAC § 116.614, Standard Permit Fees.
 - (S) Notifications under this standard permit are not subject to the requirements of 30 TAC § 116.611, Registration to Use a Standard Permit.
 - (T) Crushing operations and related activities shall comply with applicable requirements of 30 TAC Chapter 101, Subchapter F, Emission Events and Scheduled Maintenance Startup, and Shutdown Activities.
 - (U) For any owner or operator with a facility authorized by this standard permit, the TCEQ will not accept an application for authorization of a crushing facility under Texas Health and Safety Code, § 382.0518, Preconstruction Permit, located at the same site for a period of 12 months from the date of notification.
 - (V) An applicant for authorization of a rock crusher, under Texas Health and Safety Code, § 382.0518, is not eligible for this standard permit at the same site until 12 months after the application for authorization under § 382.0518 is withdrawn.
 - (W) Maintenance emissions are not included in this permit and must be approved under separate authorization. Startup and shutdown emissions that exceed those expected during production operations must be approved under separate authorization.
- (2) A Tier I crusher shall comply with section (1) of this standard permit and all of the following:
 - (A) The crusher shall not be located at a quarry or mine.

- (B) The crusher feed hopper throughput shall not exceed 125 tons per hour.
 - (C) The crusher and all associated facilities and sources shall be located no less than 200 feet from the nearest property line.
 - (D) The equipment authorized under this section shall be limited to one primary crusher, two conveyors, and two screens.
 - (E) The crusher and all associated sources operating under this standard permit shall neither locate (except for crushers in non operational storage that have not commenced construction as considered under the Texas Clean Air Act (TCAA)) nor operate on the same site as any concrete batch plant or asphalt batch plant.
 - (F) The crusher and associated sources (excluding stockpiles) shall not operate for more than 360 hours or be located for more than 45 non-consecutive calendar days on site, whichever occurs first. The owner or operator shall remove the crusher and associated equipment from the site within 24 hours of ceasing operation. The 24 hours allotted for the removal of equipment shall not be used as additional operational time above the 360 hours or 45 non-consecutive calendar days.
 - (G) If the time periods listed in subsection (2)(F) have not been exhausted during any rolling 365 day period, the operator may return to the authorized site and operate for the remaining balance of time for that site. To return to the site, the operator shall notify the commission as described in subsection (2)(H). The notification for an applicant returning to a site under this subsection shall include the applicant's previous duration at the site to show compliance with subsection (2)(F). A crusher returning to a site shall comply with applicable distance limits specified under subsections (1)(B) and (2)(C). Once the operating hours (360) or calendar days (45) for the site have been exhausted and the site has been vacated, the owner or operator shall not use a standard permit to locate any crusher on the site for at least 365 days.
 - (H) The owner or operator shall notify the appropriate regional office in writing at least 10 calendar days prior to locating (except for crushers in non operational storage that have not commenced construction as considered under the TCAA) at the site. The notification shall be made using the required form.
- (3) A Tier II crusher shall comply with section (1) of this standard permit and all of the following:
- (A) The crusher's feed hopper throughput shall not exceed 250 tons per hour.
 - (B) The crushers and all associated facilities and sources shall be located no less than 300 feet from the nearest property line.
 - (C) The crushers and all associated facilities and sources operating under this standard permit shall be located at least 550 ft. from any concrete batch plant or asphalt batch plant. If this distance cannot be met, then the crusher authorized under this standard permit shall not operate at the same time as the concrete batch plant or asphalt batch plant.
 - (D) The equipment authorized under this section shall be limited to one primary crusher, one secondary crusher, two screens, and any associated conveyors.

- (E) Except for those facilities that comply with subsection (3)(H) of this standard permit, crushers and associated sources (excluding stockpiles) shall not operate for more than 1080 hours or be located for more than 180 non-consecutive calendar days on site, whichever occurs first. The owner or operator shall remove the crusher and associated equipment from the site within 24 hours of ceasing operation. The 24 hours allotted for the removal of equipment shall not be used as additional operational time above the 1080 hours or 180 non-consecutive calendar days.
- (F) If the time periods listed in subsection (3)(E) have not been exhausted during any rolling 365-day period, the operator may return to the authorized site and operate for the remaining balance of time for that site. To return to a site, the operator shall notify the commission as described in subsection (3)(G). The notification for an applicant returning to a site under this subsection shall include the applicant's previous duration at the site to show compliance with subsection (3)(E). The applicant is not required to obtain written approval to return to a site if the time periods in subsection (3)(E) have not been exhausted. A crusher returning to a site shall comply with applicable distance limits specified under subsections (1)(B), (3)(B), and (3)(C). Once the operating hours (1080) or calendar days (180) for the site have been exhausted and the site has been vacated, the owner or operator shall not use a standard permit to locate any crusher on the site for at least 365 days, and written approval and notification as described in subsection (3)(G) shall be required to return to that site.
- (G) No owner or operator shall locate a crusher on site (except for crushers in non operational storage that have not commenced construction as considered under the Texas Clean Air Act) without first obtaining written approval from the executive director. The owner or operator shall notify the appropriate regional office in writing at least 30 calendar days prior to locating at the site. The 30-day restriction is terminated once written approval from the executive director has been obtained for operation at the proposed site. The notification shall be made using the required form. A compliance history review shall be performed by the executive director in accordance with 30 TAC Chapter 60. If a facility is determined to be a poor performer, as defined in 30 TAC Chapter 60, a standard permit notification will not be accepted or approved.
- (H) A crusher that provides crushed material exclusively to a single public works project (single contract or same contractor for related project segments), and not to other unrelated projects, and is located in or contiguous to the right-of-way may remain on site and operate for the length of the current project or related segments.