

SUMMARY DOCUMENT FOR AIR QUALITY STANDARD PERMIT FOR PERMANENT ROCK AND CONCRETE CRUSHERS

I. EXECUTIVE SUMMARY

The Texas Commission on Environmental Quality (TCEQ or commission) issues an air quality standard permit for rock crushing and concrete crushers. This standard permit is applicable to all rock crushers that process nonmetallic minerals or a combination of nonmetallic minerals at quarries, mines, aggregate handling facilities, concrete recycling sites, etc., on a permanent basis and meet the conditions of this standard permit.

II. EXPLANATION AND BACKGROUND OF AIR QUALITY STANDARD PERMIT

This standard permit will replace the permit by rule (PBR) for rock crushers (Title 30 Texas Administrative Code (30 TAC) §106.142, Rock Crushers). This PBR has potential issues with enforceability and it can be difficult to determine compliance for facilities that are authorized by the PBR. This standard permit was developed to update technical requirements, provide clearer, more enforceable conditions, require recordkeeping that facilitates the determination of compliance, and update the authorization for these facilities to include statutory requirements for certain concrete crushers. Owners or operators of crushing facilities authorized by the PBR may continue to operate under the PBR unless the crusher is moved or modified. This standard permit provides a streamlined preconstruction authorization process to be used by any owner or operator of a crusher that can comply with the standard permit requirements and all other state or federal permitting statutes or regulations.

III. OVERVIEW OF AIR QUALITY STANDARD PERMIT

The commission issues this standard permit for permanent rock crushers under 30 TAC Chapter 116, Subchapter F, Standard Permits. The commission previously authorized rock crushers under the conditions of 30 TAC Chapter 106, Permits by Rule, the Air Quality Standard Permit for Temporary Rock Crushers and Temporary Concrete Crushers, or under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification. The issuance of this standard permit is consistent with the desire of the commission to simplify its regulatory structure and provide standard permits as an alternative to authorization by a case-specific New Source Review (NSR) permit. The general public often expresses concerns with crushing sites and operations that include, but are not limited to, traffic safety, noise, appearance, and property values. These types of concerns are not addressed under the Texas Clean Air Act and are beyond the commission's jurisdiction. Those concerns of the general public regarding nuisance dust, ambient air quality, and potential adverse health impacts are the focus of the protectiveness review and the resulting conditions of the standard permit.

The commission is including requirements to minimize dust emissions, establish property line distance limitations, and establish opacity and visible emission limitations. These requirements are based on air dispersion modeling, an impacts analysis, and plant observations performed to

verify the protectiveness of the standard permit. The commission has concluded research which shows that the standard permit for a permanent rock crusher or a permanent concrete crusher is protective of the public health and welfare, and that facilities operating under the conditions specified will comply with commission regulations.

The standard permit is designed to authorize a rock crusher that will be permanently located. It is not intended to provide an authorization mechanism for all possible unit configurations or for unusual operating scenarios. Those facilities which cannot meet the standard permit conditions may apply for an air quality permit under 30 TAC §116.111, General Application, or the Air Quality Standard Permit for Temporary Rock and Concrete Crushers.

IV. PERMIT CONDITION ANALYSIS AND JUSTIFICATION

The general conditions for standard permits, located in 30 TAC Chapter 116, Subchapter F, apply to all owners or operators of crushers seeking authorization under this standard permit. With the exception of 30 TAC §116.610(a)(1), Applicability, all crushers are required to meet 30 TAC Chapter 116, Subchapter F rule requirements as well as the specific conditions of this standard permit. Any changes that are made to this standard permit by the commission shall apply to all existing and future facilities that are authorized by this standard permit. As specified by 30 TAC Chapter 116, Subchapter F, to remain authorized under the standard permit, a facility shall comply with an amendment to the standard permit on the later of either the deadline the commission provides in the amendment or the date the facility's registration to use the standard permit is required to be renewed (however, compliance with an amended standard permit is not required within 24 months of the amendment unless it is necessary to protect public health). The standard permit authorization is location specific, and relocation to a new site requires the owner or operator to apply for a new authorization. Vacating a site voids the authorization at that site.

General Requirements

Section (1), General Requirements, outlines the administrative requirements that all crushers must meet.

Similar to the Air Quality Standard Permit for Temporary Rock Crushers and Temporary Concrete Crushers, subsection (1)(A) provides definitions for the terms site and associated sources. The definition for the term site is consistent with the definition that is given in 30 TAC Chapter 122, Federal Operating Permits Program. The definition for the term associated sources is based on the term facilities defined in 30 TAC Chapter 116. These definitions are included to ensure clarity when these terms are used in the conditions of the standard permit.

This standard permit includes a definition for the term residence. 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 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

Subsection (1)(B) provides distance limitations for concrete crushers with subsection (1)(C) specifying that the distance requirements in (1)(B) are established at the time the standard permit application is filed with the commission. However, subsection (1)(D) provides exceptions to the distance requirements in (1)(B) for demolition projects.

Subsection (1)(E) states that the commission will not accept an application for a crushing facility for authorization under Texas Health and Safety Code (THSC), §382.0518, Preconstruction Permit, for a period of one year from registration of a crushing facility under this standard permit. This is to prevent the use of this standard permit as an immediate precursor to a larger crushing operation. Subsection (1)(F) prevents an applicant that has submitted an application for a crushing facility under THSC, §382.0518, from being authorized by this standard permit at the same site until 12 months after the application for authorization under THSC, §382.0518, is withdrawn. This is to prevent an applicant that has contested case hearing requests for a permit under THSC, §382.0518, from withdrawing that application and immediately using this standard permit.

Subsection (1)(G) states that an applicant must file for the standard permit using Form PI-1S, checklist, and Table 17. It also specifies that a compliance history review will be accomplished. An applicant classified as a poor performer will not be granted authorization under this standard permit.

Subsection (1)(H) states that the crushing facility shall not be constructed or operated without written authorization from the executive director. Start of construction shall be no later than 18 months from the date of authorization. Construction progress and startup notification shall be in accordance with the general conditions of the standard permit. As stated in subsection (1)(I), permit fees will be remitted in accordance with 30 TAC §116.614, Standard Permit Fees.

Subsection (1)(J) states that New Source Performance Standards identified in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart A, General Provisions, and Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, are applicable to sources authorized by this permit, and, as stated in subsection (1)(K), crushing facilities authorized by this permit will be authorized to process only those materials identified as nonmetallic minerals as defined in 40 CFR Part 60, Subpart OOO. Subsection (1)(L) identifies other commission rules that may be applicable and states that this standard permit does not supersede those rules.

Subsection (1)(M) identifies recordkeeping requirements. Records are to be kept at the site for daily hours of operation and total throughput per hour to demonstrate compliance with the conditions of the standard permit. Additionally, as the result of comments received during public notice, the commission is changing this condition to include records of watering, road cleaning logs, and dust suppression activities at stockpiles. Subsection (1)(N) specifies the requirement to comply with 30 TAC Chapter 101, Subchapter F, Emissions Events and Scheduled Maintenance, Startup, and Shutdown Activities. Subsection (1)(O) states that the facilities authorized by this permit will not be required to meet the emission and distance requirements established in 30 TAC §116.610(a)(1), since modeling has indicated

that the permit is protective without this restriction. Subsection (1)(P) states that maintenance activities are not authorized by this standard permit and that startup and shutdown emissions must be approved by separate authorization if expected to exceed emissions from production operations.

Subsection (1)(Q) states that an applicant authorized by this standard permit would not be eligible for any other authorization in 30 TAC Chapter 106, Subchapter E, Aggregate and Pavement, or 30 TAC §106.512, Stationary Engines and Turbines, at the same site as the crusher authorized by this standard permit in order to ensure that cumulative emissions do not result in adverse off-property impacts. It should be noted that subsection (1)(R) states that registrations for the PBR for rock crushers will no longer be approved by the TCEQ after issuance of this standard permit.

Public Notice Requirements

Section (2) of this standard permit requires that owners and operators of rock crushers authorized by this standard permit provide public notice. The standard permit public notice allows for local communities to be informed of proposed rock or concrete crusher projects. The public will have the opportunity to submit comments to the agency and to be informed on the outcome of the standard permit review. The public notice will not, however, allow for the public to request a contested case hearing, as rock and concrete crushers meeting the requirements of this standard permit have been demonstrated to meet all air permitting requirements, including passing a health effects review.

Subsection (2)(A) states that the public notice requirements in 30 TAC Chapter 39, Subchapter H, Applicability and General Provisions, and Subchapter K, Public Notice of Air Quality Applications, do not apply. Facilities authorized by this standard permit will be subject to the public notice requirements as set forth in section (2) of this standard permit, which are based on the public notice requirements established for the Air Quality Standard Permit for Concrete Batch Plants with Enhanced Controls.

Subsection (2)(B) requires the applicant to publish notice of intent to construct a crusher no later than the 30th day after the date the applicant receives written notice from the executive director that the application is technically complete or the 75th day after the date that the executive director receives the application. The applicant must publish notice at least once in a newspaper of general circulation in the municipality in which the crusher is proposed to be located or in the municipality nearest to the proposed location of the crusher, as required by subsection (2)(C). If the elementary or middle school nearest to the proposed crusher provides a bilingual education program as required by Subchapter B, Chapter 29, Texas Education Code, the applicant must also publish the notice at least once in an additional publication of general circulation in the municipality or county in which the crusher is proposed to be located that is published in the language taught in the bilingual education program. This requirement is waived if such a publication does not exist or if the publisher refuses to publish the notice. Subsection (2)(D) requires that the notice include: 1) a brief description of the proposed location and nature of the proposed crusher; 2) a description, including a telephone number, of the manner in which the executive director may be contacted for further information; 3) a description, including a telephone number, of the manner in which the applicant may be contacted for further information; 4) the location and hours of

operation of the commission's regional office at which a copy of the application is available for review and copying; and 5) a brief description of the public comment process and the mailing address and deadline for filing written comments.

Subsection (2)(E) requires that the applicant post signs on the site of the proposed facility. Requirements for these signs, including size and specific information to be made available, are provided in paragraphs (2)(E)(i)-(vi). Subsection (2)(F) requires that the signs be in place by the date of the newspaper publication and remain in place and legible throughout the public comment period. Subsection (2)(G) provides direction regarding the placement of signs. Subsection (2)(H) requires that alternate language signs be included for those crushers in close proximity to schools having a bilingual program required by Chapter 29 of the Texas Education Code or schools that have waived out of such a required bilingual education program under the provisions of 19 TAC §89.1205(g). Additional requirements for the alternate language signs are in paragraphs (2)(H)(i)-(iv).

As stated in subsection (2)(I), the public comment period begins on the first date notice is published under subsection (2)(B) and extends to 30 days after the publication date. As required by subsection (2)(J), the executive director will approve or deny the standard permit registration not later than the 30th day after the end of the public comment period. The executive director will base the decision on whether the representations made in the application meet the requirements of this standard permit. The executive director will consider all comments received during the public comment period in determining whether to approve the registration. If the executive director denies the registration, the executive director will state the reasons for the denial and any modifications necessary for the proposed crusher to qualify for the authorization. Subsection (2)(K) specifies that the executive director will issue a written response to any public comments received related to the standard permit at the same time as or as soon as practicable after the executive director grants or denies the application. Issuance of the response after the granting or denial of the registration does not affect the validity of the executive director's decision to grant or deny the registration. The executive director will mail the response to each person who filed a comment and make the response available to the public.

Operational Requirements

Section (3), Operational Requirements, outlines technical requirements that all crushers must meet.

In order to ensure that there are no adverse off-property impacts, subsection (3)(A) limits throughput at the primary crusher to a maximum of 200 tons per hour (tph), and subsection (3)(B) requires a minimum distance of 200 feet (ft.) from any property line. To help prevent nuisance conditions, condition (3)(C) specifies a minimum distance from the facility to a single or multi-family residence, school, or place of worship. Based on a comment received during public notice, the commission is changing this distance from 1,000 feet to 440 yards to be consistent with the statutory requirement for concrete crushers. The distance is to be measured between the closest points of the facility and the residence, school, or place of worship. This subsection also specifies that the distance requirements are established at the time the standard permit application is filed with the commission.

Subsection (3)(D) establishes a separation distance between any crushing facility authorized under this standard permit and either another additional operating crushing facility, concrete batch plant (CBP), or hot mix asphalt plant (HMAP) to help ensure that cumulative emissions do not result in adverse off-property impacts. If this distance cannot be met, then the crushing facility authorized under this standard permit shall not operate at the same time as the additional crushing facility, CBP, or HMAP. The distance is to be measured between the closest points of the facilities of concern. Distance requirements for all associated sources, as defined in subsection (1)(A), will be required by subsection (3)(E) to be at least 100 feet from the property line as measured from the closest points between the stockpile or road and the

nearest property line.

In order to limit the amount of emissions, subsection (3)(F) restricts the facilities authorized by this standard permit to one primary crusher, one secondary crusher, one vibrating grizzly, two screens, associated conveyors, and one internal combustion engine (or combination of engines) of no more than 1,000 horsepower. As stated in subsection (3)(G), the crusher, associated facilities, and associated sources (excluding stockpiles) may not operate for more than an aggregate of 2,640 hours in any rolling 12-month period. When the operating hours (2,640) for the site have been exhausted, the owner or operator shall not use a standard permit to operate another rock crusher on the site. Subsection (3)(H) designates the time of operation to be between one hour before official sunrise and one hour after official sunset.

Subsection (3)(I) designates that the rock crushers shall be equipped with a runtime meter to ensure compliance with the requirement concerning operating hours. Also, based on a comment received during public notice, the commission is changing this condition to require the runtime meter to be operating during crushing operations. Criteria for emission controls are defined in subsection (3)(J), which requires all crushing facilities to have properly mounted spray bar equipment on the inlet and outlet of all crushers, all shaker screens, and at all material transfer points. These devices are to be used as necessary to maintain compliance with all TCEQ regulations.

Subsections (3)(K) and (L) address performance demonstrations for the facility. All crushing facilities authorized under this standard permit will be limited to no visible emissions at the property line that exceed a cumulative 30 seconds over a six-minute period as determined by the U.S. Environmental Protection Agency (EPA) Test Method (TM) 22 from all crushers, associated facilities, associated sources, and in-plant roads and work areas associated with the plant. Additionally, according to EPA TM 9, 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. The performance expectations are listed for compliance demonstrations with the conditions of the standard permit and prevention of nuisance conditions. Visible emission limitations and opacity requirements ensure that both the operators and TCEQ field investigators can clearly understand how to demonstrate compliance with the rules and regulations of the commission.

Subsections (3)(M) and (N) help ensure compliance with subsection (3)(L). Subsection (3)(M) requires that dust emissions from road and traffic areas directly associated with the operation of the rock crusher be minimized by covering or treating them with dust-suppressant materials, dust-suppressant chemicals, watering, or paving. Similarly, subsection (3)(N) requires that dust from stockpiles be controlled by watering, dust-suppressant chemicals, or covered as necessary to minimize emission from these sources. Subsection (3)(O) limits raw material and product stockpiles to a maximum height of 45 feet.

Subsection (3)(P) states that a weigh hopper or scale belt is to be used to determine the mass of material to be processed by the crushing facility to ensure compliance with throughput requirements. Subsection (3)(Q) states that the crushing facility may relocate on the same site without reauthorization as long as the required distance from any residence, school, or place of worship in existence at the time of the move is maintained. Based on a comment received during public notice the commission is changing this distance from 1,000 feet to 440 yards to be consistent with the statutory requirement for concrete crushers.

V. PROTECTIVENESS REVIEW

Dispersion Modeling and Distance Limits

The rock and concrete crushing standard permit team developed representative worst-case operating scenarios to be evaluated by dispersion modeling. Pollutants evaluated were particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), PM_{2.5}, silica, and products of combustion from the engines, including sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen dioxide (NO₂), and PM₁₀. Impacts were obtained using the EPA Industrial Source Complex (ISC) model. The model's output was used as the basis to develop the distance limits for the standard permit.

The operating scenarios consisted of a generic configuration of a 200 tph rock crushing operation. All rock crushing equipment emissions, including drop points, screens, crushers, conveyers, and stockpiles, were characterized as three circular area sources with heights of 1 meter, 3 meters, and 6 meters. The radius of the circular area sources was based on the areal coverage of the stockpiles.

The emissions of the sources were based on the maximum plant throughput of 200 tph operating for 2,640 hours per year. Stockpile emissions were evaluated as being active over the entire year (8,760 hours per year) with emissions controlled in accordance with the operational requirements stated in subsections (3)(L) and (3)(N). Thus, the emissions used in the air dispersion model reflect emission reductions for the use of water sprays and watering stockpiles. Because the sources are all low-level fugitives, the emissions modeled were adjusted by 40 percent to account for increased dispersion due to plume meander and spreading found to exist in conditions of stable atmosphere and low wind speeds. A study of monitoring data collected throughout the state indicates that this factor provides a good correlation between the collected data and the ISC model for the low-level fugitive emissions indicative of this type of facility.

Because there is no set "property line" for this standard permit, the receptor grid started at the edge of a circle encompassing all sources and continued out in 25 meter increments along 10 degree radial profiles sufficiently far to determine that the emissions would be below the National Ambient Air Quality Standard (NAAQS) protectiveness requirements in any, and every, direction.

The TCEQ staff used five years of meteorological data for a single location in lieu of evaluating multiple regional meteorological data sets. The rationale that the staff considered in making this decision was that the source releases are low-level fugitives and that the sources would be evaluated in multiple orientations; therefore, five years of data would provide representative worst-case meteorological parameters for fugitive impacts (low wind speed and stable atmospheric conditions). The meteorological data for this analysis consisted of surface data from Austin and upper-air data from Victoria for the years 1983, 1984, 1986, 1987, and 1988. Thus, since this analysis is primarily for short-term concentrations, this five-year set would include worst-case short-term meteorological conditions that could occur anywhere in the state.

Because all the emission sources were characterized as low-level fugitives, the emissions would be terrain following. Therefore, a reasonable worst-case evaluation was to address only flat terrain. The staff used both urban and rural dispersion coefficients with the worst-case result for each case evaluated used as the defining condition. Staff did not consider building downwash for this analysis because typically there are no downwash structures involved and this is not applicable for area source modeling.

The point source representation of engines is a minor source at rock crushing sites. No downwash was assumed for this emission point since the stack exit velocity and the stack exit temperature generally results in a plume that escapes downwash effects.

Results from the air dispersion modeling described above show that the maximum ground level emission concentrations for SO₂, PM₁₀, PM_{2.5}, NO₂, and CO are below the required limits established by the NAAQS. Thus, the rock and concrete crushing facility established by this standard permit should be protective with regard to the NAAQS requirements.

The potential health effect of the possibility of silica within the crushed material was evaluated assuming a conservatively high 20 percent silica content within the material to be crushed. The results were compared to the current effects screening level (ESL). The ESL is a conservative guideline concentration that is meant to serve as a screening tool and, as such, has multiple built-in safety factors. Because of the safety factors, the conservative guideline concentration is considered to be protective of the general population, which includes the very young, the elderly, and people with preexisting health conditions.

Using the same modeling techniques and assumptions as described previously, the maximum one-hour ground level concentration of respirable quartz silica (PM₄) was found to be 4.5 micrograms per cubic meter (µg/m³), which is below the current ESL value of 10 µg/m³. The maximum annual ground level concentration of respirable quartz silica was found to be 0.3 µg/m³, which, again, is below the current ESL value of 1 µg/m³. Thus, there should be no health-based effects of the rock or concrete crushing facility defined by this standard permit.

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 proposed 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 by Hill Country Environmental, Inc. (HCE); CSA Materials, Inc. (CSA); Fred M. Bosse representing Southern Crushed Concrete, LLC (SCC); Associated General Contractors (AGC); Harris County Public Health & Environmental Resources (HCPHES); Westward Environmental, Inc. (WE); City of Houston Department of Health and Human Services, Bureau of Air Quality Control (BAQC); Jobe Materials, L.P. (Jobe); 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 and Jobe.

VIII. ANALYSIS OF COMMENTS

HCE commented that the definition of associated sources in condition (1)(A)(ii) includes activities that are not facilities as defined by the Texas Clean Air Act (TCAA) and 30 TAC Chapter 116 and are thus, not required to be authorized.

Associated sources, while not requiring authorization, may be regulated by permit conditions when co-located with an authorized facility in order to ensure that cumulative emissions from the

associated sources and the facility do not result in adverse off-property impacts.

HCE requested the term dwelling be defined to include the conditions listed in the technical summary document that will be used to determine whether a structure is a dwelling.

The list of factors that may be used in determining whether a structure is a residence included in the technical summary document is meant to illustrate the types of considerations the executive director might use in making such a determination. The ultimate determination of whether a structure constitutes a dwelling will be made on a case-by-case basis considering above noted factors and the information specific to the particular structure and circumstances.

HCE commented that conditions (1)(E) and (1)(F) of the standard permit were too restrictive and requested that staff include language that would allow an owner or operator to continue to produce aggregate during a contested case hearing and retain the option to continue authorization under the standard permit if an NSR permit application was denied or strongly opposed. Jobe also commented that condition (1)(E) was excessively restrictive.

As noted in the Permit Condition Analysis and Justification section of this document, conditions (1)(E) and (1)(F) were established to prevent the use of this standard permit as an immediate precursor to a larger crushing operation and to prevent an applicant that has contested case hearing requests for a permit under THSC, §382.0518, from withdrawing that application and immediately using this standard permit.

HCE commented that there is a typo in condition (3)(E).

The commission appreciates the comment and has corrected the error.

HCE requested the inclusion of additional language authorizing the removal of overburden.

With regard to the removal of overburden, unless the overburden material is processed by equipment meeting the definition of a facility, this activity does not require authorization. Additional and separate authorization is required if the owner or operator intends to process overburden material with a facility.

CSA commented that the combination of hours of operation and throughput limitations resulted in operating inefficiencies and suggested that higher production rates, more crushers, and more screens should be allowed.

The commission disagrees with this comment. This standard permit is being proposed to replace the current PBR for rock crushers and the intent is to provide authorization for a similar type and size operation. This standard permit is not meant to provide authorization for all unit configurations or operating scenarios for rock crushers. For facilities that cannot meet the conditions of this standard permit, applicants may seek authorization by a case-by-case NSR permit.

SCC commented that modeling does not support the stockpile height limitation in condition (3)(O) and that this restriction should be removed.

The commission does not agree with this comment. A 45-foot stockpile height was the design criteria that was evaluated in the protectiveness review and the review indicated that there would be no adverse off-property impacts. The conditions in PBRs and standard permits are often more restrictive than those in a case-by-case NSR permit. This standard permit is not meant to provide

authorization for all unit configurations or operating scenarios for rock crushers. Facilities that cannot meet the conditions of this standard permit may be authorized by a case-by-case NSR permit.

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 can result in nuisance conditions beyond the 440-yard setback requirement and BAQC requested that the setback be increased to 1,500 feet.

The commission disagrees with this comment. If a facility complies with all conditions of this standard permit, then the 440-yard setback required by condition (1)(B) is adequate to prevent nuisance and is the distance specified by the Texas Health and Safety Code, §382.065. 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 and HCPHES requested that watering and road cleaning logs be included in the recordkeeping required by the permit. HCPHES also requested the inclusion of stockpile dust suppression activities and abatement systems maintenance in the recordkeeping requirements.

The commission agrees with the request to keep records of watering, road cleaning logs, and dust suppression activities at stockpiles. This standard permit gives considerable latitude to owners and operators regarding the frequency of these tasks due to the influence of weather conditions on the potential for emissions. It is reasonable to expect the owner or operator to supply evidence that these tasks are being performed with adequate frequency, particularly in the case of a nuisance complaint investigation.

The commission does not agree with the request to include records of abatement system maintenance because the required abatement equipment, spraybars, requires little if any maintenance. Additionally, 30 TAC §116.615, General Conditions, requires that abatement equipment be in good condition and working properly at all times during normal facility operations.

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.

The TCEQ's jurisdiction is established by the Legislature and is limited to the issues set forth in statute. Accordingly, the TCEQ does not have statutory authority over the emissions from mobile sources. However, 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 (1)(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.

Jobe commented that the introductory paragraph states that the permit authorizes crushing operations and should be changed to crushing facilities in order to be consistent with the requirements of the TCAA and Chapter 116.

The commission agrees with the comment and has changed the language in the opening paragraph.

Jobe commented that it appeared that the standard permit could be used to authorize multiple crushers on a single site as long as the distance requirements in (1)(B), (3)(B), (3)(C), and (3)(D) were all met.

The commission agrees with this comment with some exceptions. Multiple crushers on a single site may be authorized by the standard permit as long as all of the conditions of the standard permit are met, including condition (3)(G), which requires that all crushers on the site (not including secondary crushers used as part of a single crushing operation) not exceed an aggregate of 2,640 hours. No changes were made to the standard permit.

Jobe, TACA, and WE commented that the 200 tph limit was too low and should be increased to between 270 tph and 350 tph, possibly using a tiered system similar to that used in the Air Quality Standard Permit for Hot Mix Asphalt Plants. AGC suggested a tiered approach with a maximum throughput of 1,000 tph. Additionally, AGC and Jobe provided information demonstrating the increased economic efficiency of higher throughput rates.

No changes were made to the standard permit. This standard permit is intended to replace the current PBR for rock crushers and the intent is to provide authorization for a similar type and size operation. This standard permit is not meant to provide authorization for all unit configurations or operating scenarios for rock crushers. Facilities that cannot meet the conditions of this standard permit may be authorized by a case-by-case NSR permit.

AGC suggested that condition (3)(F) include a tertiary crusher in addition to the primary and secondary crushers this standard permit authorizes.

This standard permit is intended to replace the current PBR for rock crushers and the intent is to provide authorization for a similar type and size operation. This standard permit is not meant to provide authorization for all unit configurations or operating scenarios for rock crushers. Facilities that cannot meet the conditions of this standard permit may be authorized by a case-by-case NSR permit.

Jobe requested clarification on the requirements in condition (1)(F). Specifically, Jobe asked, for a site that has a facility authorized by a case-by-case NSR permit, assuming all conditions of the standard permit were met, if the standard permit could be used to authorize an additional crusher on that site.

No change was made to the standard permit. If a facility, currently authorized under a case-by-case NSR permit, exists at the site prior to the application for this standard permit, an additional crusher may be allowed under this standard permit if all conditions of the standard permit can be met, i.e. distance limitations.

TACA and WE requested that the standard permit allow an exemption from the setback requirement of 550 feet from any other rock crusher, CBP, or HMAP in condition (3)(D) for any facility demonstrating, through air dispersion modeling, that there would be no adverse off-property impacts.

This standard permit is not subject to the level of review necessary to make a determination of protectiveness based on modeling of individual facilities. Facilities that cannot meet the conditions of this standard permit may be authorized by a case-by-case NSR permit.

HCPHES also requested that the TCEQ take speciated $PM_{2.5}$ studies conducted by the TCEQ at the Clinton monitor in Harris County and other studies of this kind into account for this standard permit. Additionally, HCPHES commented that the modeling report also states that, since there is no guidance from EPA concerning how to globally address $PM_{2.5}$ from on-site engines, off-site on-road engines, off-site off-road engines, and other $PM_{2.5}$ sources, the commission has directed staff to not include potential $PM_{2.5}$ emissions from the engines for this analysis. HCPHES disagrees with this assessment and believes that the TCEQ can develop its methodology to address these emissions from $PM_{2.5}$. HCPHES stated that without including all potential emissions in the modeling, the protectiveness review is flawed and whether the standard permit is protective of the applicable PM_{10} and $PM_{2.5}$ NAAQS is questionable.

The EPA has not completed the implementation of the $PM_{2.5}$ NAAQS for the NSR program. The EPA has provided interim guidance in a memorandum that the PM_{10} NAAQS will be the surrogate for demonstrating compliance with the $PM_{2.5}$ NAAQS, EPA memorandum from John S. Seitz, Director of the Office of Air Quality Planning & Standards, dated October 23, 1997.

The commission reaffirmed on November 15, 2006, in the case of KBDJ L.P. for Permit No. 55480, the TCEQ would continue to use PM_{10} as a surrogate for $PM_{2.5}$ until EPA fully implements the new $PM_{2.5}$ NAAQS for the NSR program.

HCPHES also commented that the modeling report states that a low-level fugitive scaling factor of 0.6 was applied to the modeled emission rates for the area sources and the rationale is that it is consistent with TCEQ guidance for these types of sources. HCPHES asked for a reasoned technical and scientific basis for using a multiplier factor of 0.6 for fugitive emissions, which in essence reduces emissions by 40% in the emission rate calculations.

In a March 6, 2002, memorandum available at www.tceq.state.tx.us/assets/public/permitting/air/memos/modadjfact.pdf, the TCEQ documented and provided supporting references that explain the motivation, development, and rationale related to the adjustment of predicted concentrations from low-level sources with little vertical momentum or buoyancy flux. The procedure on how to apply the adjustment factor, background documentation, explanation of the technical justifications used, derivation of the adjustment factor, and a listing of supporting documentation are included in the ten-page March 6, 2002, memorandum.

HCPHES noted that the TCEQ's compliance history does not include violations documented by a local government that is not under contract with the TCEQ as a local program and requested that TCEQ include HCPHES violation notices as part of the compliance history when determining the issuance of this standard permit.

The input for determining the compliance history follows a complex formula that includes data determined by agency policy and rules. More specifically, TCEQ rules at 30 TAC § 60.1(6) limit compliance histories to the components specified in this chapter. The components include, among other things, any final enforcement orders, court judgments, consent decrees, and criminal convictions of this state and the federal government relating to compliance with applicable legal requirements under the jurisdiction of the commission or the EPA and to the extent readily available to the executive director, final enforcement orders, court judgments, and criminal convictions relating to violations of environmental laws of other states. The components do not include violations documented by a local government that is not under contract with the TCEQ as a local program. Therefore, this information will not be considered in the review process for this standard permit.

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.

The TCEQ's jurisdiction is established by the Legislature and is limited to the issues set forth in statute. Accordingly, the TCEQ does not have jurisdiction to consider facility location choices made by an applicant when determining whether to approve or deny a permit application, unless state law imposes specific distance limitations that are enforceable by the TCEQ. Zoning, land use, and population density are therefore beyond the authority of the TCEQ for consideration when reviewing air quality standard permit registrations. The applicant must meet all distance requirements for protectiveness and state law (statutory distance limits) regardless of type and nature of receptors. In addition, the air quality standard permit does not negate or affect the responsibility of the applicant to comply with any additional local requirements.

The form and concept of the standard permit results in a standardized set of requirements and conditions for use such that a case-by-case site evaluation is unnecessary provided that the applicant qualifies under the terms of the permit. The standard permit requires that a copy of the registration application form be provided to the regional office and local program with jurisdiction. Thus, a local program will be provided notice of the pending standard permit use, and can make any reviews deemed necessary. However, as the standard permit contains all the necessary site conditions for approval, any further written site approvals are unnecessary.

HCPHES requested that the TCEQ require permanent rock and concrete crushers be subject to the contested case hearing requirements of 30 TAC Chapter 39, Subchapter H.

Under TCEQ rules regarding public notice and applicability of contested case hearings, there is no opportunity for a contested case hearing for standard permits issued under Chapter 116. Specifically, the public notice applicability and general provisions found at 30 TAC §39.403(c)(5) states "Notwithstanding subsection (b) of this section, Subchapters H - M of this chapter (referring to applicability, public notice requirements and contested case hearings for different types of applications) do not apply to the following actions and other applications where notice or opportunity for contested case hearings are otherwise not required by law: (5) applications under Chapter 116, Subchapter F of this title (relating to Standard Permits) " In addition, TCEQ rules at 30 TAC §55.101(g)(9) state: " Subchapters D - G of this chapter (referring to public comment, requests for reconsideration and requests for contested case hearings) do not apply to air quality standard permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification)." Therefore, facilities to be authorized under this standard permit will not be subject to contested case hearing requirements.

HCPHES requested that the TCEQ require a consistent distance limitation of 440 yards throughout the entire standard permit rather than 440 yards for concrete crushing and 1,000 feet for rock crushing. It is the position of the HCPHES that the consistent distance limitation of 440 yards for all crushing activities (rock and concrete) will provide for more straightforward compliance and improve environmental public health.

The commission agrees with this comment. The set back required by condition (3)(C) has been changed from 1,000 feet to 440 yards.

HCPHES suggested the inclusion of concrete crushers in the list of facilities subject to the 550-foot distance requirement in condition (3)(D).

The commission agrees with this comment and is including the term concrete crusher in condition (3)(D).

HCPHES commented that, since the proposed standard permit contains requirements to meet EPA TMs 9 and 22 as contained in 40 CFR Part 60 and both test methods require adequate illumination to perform the tests correctly, the restriction on operating hour requirement in condition (3)(H) should be changed to one hour before official sunset to one hour after official sunrise.

Although EPA TMs 9 and 22 are appropriate tools for evaluating PM emissions and making a determination of compliance, it is unreasonable to expect all facilities that may emit PM or be subject to a PM standard to operate only during those periods when TMs 9 and 22 may be made. It is reasonable to expect that facilities complying with the conditions of the standard permit during periods when TMs 9 and 22 observations are appropriate to continue to do so during those short periods when there is not sufficient illumination to perform an observation.

HCPHES requested that the TCEQ require that all in-plant roads and operating areas be paved with a cohesive, hard surface that is capable of being vacuumed.

Observations and technical evaluation of available documentation show that, if properly maintained, the best management practices (BMPs) proposed in this standard permit adequately control dust from traffic areas. These BMPs include covering, watering, application of dust-suppressant chemicals, or paving and cleaning. Requiring all facilities to pave would be an unnecessary financial burden on crusher owners.

TACA commented that it appreciates the TCEQ's recognition of the problems created by the ability of unscrupulous operators to stack permits in an effort to continue operating at a fixed site. The operational requirements as stated in condition (3)(G) of the proposed standard permit perceivably close the loophole and prohibit operators from applying for additional standard permits to operate another rock crusher on the site once the 2,640 operational hours have been exhausted.

The commission appreciates the support from TACA on this issue.

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.

HCPHES requested that condition (3)(I) (requirement for a runtime meter) also require that the runtime meter be operating during crushing operations.

The commission agrees with this comment and is including a requirement that the runtime meter be operating in condition (3)(I).

HCPHES requested that staff provide calculated emissions rates for each source and the methodologies used in calculating emission rates along with technical bases for assumptions. Additionally, HCPHES would like specific information on the methodology, assumptions, and calculations used for road emissions.

Methodologies used in calculating the emission rates are based on the information supplied by the EPA in its Compilation of Air Pollutant Emissions Factors (AP-42), Chapter 11.19.2, Crushed Stone Processing and Pulverized Mineral Processing, which was last updated in August 2004. The methodology and assumptions used for the evaluation were the same as is currently used for all NSR permits and were documented in the Rock Crushing Plants guidance document and as a spreadsheet on the TCEQ Web site.

An initial assessment of road emissions was completed using EPA AP-42, Chapter 13.2.2, Unpaved Roads, which was updated in October 2001. To evaluate emissions, a number of variables need to be defined, including average weight of vehicles on the roads, distance traveled on the roads, average vehicle capacity, etc. For a standard permit that could be used in various locations and situations, it was difficult to determine what value to place on each of the variables available that would satisfy the majority of interested parties. Thus, for this standard permit, the decision was made to control the road emissions in the same manner as all NSR permits that require BMPs. As in all NSR permits, additional stipulations were included to ensure that visible emissions from all in-plant roads did not leave the property for a period exceeding 30 seconds in duration in any six-minute period as determined using EPA TM 22.

Calculated emission rates for each source are given in the table below.

EMISSION SOURCES AND EMISSION RATES

Permanent Rock and Concrete Crushing Standard Permit

AIR CONTAMINANTS DATA

Emission Point No.	Source Name	Air Contaminant Name	Emission Rates	
			lb/hr	TPY
2	Primary Crusher	PM	0.24	0.32
		PM ₁₀	0.11	0.14
4	Secondary Crusher	PM	0.24	0.32
		PM ₁₀	0.11	0.14
3	Screen No. 1	PM	0.44	0.58
		PM ₁₀	0.15	0.20
5	Screen No. 2	PM	0.44	0.58

AIR CONTAMINANTS DATA

Emission Point No.	Source Name	Air Contaminant Name	Emission Rates	
			lb/hr	TPY
		PM ₁₀	0.15	0.20
1, 10	Loading/Unloading Operations	PM	0.03	0.04
		PM ₁₀	0.01	0.02
MHFUG	Material Handling	PM	0.07	0.10
		PM ₁₀	0.02	0.03
SPFUG	Stockpiles	PM	---	0.52
		PM ₁₀	---	0.26
GEN 1	250hp Engine/Generator 1	NO _x	7.75	10.23
		CO	1.67	2.20
		SO ₂	0.51	0.68
		PM ₁₀	0.55	0.73
		VOC	0.63	0.83
GEN 2	250hp Engine/Generator 2	NO _x	7.75	10.23
		CO	1.67	2.20
		SO ₂	0.51	0.68
		PM ₁₀	0.55	0.73
		VOC	0.63	0.83
GEN 3	500hp Engine/Generator	NO _x	15.50	20.46
		CO	3.34	4.41
		SO ₂	1.03	1.35
		PM ₁₀	1.10	1.45
		VOC	1.26	1.66

IX. STATUTORY AUTHORITY

This standard permit is 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.

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

This air quality standard permit authorizes rock and concrete crushing facilities that meet all of the conditions listed in sections (1), (2), and (3) of this standard permit. 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 one or more contiguous or adjacent properties which are under common control of the same person (or persons under common control).
- (ii) Associated sources are sources of air emissions that are related to the rock or concrete crushing operation, that are not "facilities" as defined under Title 30 Texas Administrative Code (30 TAC) § 116.10, General Definitions. Associated sources include, but are not limited to, stockpiles and outdoor work areas. Screens, belt conveyors, generator sets, 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) of this section, 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 an application 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 an application 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) 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 (THSC) § 382.0518, Preconstruction Permit, located at the same site for a period of 12 months from the date of authorization.
- (F) An applicant for authorization of a rock crusher under THSC § 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. Facilities already authorized by a permit under § 382.0518 are not eligible for this standard permit.
- (G) Applications for this standard permit shall be registered in accordance with 30 TAC § 116.611, Registration to Use a Standard Permit (including a current Form PI-1S, Crushing Plant Standard Permit Checklist and Table 17). A compliance history review shall be performed by the executive director in accordance with 30 TAC Chapter 60, Compliance History. If a facility is determined to be a poor performer, as defined in 30 TAC Chapter 60, a standard permit registration shall not be issued.
- (H) No owner or operator of a crushing facility shall begin construction and/or operation without obtaining written approval from the executive director (except for crushers in non operational storage for which construction has not commenced as considered under the Texas Clean Air Act). Start of construction of any facility registered under this standard permit shall be no later than 18 months from the date of authorization. Construction progress and startup notification shall be made in accordance with 30 TAC § 116.115(b)(2), General and Special Conditions.
- (I) Applications for registration under this standard permit shall comply with 30 TAC § 116.614, Standard Permit Fees.
- (J) All affected facilities authorized by this standard permit must meet all applicable conditions of Title 40 Code of Federal Regulations (40 CFR) Part 60, Subpart A, General Provisions, and OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.
- (K) Only crushing facilities 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.
- (L) This standard permit does not supersede the requirements of any other commission rule, including 30 TAC Chapter 101, Subchapter H, Division 3, Mass Emissions Cap and Trade Program; and 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds.

- (M) Written records shall be kept for a rolling 24-month period and shall always remain on site. These records shall be made available at the request of any personnel from the TCEQ or any air pollution control program having jurisdiction. These written records shall contain the following:
 - (i) daily hours of operation;
 - (ii) the throughput per hour;
 - (iii) road and work area cleaning and dust suppression logs; and
 - (iv) stockpile dust suppression logs.
 - (N) 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.
 - (O) 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.
 - (P) 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.
 - (Q) Owners or operators of facilities authorized by this standard permit are not eligible for any authorization in 30 TAC Chapter 106, Subchapter E, Aggregate and Pavement or 30 TAC § 106.512, Stationary Engines and Turbines, for a facility located at the same site as a rock crusher authorized by this standard permit.
 - (R) Upon issuance of this standard permit, the TCEQ will no longer accept a registration for § 106.142, Rock Crushers.
- (2) Public Notice Requirements:
- (A) An application for authorization to construct and operate a rock crusher under this standard permit is not subject to the public notice requirements in 30 TAC Chapter 39 Subchapter H, Applicability and General Provisions, and Subchapter K, Public Notice of Air Quality Applications.
 - (B) For authorization to use this standard permit, an applicant must publish notice under this section not later than the earlier of:
 - (i) the 30th day after the date the applicant receives written notice from the executive director that the application is technically complete; or
 - (ii) the 75th day after the date the executive director receives the application.
 - (C) The applicant must publish notice at least once in a newspaper of general circulation in the municipality in which the plant is proposed to be located or in the municipality nearest to the proposed location of the crusher. If the elementary or middle school nearest to the proposed plant provides a bilingual education program as required by Subchapter B, Chapter 29, Texas Education Code, the applicant must also publish the notice at least once in an additional

publication of general circulation in the municipality or county in which the plant is proposed to be located that is published in the language taught in the bilingual education program. This requirement is waived if such a publication does not exist or if the publisher refuses to publish the notice.

- (D) The notice must include:
- (i) a brief description of the proposed location and nature of the proposed crusher;
 - (ii) a description, including a telephone number, of the manner in which the executive director may be contacted for further information;
 - (iii) a description, including a telephone number, of the manner in which the applicant may be contacted for further information;
 - (iv) the location and hours of operation of the commission's regional office at which a copy of the application is available for review and copying; and
 - (v) a brief description of the public comment process, including the mailing address and deadline for filing written comments.
- (E) At the applicant's expense, a sign or signs shall be placed at the site of the proposed facility declaring the filing of an application for a permit and stating the manner in which the commission may be contacted for further information. Such signs shall be provided by the applicant and shall meet the following requirements:
- (i) signs shall consist of dark lettering on a white background and shall be no smaller than 18 inches by 28 inches;
 - (ii) signs shall be headed by the words "PROPOSED AIR QUALITY PERMIT" in no less than two-inch boldface block-printed capital lettering;
 - (iii) signs shall include the words "APPLICATION NO." and the number of the permit application in no less than one-inch boldface block-printed capital lettering (more than one number may be included on the signs if the respective public comment periods coincide);
 - (iv) signs shall include the words "for further information contact" in no less than 1/2-inch lettering;
 - (v) signs shall include the words "Texas Commission on Environmental Quality," and the address of the appropriate commission regional office in no less than one-inch boldface capital lettering and 3/4-inch boldface lower case lettering; and
 - (vi) signs shall include the phone number of the appropriate commission office in no less than two-inch boldface numbers.
- (F) The sign or signs must be in place by the date of publication of the newspaper notice required by subsection (2)(C) of this section and must remain in place and legible throughout the period of public comment provided for in subsection (2)(I) of this section.
- (G) Each sign placed at the site must be located within ten feet (ft.) of each (every) property line paralleling a street or other public thoroughfare. Signs must be completely visible from the

street and spaced at not more than 1,500-ft. intervals. A minimum of one sign, but no more than three signs shall be required along any property line paralleling a public thoroughfare. The commission may approve variations from these requirements if it is determined that alternative sign posting plans proposed by the applicant are more effective in providing notice to the public.

- (H) The alternate language sign posting requirements of this subsection are applicable whenever either the elementary school or the middle school located nearest to the facility or proposed facility provides a bilingual education program as required by Texas Education Code, Chapter 29, Subchapter B, and 19 TAC § 89.1205(a) or if either school has waived out of such a required bilingual education program under the provisions of 19 TAC § 89.1205(g). Schools not governed by the provisions of 19 TAC § 89.1205(a) shall not be considered in determining applicability of the requirements of this subsection. Each affected facility shall meet the following requirements.
 - (i) The applicant shall post an additional sign in each alternate language in which the bilingual education program is taught. If the nearest elementary or middle school has waived out of the requirements of 19 TAC § 89.1205(a) under 19 TAC § 89.1205(g), the alternate language signs shall be published in the alternate languages in which the bilingual education program would have been taught had the school not waived out of the bilingual education program.
 - (ii) The alternate language signs shall be posted adjacent to each English language sign required in this section.
 - (iii) The alternate language sign posting requirements of this subsection shall be satisfied without regard to whether alternate language notice is required under subsection (C) of this section.
 - (iv) The alternate language signs shall meet all other requirements of this section.
- (I) The public comment period begins on the first date notice is published under subsection (2)(B) and extends no less than 30 days from the publication date.
- (J) Not later than the 30th day after the end of the public comment period, the executive director will approve or deny the application for authorization to use the standard permit. The executive director must base the decision on whether the application meets the requirements of this standard permit. The executive director must consider all comments received during the public comment period in determining whether to approve the application. If the executive director denies the application, the executive director must state the reasons for the denial and any modifications to the application necessary for the proposed plant to qualify for the authorization.
- (K) The executive director will issue a written response to any public comments received related to the issuance of an authorization to use the standard permit at the same time as or as soon as practicable after the executive director grants or denies the application. Issuance of the response after the granting or denial of the application does not affect the validity of the executive director's decision to grant or deny the application. The executive director will:
 - (i) mail the response to each person who filed a comment; and
 - (ii) make the response available to the public.

(3) Operational Requirements:

- (A) The primary crusher throughput shall not exceed 200 tons per hour.
- (B) The crusher and all associated facilities, including engines and/or generator sets, but not including associated sources, shall be located no less than 200 ft. from the nearest property line, as measured from the point on the facility nearest the property line.
- (C) The crusher and all associated facilities, including engines and/or generator sets, but not including associated sources, shall be located no less than 440 yards from any building which was in use as a single or multi-family residence, school, or place of worship, at the time an application was filed, as measured from the point on the facility nearest the residence, school, or place of worship to the point on the residence, school, or place of worship nearest the facility.
- (D) The crushing facilities (not including associated sources) operating under this standard permit shall be located at least 550 ft. from any other rock crusher, concrete crusher, concrete batch plant, or hot mix asphalt plant. If this distance cannot be met, then the crusher shall not operate at the same time as the other rock crusher, concrete crusher, concrete batch plant, or hot mix asphalt plant. Measurement shall be from the closest point on the rock crushing facility to the closest point on any other facility.
- (E) All associated sources, including but not limited to, roads (except for incidental traffic and the entrance and exit to the site), work areas, and stockpiles, shall be located at least 100 ft. from the property line.
- (F) The facilities (as defined in 30 TAC § 116.10(4)) authorized under this standard permit shall be limited to one primary crusher, one secondary crusher, one vibrating grizzly, two screens, any conveyors, and one internal combustion engine (or combination of engines) of no more than 1,000 total horsepower. Equipment that is not a source of emissions does not require authorization.
- (G) All crushers, associated facilities, and associated sources (excluding stockpiles) shall not operate for more than an aggregate of 2,640 hours at the authorized site in any rolling 12 month period. Once the operating hours (2,640 hours) for the site have been exhausted, the owner or operator shall not use a standard permit to operate another rock crusher on the site.
- (H) The rock crusher and associated facilities shall not operate from one hour after official sunset to one hour before official sunrise.
- (I) Each crusher shall be equipped with a runtime meter, which will be operating during crushing during crushing operations.
- (J) 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 TCEQ rules and regulations.
- (K) 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 U.S. Environmental Protection Agency (EPA) Test Method (TM) 9.

- (L) Visible emissions from the crusher, associated facilities, associated sources, and in-plant roads associated with the plant shall not leave the property for a period exceeding 30 seconds in duration in any six-minute period as determined using EPA TM 22.
- (M) Dust emissions from all in-plant roads and active work areas that are associated with the operation of the crusher, associated facilities, and associated sources 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.
- (N) All stockpiles shall be sprinkled with water, dust-suppressant chemicals, or covered, as necessary, to minimize dust emissions.
- (O) Raw material and product stockpile heights shall not exceed 45 ft.
- (P) The crusher shall be equipped with a weigh hopper or scale belt to accurately determine the mass of material being crushed.
- (Q) The crusher may relocate on the site for which it has been authorized without reauthorization as long as it remains at least 440 yards from any residence, school, or place of worship that was in existence at the time of the move.