

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Jon Niermann, *Commissioner*  
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
*Protecting Texas by Reducing and Preventing Pollution*

March 7, 2017

TO: Persons on the attached mailing list.

RE: Saint-Gobain Ceramics & Plastics, Inc.  
Permit No. 20006

**Decision of the Executive Director.**

The executive director has made a decision that the above-referenced permit application meets the requirements of applicable law. **This decision does not authorize construction or operation of any proposed facilities.** This decision will be considered by the commissioners at a regularly scheduled public meeting before any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.

Enclosed with this letter is a copy of the Executive Director's Response to Comments. A copy of the complete application, draft permit and related documents, including public comments, are available for review at the TCEQ Central Office. A copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the TCEQ central office, the TCEQ Waco regional office, and at the Clara B. Mounce Public Library, 201 East 26th Street, Bryan, Brazos County, Texas, beginning the first day of publication of this notice. The facility's compliance file, if any exists, is available for public review at the TCEQ Waco Regional Office, 6801 Sanger Avenue Suite 2500, Waco, Texas.

If you disagree with the executive director's decision, and you believe you are an "affected person" as defined below, you may request a contested case hearing. In addition, anyone may request reconsideration of the executive director's decision. The procedures for the commission's evaluation of hearing requests/requests for reconsideration are located in 30 Texas Administrative Code Chapter 55, Subchapter F. A brief description of the procedures for these two types of requests follows.

**How to Request a Contested Case Hearing.**

It is important that your request include all the information that supports your right to a contested case hearing. You must demonstrate that you meet the applicable legal requirements to have your hearing request granted. The commission's consideration of your request will be based on the information you provide.

The request must include the following:

- (1) Your name, address, daytime telephone number, and, if possible, a fax number.
- (2) If the request is made by a group or association, the request must identify:
  - (A) one person by name, address, daytime telephone number, and, if possible, the fax number, of the person who will be responsible for receiving all communications and documents for the group;
  - (B) the comments on the application submitted by the group that are the basis of the hearing request; and
  - (C) by name and physical address one or more members of the group that would otherwise have standing to request a hearing in their own right. The interests the group seeks to protect must relate to the organization's purpose. Neither the claim asserted nor the relief requested must require the participation of the individual members in the case.
- (3) The name of the applicant, the permit number and other numbers listed above so that your request may be processed properly.
- (4) A statement clearly expressing that you are requesting a contested case hearing. For example, the following statement would be sufficient: "I request a contested case hearing."

Your request must demonstrate that you are an **"affected person."** An affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. Your request must describe how and why you would be adversely affected by the proposed facility or activity in a manner not common to the general public. For example, to the extent your request is based on these concerns, you should describe the likely impact on your health, safety, or uses of your property which may be adversely affected by the proposed facility or activities. To demonstrate that you have a personal justiciable interest, you must state, as specifically as you are able, your location and the distance between your location and the proposed facility or activities. A person who may be affected by emissions of air contaminants from the facility is entitled to request a contested case hearing.

Your request must raise disputed issues of fact that are relevant and material to the commission's decision on this application that were raised **by you** during the public comment period. The request cannot be based solely on issues raised in comments that you have withdrawn.

To facilitate the commission's determination of the number and scope of issues to be referred to hearing, you should: 1) specify any of the executive director's responses to **your** comments that you dispute; 2) the factual basis of the dispute; and 3) list any disputed issues of law.

## **How to Request Reconsideration of the Executive Director's Decision.**

Unlike a request for a contested case hearing, anyone may request reconsideration of the executive director's decision. A request for reconsideration should contain your name, address, daytime phone number, and, if possible, your fax number. The request must state that you are requesting reconsideration of the executive director's decision, and must explain why you believe the decision should be reconsidered.

## **Deadline for Submitting Requests.**

A request for a contested case hearing or reconsideration of the executive director's decision must be **received** by the Chief Clerk's office no later than **30 calendar days** after the date of this letter. You may submit your request electronically at <http://www.tceq.texas.gov/goto/comments> or by mail to the following address:

Bridget C. Bohac, Chief Clerk  
TCEQ, MC-105  
P.O. Box 13087  
Austin, Texas 78711-3087

## **Processing of Requests.**

Timely requests for a contested case hearing or for reconsideration of the executive director's decision will be referred to the TCEQ's Alternative Dispute Resolution Program and set on the agenda of one of the commission's regularly scheduled meetings. Additional instructions explaining these procedures will be sent to the attached mailing list when this meeting has been scheduled.

## **How to Obtain Additional Information.**

If you have any questions or need additional information about the procedures described in this letter, please call the Public Participation and Education Program, toll free, at 1-800-687-4040.

Sincerely,



Bridget C. Bohac  
Chief Clerk

BCB/lg

Enclosure

MAILING LIST  
for  
Saint-Gobain Ceramics & Plastics, Inc.  
Permit No. 20006

FOR THE APPLICANT:

David Yandell, Plant Manager  
Saint-Gobain Ceramics & Plastics, Inc.  
1500 Independence Avenue  
Bryan, Texas 77803

Phil Goodwin, EHS Manager  
Saint-Gobain Ceramics & Plastics, Inc.  
1500 Independence Avenue  
Bryan, Texas 77803

INTERESTED PERSONS:

See attached list.

FOR THE EXECUTIVE DIRECTOR  
via electronic mail:

Brian Christian, Director  
Texas Commission on Environmental  
Quality  
Environmental Assistance Division  
Public Education Program MC-108  
P.O. Box 13087  
Austin, Texas 78711-3087

Nicholas Parke, Staff Attorney  
Texas Commission on Environmental  
Quality  
Environmental Law Division MC-173  
P.O. Box 13087  
Austin, Texas 78711-3087

Marc Sturdivant, Technical Staff  
Texas Commission on Environmental  
Quality  
Air Permits Division MC-163  
P.O. Box 13087  
Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL  
via electronic mail:

Vic McWherter, Attorney  
Texas Commission on Environmental  
Quality  
Public Interest Counsel MC-103  
P.O. Box 13087  
Austin, Texas 78711-3087

FOR THE CHIEF CLERK  
via electronic mail:

Bridget C. Bohac, Chief Clerk  
Texas Commission on Environmental  
Quality  
Office of Chief Clerk MC-105  
P.O. Box 13087  
Austin, Texas 78711-3087

TCEQ AIR QUALITY PERMIT NUMBER 20006

2017 MAR -2 PM 2:05

APPLICATION BY SAINT-GOBAIN	§	BEFORE THE	CHIEF CLERKS OFFICE
CERAMICS & PLASTICS, INC.	§		
CERAMIC CATALYST	§	TEXAS COMMISSION ON	
MANUFACTURING PLANT	§		
BRYAN, BRAZOS COUNTY	§	ENVIRONMENTAL QUALITY	

**EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT**

The Executive Director of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the New Source Review (NSR) Authorization application and Executive Director's preliminary decision.

As required by Title 30 Texas Administrative Code (TAC) § 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk received timely comment letters from the following persons: Jennifer Adams, John Adams, Tawnya Anderson, Amy A. Banks, Cassidy Barton, Candice Bellis, Jason P. Bienski, Brian Blake, Katherine Bonugli, Calleleh Bonugli, Sarah D. Brooks, Stephen Mark Caffey, Thomas Michael Cavaness, Heather Crenwelge, Will Davis, Frances DeGelia, Bret Elder, John R. Ellison, David Flash, Kim Gallego, Mary M. Gartner, James Gary, Don Gilman, Sally Godfrey, Rene Graham, John Grant, Marilyn Gullede, Donald R. Hall, Theodore Hamilton, Cathy E. Hansen, Helen Hensley, Rodney C. Hill, Ronnie Holz, Felice L. House, Rob Hutchison, Maurice Jacob, Wendy Jepson, Rachel Konderla, Kathy Langlotz, Chris Lawrence, Rosa Ledezma, Tai Lee, Monica Love, Mary Marsden, Dan McAdams, Mike McFarland, Christine McGee, Joey McGee, Jennifer McGrath, John N. Miller, Nick Ortega, Melinda Pollard, Mark Austin Purcell, Dwight Rabe, Nora Rabe, Justin Radcliffe, Jennifer Rich, Mark Rodgers, Geoffrey Roest, Robert Rose, Gunnar Schade, Ron Schmidt, Anja Schwalen, Katherine Shafer, Bobby Slovak, Denise Snyder, Justin Jesse Stancil, David Stasny, Mary Stasny, Hugh Stearns, Patrick Stoddard, Rosalynn Sylvan, Tim Touchstone, Robert Van Brunt, Paula Verdegaal, Hugh R. Walker, on behalf of the City of Bryan, Katherine Willyard, Laura Wimberley, Olivia Jade Wolford, Richard T. Woodward, Harry Wright, on behalf of the Bryan Independent School District (BISD), Douglas Wunneburger, and Lon K. Young. This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at [www.tceq.texas.gov](http://www.tceq.texas.gov).

**BACKGROUND**

Description of Facility

Saint-Gobain Ceramics & Plastics, Inc. (Saint-Gobain or the Applicant) has applied to the TCEQ for an NSR Authorization under Texas Clean Air Act (TCAA), Texas Health & Safety Cody § 382.0518. This permit will authorize the applicant to construct a new facility and modify an existing facility at the Bryan Ceramics Plant (the plant), which

produces ceramic ware used in the chemical process industry. The plant is located at 1500 Independence Avenue Bryan, Brazos County, Texas. Contaminants authorized under this permit include nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), organic compounds (VOC), particulate matter (PM), including PM with aerodynamic diameters of 10 micrometers or less (PM<sub>10</sub>) and 2.5 micrometers or less (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and hazardous air pollutants (HAPs).

### Procedural Background

Before work begins on the modification of an existing facility that may emit air contaminants, the person planning the modification must obtain a permit amendment from the commission. This permit application is for a permit amendment of Air Quality Permit Number 20006.

The permit application was received on February 17, 2016, and declared administratively complete on February 22, 2016. The Notice of Receipt and Intent to Obtain an Air Quality Permit (first public notice) for this permit application was published in English on February 27, 2016, in *The Eagle* and in Spanish on February 26, 2016, in *La Voz Hispana*. The Notice of Application and Preliminary Decision for an Air Quality Permit (second public notice) was published on May 6, 2016, in English in the *Eagle* and in Spanish on May 6, 2016, in *La Voz Hispana*. A public meeting was held on July 28, 2016, in Bryan, Texas. The public comment period ended on July 28, 2016. Because this application was received after September 1, 2015, it is subject to the procedural requirements of and rules implementing Senate Bill 709 (84th Legislature, 2015).

## COMMENTS AND RESPONSES

### Comments Related to Health Effects

**Comment 1:** Multiple commenters expressed concern about health effects on potentially sensitive populations including children (Katherine Bonugli, Amy A. Banks, Heather Crenwelge, Frances DeGelia, Mary M Gartner, John Grant, Marilyn Gullledge, Donald Hall, Cathy E. Hansen; Rosa Ledezma, Monica Love, Christine McGee, John N. Miller, Anja Schwalen, Douglas Wunneburger, BISD), the elderly (Frances DeGelia, Anja Schwalen), and cyclists/runners (Bret Elder, Theodore Hamilton, Dr. Don Gilman, Monica Love, Robert Van Brunt).

Commenters also expressed concern about effects on their own health (Bret Elder, James Gary, Rob Hutchison, Nora Rabe, Robert Rose, Denise Snyder, and Patrick Stoddard), students at Texas A&M University (Robert Rose), and on those who suffer from health conditions (Thomas Michael Cavaness, Frances DeGelia, Donald Hall, Helen Hensley, Christine McGee, Nora Rabe, Robert Rose, Anja Schwalen).

BISD stated that children at the nine schools within five miles of the plant will be affected by the proposed air emissions in a way not common to the general public

because children are more vulnerable to air pollution due to higher ventilation rates. BISD also commented that the majority of children at the schools come from lower socio-economic backgrounds and may have more limited access to medical care.

Commenters also expressed concern about effects on local wildlife, livestock, and plant life. (Dr. Don Gilman, Monica Love, Sally Godfrey, Nora Rabe, and Justin Jesse Stancil).

Commenters were also concerned about the effect of this project on the local air quality and visibility. (John Adams, Cassidy Barton, Candice Bellis, Katherine Bonugli, Calleele Bonugli, Sarah D. Brooks, Heather Crenwelge, Will Davis, Bret Elder, James Gary, Dr. Don Gilman, Rene Graham, Donald Hall, Theodore Hamilton, Helen Hensley, Felice L. House, Rob Hutchison, Maurice Jacob, Wendy Jepson, Joey McGee, Jennifer McGrath, John N. Miller, Melinda Pollard, Mark Austin Purcell, Katherine Shafer, Denise Snyder, Rosalyn Sylvan, Patrick Stoddard, Dwight Rabe, Mark Rodgers, Katherine Willyard, Olivia Jade Wolford, and Richard T. Woodward).

Dwight Rabe stated that while the Applicant has equipment to care for its employee's health, the health of local citizens are not being adequately protected by the TCEQ.

**Response 1:** The Executive Director reviewed the permit application in accordance with the applicable law, policy, procedures, and the Agency's mission to protect the state's human and natural resources consistent with sustainable economic development. For this type of permit application, potential impacts to human health and welfare or the environment are determined by comparing air dispersion modeling predicted emission concentrations from the plant to appropriate state and federal standards and TCEQ Effects Screening Levels (ESLs)<sup>1</sup>. The specific health-based standards or guidance levels employed in evaluating the potential emissions include the National Ambient Air Quality Standards (NAAQS), TCEQ standards contained in 30 Texas Administrative Code (30 TAC), and TCEQ (ESLs).

NAAQS are established and periodically reviewed by the US Environmental Protection Agency (EPA). The NAAQS, as defined in 40 Code of Federal Regulations (CFR) § 50.2, include both primary and secondary standards. Primary standards are those which the EPA Administrator determines are necessary, within an adequate margin of safety, to protect public health, including sensitive members of the population such as children, the elderly, and those individuals with preexisting health conditions. Secondary NAAQS are those which the Administrator determines are necessary to protect public welfare and the environment, including animals, crops, vegetation, visibility, and

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<sup>1</sup> See the document "Air Quality Modeling Guidelines" for details on air modeling at the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/newsourcereview/nsr\\_mod\\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/newsourcereview/nsr_mod_guidance.html). Also visit the agency air modeling page at [www.tceq.texas.gov/permitting/air/nav/modeling\\_index.html](http://www.tceq.texas.gov/permitting/air/nav/modeling_index.html).

buildings, from any known or anticipated adverse effects associated with the presence of a contaminant in the ambient air.

For this specific permit application, appropriate air dispersion modeling was performed. The likelihood of whether adverse health effects caused by emissions from the plant could occur in members of the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions, was determined by comparing the facility's predicted air dispersion computer modeling concentrations to the relevant state and federal standards and ESLs. The permit reviewer used modeling results to verify that predicted ground level concentrations from the proposed facility are not likely to adversely impact off-property receptors. TCEQ background concentrations from an appropriate area were added to the modeled concentrations because background concentrations in the geographic area surrounding the site were not available. The overall evaluation process provides a conservative prediction that is protective of the public. The modeling predictions were reviewed by the TCEQ Air Permits Division, and the modeling analysis was determined to be acceptable.

The air contaminants evaluated were nitrogen dioxide (NO<sub>2</sub>), CO, PM<sub>10</sub>, PM<sub>2.5</sub>, and SO<sub>2</sub>. There are two levels of modeling sophistication used in the air quality analysis process: screening (de minimis) and refined.

A de minimis analysis of the emissions increases from the project was initially conducted to determine if a refined impact analysis would be required. Concentrations that do not exceed de minimis levels are considered to be so low that they do not require further NAAQS analysis. The predicted concentration for each pollutant and for each averaging period except NO<sub>2</sub> (1-hr) and PM<sub>2.5</sub> (24-hr) was less than their respective de minimis concentrations; therefore, no further analysis was required for those pollutants. The modeled maximum predicted ground level concentrations (GLCmax) for the following criteria pollutants and their averaging times are as follows:

Pollutant	Averaging Time	GLCmax (µg/m <sup>3</sup> )	De Minimis (µg/m <sup>3</sup> )
NO <sub>2</sub>	1-hr	12.5	7.5
	Annual	0.5	1
CO	1-hr	68	2000
	8-hr	40	500
PM <sub>10</sub>	24-hr	3.1	5
PM <sub>2.5</sub>	24-hr	2.3	1.2
	Annual	0.296	0.3
SO <sub>2</sub>	1-hr	6.3	7.8
	3-hr	4.5	25
	24-hr	1.8	5
	Annual	0.3	1



The predicted GLCmax for concentrations for NO<sub>2</sub> (1-hr) and PM<sub>2.5</sub> (24-hr) exceeded their respective de minimis concentrations and required a site-wide refined impact analysis. Background concentrations for NO<sub>2</sub> were obtained from the EPA AIRS monitor 480391016 located in Brazoria County and for PM<sub>2.5</sub> the EPA AIRS monitor 481130069 located in Dallas County were used. The monitors are considered a conservative representation of the background concentration for the plant site due to their greater population density and industry. The full NAAQS modeling results indicate the total predicted concentrations will not result in an exceedance of the NAAQS. The modeled GLCmax for NO<sub>2</sub> and PM<sub>2.5</sub> and their averaging times are as follows:

Pollutant	Averaging Time	GLCmax (µg/m <sup>3</sup> )	Background (µg/m <sup>3</sup> )	Total Conc. = [Background + GLCmax] (µg/m <sup>3</sup> )	Standard (µg/m <sup>3</sup> )
NO <sub>2</sub>	1-hr	97.9	35.8	133.7	188
PM <sub>2.5</sub>	24-hr	12.8	22	34.8	35

In summary, based on the potential concentrations reviewed by the Executive Director's staff, it is not expected that existing health conditions will worsen, or that there will be adverse health effects in the general public, sensitive subgroups, or on the public welfare and the environment as a result of exposure to the expected levels of NO<sub>2</sub>, CO, PM<sub>10</sub>, PM<sub>2.5</sub>, or SO<sub>2</sub>. See Response 2 for additional discussion of the health effects.

**Comment 2:** Denise Snyder asked about emissions of hydrogen fluoride and formic acid, risks to the immediate area, and how neighbors can protect themselves. She further asked whether the emissions of hydrogen fluoride and formic acid are continuously released, and if not, the frequency at which they are released. Gunnar Schade is also concerned that emissions of hydrogen fluoride, hydrogen chloride, and formic acid from the plant could condense into emitted PM and increase its mass and toxicity.

**Response 2:** There are no continuously emitted air pollutants at the plant. Although this project proposes increases of hydrogen fluoride and hydrogen chloride emissions, discussed below in this Response, this project does not include a proposed increase in formic acid emissions. Because there is no increase in formic acid emissions as part of this air quality permit application, the health effects analysis for formic acid is outside the scope of this project. A health effects analysis of formic acid emissions was conducted as part of a previous permitting action. Emissions inventory data shows that emissions of formic acid have not exceeded the permitted allowable emission rates, which were previously determined to be protective of human health and the environment when they were authorized. Therefore, because there have been no exceedances of the allowable emission rates and there is no proposed increase in

formic acid emissions as part of this application, additional health effects analysis for formic acid was not performed as part of this project.

ESLs are constituent-specific guideline concentrations used in TCEQs evaluation of constituent concentrations in air. These guidelines are developed by the Toxicology Division of the TCEQ and are based on a constituent's potential to cause adverse health effects, odor nuisances, or effects on vegetation. These health-based screening levels are set at concentrations lower than those reported to produce adverse health effects and are set to protect the public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions. Adverse health effects are not expected to occur if the predicted air concentration of a constituent is below its ESL. In addition, air contaminant levels below their ESLs would not be expected to result in significant secondary formation of PM<sub>2.5</sub>. To view the ESL list or obtain more information on ESLs, visit the TCEQ website at [http://www.tceq.texas.gov/toxicology/esl/list\\_main.html](http://www.tceq.texas.gov/toxicology/esl/list_main.html).

The following table demonstrates the modeled GLCmax for this project's emissions of hydrogen fluoride and hydrogen chloride. Because each GLCmax is below the corresponding ESL, this project is not expected to cause adverse effects.

Pollutant & CAS#	Averaging Time	GLCmax (µg/m3)	ESL (µg/m3)
Hydrogen fluoride 7664-39-3	1-hr	0.25	18
	1Annual	0.01	8.7
Hydrogen fluoride (agricultural areas) 7664-39-3	1-hr	0.25	3.0
	Annual	0.01	0.6
Hydrogen chloride 7647-01-0	1-hr	0.9	19
	Annual	0.04	0.79

**Comment 3:** Lon K. Young requested a comparison of the emissions from this project to emissions from other sources such as cars or houses.

**Response 3:** There is not a direct correlation between impacts from vehicles or houses and the proposed emissions from the plant because of differences in the way contaminants disperse in the atmosphere. The emissions from the plant are dispersed higher into the atmosphere via stacks, while car emissions occur at ground level and will not disperse as much. The dispersion differences affect the ground level concentrations of the pollutants from the plant versus the cars. The emissions from

household gas appliances are not quantifiable in a way to make a meaningful comparison.

**Comment 4:** Gunnar Schade stated that statements made in Chapter 7.3 of the modeling report regarding secondary PM<sub>2.5</sub> formation are generally correct, but the facility also emits hydrogen fluoride, hydrogen chloride, and formic acid. Depending on the nature of the PM emitted (likely basic pH), these gases can condense into emitted PM rapidly and thereby increase its mass while at the same time contributing to the PM's toxicity.

**Response 4:** As discussed above in Response 2, the concentrations of hydrogen chloride and hydrogen fluoride are below their respective ESLs, and therefore, are not expected to cause adverse health effects. Air contaminant levels below their ESL would not be expected to result in significant secondary formation of PM<sub>2.5</sub>. Because there is no proposed increase in formic acid emissions as part of this application, it is outside the scope of this project.

**Comment 5:** Commenters stated that Saint-Gobain did not speciate VOC emissions. They are concerned that many of the potential VOCs that could be released are not listed and suspect cancer causing agents, teratogens and mutagens, may be emitted. They stated that any of the potential VOCs are associated with acute health impacts that negatively affect quality of life. They requested that TCEQ require speciation (for both the current permit and the proposed amendment) and establish emission limits for the most toxic VOCs. (Denise Snyder, Richard Woodward)

**Response 5:** The Modeling and Effects Review Applicability (MERA) guidance document includes a Toxicology Emissions Screening List, which identifies certain types of projects and emissions for which the Toxicology Division has determined, based on past case-by-case reviews, that no further health effects review is necessary. VOCs resulting from the firing of natural gas are listed in Appendix B of the MERA as not needing any further review. The permitted VOCs are not expected to cause adverse effects to human health or welfare. Therefore, speciation of VOCs is not warranted for this project.

#### Comments Related to the Air Quality Modeling Analysis

**Comment 6:** Commenters questioned why meteorological data from other communities was used instead of local data from Brazos County (Robert Rose, Gunnar Schade, Hugh R. Walker, BISD).

Nora Rabe stated that emissions disperse differently when it is very hot or very wet and can be affected by drought. The dispersion in Bryan-College Station is also different from Austin because there are no hills and valleys to accumulate particulates like there are in Austin. The two areas are different, and the monitored data in Austin isn't representative of Bryan-College Station.

Commenters stated TCEQ has local College Station data, but only for AERMOD, and that the model and meteorological data used are outdated. (Gunnar Schade, Denise Snyder, Robert Rose). Geoffrey Roest stated that it is possible the use of another year of meteorological data would produce a value that does exceed the threshold due to extreme events that are not consistent from year-to-year.

**Response 6:** The TCEQ has prepared meteorological data sets for modeling demonstrations in order to establish consistency among modeling demonstrations across the state. The Applicant used the TCEQ preprocessed meteorological dataset for Brazos County. This dataset is based on meteorological data from Austin, Texas. Austin is located approximately 80 miles southwest of Bryan. The cities are in close enough proximity to each other to experience the same type of weather conditions over the course of a year. There are no major terrain features located between Austin and Bryan that would affect weather conditions in the two areas, and the meteorological data collected in Austin is considered representative for Bryan for purposes of regulatory permit modeling.

The National Weather Service meteorological data used in the modeling analysis is valid. The full range of meteorological conditions that can occur over one year can also be found in any other year. The Applicant used the TCEQ preprocessed meteorological dataset for Brazos County for the years 1983, 1984, 1986, 1987, and 1988. The model was run for all hours of the year for each of the five years, or 43,848 hours. This approach and amount of data are sufficient to capture the worst-case meteorological conditions that could occur in any given year.

**Comment 7:** Commenters questioned why AERMOD was not used and requested the justification for using an alternative model. (Gunnar Schade, Hugh R. Walker, BISD)

**Response 7:** AERMOD is not required for minor NSR analyses. Appendix J to the TCEQ Air Quality Modeling Guidelines (AQM) (APDG 6232) states that an applicant can use the most recent version of the Industrial Source Complex with Plume Rise Model Enhancements (ISC-PRIME) model unless a federal NSR permit is required. As discussed below in Response 31, the proposed project did not trigger a federal review. Therefore, the Applicant used the latest version of the ISC-PRIME model consistent with TCEQ guidance.

**Comment 8:** Robert Rose stated that the highest  $PM_{2.5}$  GLCmax ( $34.79 \mu\text{g}/\text{m}^3$ ) falls just below the threshold of  $35 \mu\text{g}/\text{m}^3$  and does not provide for a safe margin. Gunnar Schade stated that this appears too convenient and does not include a margin of error. Commenters stated that further air quality modeling is warranted (Geoffrey Roest, Gunnar Schade).

Gunnar Schade states that short-term  $PM_{2.5}$  emission concentration levels match the annual standard and are above the short-term significant impact level (SIL). The maximum impact was calculated at approximately  $13 \mu\text{g}/\text{m}^3$ , which is one third of the  $PM_{2.5}$  (24-hr) threshold. The actual background concentration in the area is needed to

determine whether the emissions are in need of further abatement. There are other nearby sources that may contribute PM. (Gunnar Schade)

**Response 8:** The NAAQS are developed to protect the public health, as well as the environment from any known or anticipated adverse effects associated with the presence of an air contaminant in the ambient air. The standards are set for criteria pollutants including PM<sub>2.5</sub>.

The PM<sub>2.5</sub> background concentrations used in the modeling analysis were based on data from the Dallas Hinton monitor located in Dallas, Texas. This monitor is located in an area much more developed than Bryan-College Station. The Applicant evaluated emissions in the vicinity of the Saint-Gobain site and the Dallas Hinton monitor site, and determined that more reported PM<sub>2.5</sub> emissions exist in the vicinity of the Dallas Hinton monitor. Thus, the PM<sub>2.5</sub> background concentrations used in the modeling analysis are conservative because the background concentrations in the Dallas area are expected to be higher than background concentrations in the Bryan area. The background concentrations were added to the model predicted concentrations from the Saint-Gobain sources in order to account for impacts from nearby off-property sources.

The modeling analysis for the project determined a total predicted 24-hr PM<sub>2.5</sub> concentration of 34.79 µg/m<sup>3</sup>. Because this is less than the 24-hr PM<sub>2.5</sub> NAAQS of 35 µg/m<sup>3</sup>, the predicted concentration is protective of the public health, public welfare, and the environment. The Applicant assumed a worst-case scenario, i.e., all processes at the site operating simultaneously at worst-case emission rates during worst-case meteorological conditions. This modeling approach is designed to provide a conservative prediction of the proposed emissions to ensure compliance with the NAAQS. The modeling predictions were reviewed by the TCEQ Air Dispersion Modeling Team (ADMT) of the Air Permits Division, and the modeling analysis was deemed to be acceptable. See Response 1 for additional information regarding the evaluation of emissions from the project.

**Comment 9:** Geoffrey Roest is concerned with the Applicant's use of data from the Deer Park monitor in the modeling analysis. The monitor is located upwind of downtown Houston and many suburbs during prevailing winds from the southeast. The air mass in Bryan is going to be an aged urban air mass as opposed to local emissions from the Deer Park area.

Commenters state that the Bryan area does not have baseline air monitoring data; therefore, any modeling may be inaccurate as current levels of pollution are unknown (Gunnar Schade, Hugh R. Walker). Gunnar Schade stated that emissions from the plant should not be assumed to occur into a clean air shed with limited potential for harm. Denise Snyder stated that the monitoring data would not account for oil and gas development.

**Response 9:** Background concentrations in air quality modeling are used to account for pollution from other sources in the area around the plant. The only pollutants which required the evaluation of ambient monitor data for this project were NO<sub>2</sub> and PM<sub>2.5</sub>. As discussed in Response 1, representative ambient monitor data were used in lieu of an ambient air monitor obtained in the vicinity of the plant. The applicant selected the ambient monitor data that was conservative and consistent with TCEQ guidance. For each monitor, the Applicant conducted a quantitative analysis of pollutant emissions in the vicinity of the monitor site relative to the Saint-Gobain site. The reported pollutant emissions in the vicinity of the selected monitor sites were greater than the reported pollutant emissions in the vicinity of the Saint-Gobain site. Thus, background concentrations from the selected monitors are conservative because background concentrations in the vicinity of the selective monitors are expected to be higher than background concentrations in the vicinity of Saint-Gobain.

**Comment 10:** Gunnar Schade stated that current emissions should be considered as part of the decision on this permit action.

**Response 10:** Current emission rates are considered in the impacts analysis if the increase in emissions exceeds the pollutant's respective de minimis level. In this case, NO<sub>2</sub> (1-hr) and PM<sub>2.5</sub> (24-hr) exceeded their de minimis levels. Therefore, all the facilities at the plant that emit NO<sub>2</sub> and PM<sub>2.5</sub> were included for further analysis. The current emission rates for all other pollutants were evaluated and determined to be protective when authorized. See Response 1 for a detailed discussion of the modeling results.

**Comment 11:** Commenters stated that the modeling settings were not appropriate, namely that a rural setting was used instead of an urban setting. Current land use designations surrounding the site dispute the rural parameter (Robert Rose, Hugh R. Walker). Gunnar Schade stated the dominant wind direction is from the southeast and because the air flows over dense urban terrain while approaching the plant, an urban setting is the proper choice. As a result, the model should have to be re-run to determine if dispersion was improved in places and worsened in other places.

**Response 11:** For the ISC-PRIME model, the dispersion coefficients are based on whether the area is predominately rural or urban. An Auer land-use analysis, described in Appendix N to the TCEQ AQMG (APDG 6232), is used to determine the appropriate dispersion coefficients. The goal in an Auer land-use analysis is to estimate the percentage of the area within a three-kilometer (km) radius of the source to be evaluated that is either rural or urban. Both land use types do not need to be evaluated since the land use type that has the greatest percentage will be the representative type. The land use types "undeveloped" and "common residential" make up the majority of the area within 3 km of the Saint-Gobain site. Both of these land use types are classified as rural. Therefore, the use of the rural dispersion option for this modeling analysis is appropriate.

**Comment 12:** Gunnar Schade questions the assessment that the area around the facility is mostly industrial and undeveloped and claims outdated maps were used. Mr. Schade states that development has occurred up to the site on the east side, across N Harvey Mitchel Parkway (FM 2818). Future development is likely between Beck and Suncrest, which is just across FM 2818 and within 1000 feet of the site.

**Response 12:** The TCEQ Air Permits Division used the latest aerial photography available in the review of the modeling analysis. The area in the vicinity of the Saint-Gobain site is mostly industrial and undeveloped land with residential areas to the east of the site. Potential future development cannot be included in the assessment.

**Comment 13:** Gunnar Schade is concerned about the background levels of NO<sub>2</sub> for the area. The commenter states that rush-hour values often exceed the background listed in the modeling report, especially after a strong nighttime inversion. Mr. Schade questioned if the NO<sub>2</sub> background was based on traffic or industrial emissions, or both, and is concerned a heavily traveled highway immediately adjacent to the site is likely a large source of NO<sub>x</sub> emissions.

**Response 13:** Background concentrations were used as part of the air quality analysis and the chosen background concentration was reviewed and determined to be appropriate. The NO<sub>2</sub> background concentration was based on industrial emissions and mobile emissions.

The 1-hr NO<sub>2</sub> background concentration used in the modeling analysis was based on data from the Lake Jackson monitor located in Lake Jackson, Texas. The Applicant did not sufficiently justify the use of this monitor because there were no sources of reported NO<sub>x</sub> emissions in close proximity to the monitor site. In contrast, the Saint-Gobain site was located in close proximity to other sources of reported NO<sub>x</sub> emissions. As a result, the TCEQ Air Permits Division identified other monitors more representative of Bryan in order to ensure that the outcome of the modeling analysis would not change. Based on the data from the other monitors, the TCEQ Air Permits Division concluded that the outcome of the modeling analysis would not change, and the modeling analysis demonstrated compliance with the 1 hour NO<sub>2</sub> NAAQS.

The 1-hr NO<sub>2</sub> NAAQS is a statistical standard based on the three-year average of the 98th percentile of the annual distribution of the daily maximum 1-hr concentrations. The form of the 1-hr NO<sub>2</sub> NAAQS takes into account the variations in ambient NO<sub>2</sub> concentrations that occur on a day-to-day basis, such as NO<sub>2</sub> concentrations in the morning and evening hours. Given the form of the 1-hr NO<sub>2</sub> NAAQS, the background concentration used in the modeling analysis generally will not be the highest recorded 1-hr concentrations at the monitor site.

**Comment 14:** Gunnar Schade stated that Saint-Gobain does not present any maps that show where the maximum concentration impacts are located based on the choice of model and meteorological input data. Mr. Schade commented that maps would provide useful information as to where impacts will be located and whether the

impacted locations are consistent with what would be expected based on typical local meteorological conditions.

**Response 14:** Applicants are not required to include concentration plot maps of the air dispersion model output with their applications. The Air Quality Analysis report submitted to ADMT includes data that is used to determine the location of the maximum concentration. However, the modeling report and the summary of the modeling audit performed by TCEQ is part of the permit record and are available to the public for review.

**Comment 15:** Gunnar Schade questioned if the nearby school was modeled as a receptor and states that the TCAA requires modifications at facilities within 3000 feet of a school to be evaluated for possible adverse effects for students. Robert Rose is concerned that the Jane Long School is 4378 feet from the plant and may violate the intent of the TCAA because it is so close to the distance requirement.

Commenters are concerned about the close proximity of the plant to schools. (Cathy E. Hansen, David Stasny, Richard Woodward, Douglas Wunneburger, BISD). Commenters have stated the nearest school is within 1 mile of the plant, five schools are within 2.5 miles (Douglas Wunneburger), and nine schools are within 5 miles (BISD).

**Response 15:** Air quality permit applications are evaluated to determine whether standards outlined in the TCAA, and applicable state and federal rules and regulations are met. Section 382.052 of the TCAA and 30 TAC § 116.111(a)(2)(A)(ii) both require that the TCEQ consider any possible adverse side effects that the proposed emissions may have on individuals attending schools located within 3,000 feet of the Saint-Gobain site. A site review was conducted and no schools were found to be within 3000 feet of the site.

The Applicant developed the receptor grid consistent with TCEQ modeling guidance. The modeled receptor grid extended approximately 380 meters (approximately 1,246 feet) from the Saint-Gobain property line in all directions and was sufficient to capture the maximum predicted concentrations. The maximum predicted concentrations were reviewed by the TCEQ staff and were determined to be protective of the public health and the environment.

**Comment 16:** Commenters expressed concern regarding the location of the plant in relation to public areas. (Sally Godfrey, Mike McFarland, Brian Blake, Donald Hall, Rodney Hill, Rachel Konderla, Katherine Shafer).

**Response 16:** 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 plant location choices made by an applicant when determining whether to approve or deny a permit application, unless a statute or rule imposes specific distance limitations that are enforceable by the TCEQ. Zoning and land use are beyond the authority of the TCEQ for consideration when reviewing air quality permit



applications and such issues should be directed to local officials. A protectiveness review was conducted for all contaminants proposed to be emitted. The maximum concentrations were evaluated at the property line, at the nearest off-property receptor, and at any schools located within 3,000 feet of the facilities. As discussed above, the site review indicated that there was no school within 3,000 feet. The recommendation of the Waco Regional Office was to proceed with the permit review and the site review indicated no reasons to deny the permit application.

**Comment 17:** Hugh R. Walker stated the application contained math errors that might impact modeling. Gunnar Schade identified a calculation, which he stated reduced his confidence in the accuracy of the rest of the report.

**Response 17:** The TCEQ permitting process includes reviewing all submitted information including calculation methodology and results. If errors are discovered in the application materials, the permit reviewer resolves the discrepancies with the Applicant before proceeding. The modeling analysis, which includes the correction of any mathematical errors, was reviewed by the TCEQ Air Permits Division and was determined to be acceptable.

**Comment 18:** Gunnar Schade stated that the SO<sub>2</sub> GLCmax may be below the SIL, but that the margin is small. As a result, the use of a different model or different meteorological data may have shown exceedances.

**Response 18:** The Applicant selected the air dispersion model consistent with TCEQ guidance. Appendix J to the TCEQ Air Quality Modeling Guidelines (APDG 6232) states that an applicant can use the most recent version of the ISC-PRIME model unless a federal NSR review is required. As described in Response 31 below, the proposed project did not trigger a federal NSR review. Therefore, the Applicant selected the ISC-PRIME model to conduct the modeling analysis. As described above in Responses 1 and 6, the Applicant's approach for using meteorological data was conservative and appropriate.

**Comment 19:** Denise Snyder stated that the EPA has tightened air quality standards for PM<sub>2.5</sub>, but noted that states have until 2020 to meet the new standards. Ms. Snyder asked if this project was reviewed under the new standards. She requests a list of the new standards, the emission levels from the plant, and current levels for Bryan-College Station.

**Response 19:** The Federal Clean Air Act (FCAA) requires the EPA to review the NAAQS in five-year intervals. An independent scientific review committee conducts a review of the NAAQS and provides recommendations for whether revisions of existing NAAQS are needed. The EPA reviews the recommendations from the committee and revises the NAAQS if appropriate. The current PM<sub>2.5</sub> standards were formalized by EPA in

January 2013.<sup>2</sup> The PM<sub>2.5</sub> NAAQS in effect at the time of the modeling analysis (the 2012 Standard) were used for the evaluation of Saint-Gobain's permit application. No revisions to the PM<sub>2.5</sub> NAAQS have been proposed as of the date of this Response. See Response 1 for information regarding emissions from this project.

**Comment 20:** Hugh R. Walker stated that SO<sub>2</sub> and PM (especially for smaller particles) will be above acceptable standards as a result of this project. Mr. Walker indicated that EPA guidelines encourage integrating chemical and physical processes into the formation of modeling (e.g., collecting air monitoring samples that are representative of the neighborhood, urban, or regional scales).

**Response 20:** TCEQ was unable to determine which EPA guideline the commenter was referring to in his comment. However, the applicant submitted an Air Quality Analysis which was reviewed by the TCEQ's ADMT. The proposed SO<sub>2</sub> and PM concentrations are below the respective standards and will be protective of the public health and welfare.

#### Comments Related to Air Quality Monitoring.

**Comment 21:** Commenters requested that monitors be installed prior to any additional emissions being authorized in order to assess the current air quality and to ensure compliance with the NAAQS. They inquired as to why no monitoring has been done in the area previously and who will be responsible for checking the air quality in the future (Tawnya Anderson, Frances DeGelia, John R. Ellison, Marilyn Gulledge, Jennifer McGrath, Dwight Rabe, Nora Rabe, Geoffrey Roest, Robert Rose, Kathy Langlotz, Gunnar Schade, Denise Snyder, Justin Stancil, David Stasny, Tim Touchstone, Robert Van Brunt, Laura Wimberly, Richard Woodward, Lon K. Young).

**Response 21:** The TCEQ's qualitative analysis of the area's emission sources have not provided supporting justification for the deployment of ambient air quality monitoring in the area. This qualitative analysis takes into consideration the point sources reported to the TCEQ Emissions Inventory, area sources, and population. The Bryan-College Station area does not meet federally established thresholds in 40 CFR Part 58 requiring the deployment of an ambient air monitor.

**Comment 22:** Gunnar Schade states that there is no evidence to view the Bryan-College Station area as a relatively clean air environment. The only long-term air quality measurements in the area were those as part of the Texas Air Quality Study II (TexAQSI).

**Response 22:** The Air Quality Division of the TCEQ Office of Air conducted a review of the 2006 TexAQSI (ozone analysis). The data reviewed was collected at Lick Creek Park in College Station from July 6 through September 6, 2006. The data showed that

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<sup>2</sup> Information concerning EPA's review of the NAAQS can be found on EPA's website:  
<https://www.epa.gov/naaqs>.

Bryan-College Station saw no exceedances of the 1997 ozone NAAQS of 85 parts per billion (ppb), which was in place at the time of the study.

Additionally, while there is no air quality monitor sited in the Bryan-College Station area, statewide emissions reductions and air quality improvements since 2006 are significant and are likely reflected in the Bryan-College Station air quality. For example, the Conroe (C78) monitor's design value<sup>3</sup> for ozone dropped from 93 ppb in 2006 to 73 ppb in 2015, which illustrates the degree of air quality improvement in and downwind of Houston since 2006. Further, two other monitors closest to Bryan-College Station (Temple (C651), and Fayette County (C601)) had 2015 design values of 64 ppb and 67 ppb, respectively. Based on the information from the ozone analysis and air quality trends from monitors surrounding Bryan, there is no evidence to suggest that the air quality in Bryan exceeds the applicable ozone NAAQS.

**Comment 23:** Commenters suggested that Saint-Gobain and other major polluters in the area fund ambient air monitoring as part of this permit action (Tawnya Anderson, Gunnar Schade, Denise Snyder, Lon K. Young). Denise Snyder asked what options are available for obtaining permanent air monitoring or mobile air monitoring in Bryan-College Station.

**Response 23:** The TCEQ does not have jurisdiction under the TCAA to require a company to fund an ambient air monitor for a particular area. However, there have been instances of local initiatives in which non-required monitors were installed as a result of interest from the legislature, city governments, county officials, regional planning groups, or other interest groups.

Mobile air monitoring is an approach typically used to support on-going field investigations regarding a specific source or group of sources, or to provide short-term evaluations of air quality in areas where the agency suspects potential air quality issues. Mobile monitoring is not appropriate for ambient air monitoring to determine compliance with the NAAQS.

**Comment 24:** Denise Snyder asks what type of air monitoring is most likely to give the most accurate results for Bryan-College Station. Ms. Snyder asks which monitors are relevant to understanding pollution in the Bryan-College Station area.

**Response 24:** The FCAA requires the EPA to establish NAAQS for criteria pollutants. Ambient air quality refers to the quality of outdoor air in our surrounding environment. It is typically measured near ground level, away from direct sources of pollution. Monitors measuring any criteria pollutant would be appropriate for determining the air quality of an area; however, the type of monitor(s) that would be

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<sup>3</sup> The design value for the eight-hour ozone standard is the average of the annual fourth-high eight-hour ozone concentrations for three consecutive years, and is the number that is used to determine attainment status for the ozone NAAQS.

recommended would be determined based upon population and the type of industry located in an area.

**Comment 25:** Denise Snyder asks how new air monitoring data is added to the TCEQ database.

**Response 25:** The Texas Air Monitoring Information System (TAMIS) is the TCEQ database that displays continuous and non-continuous ambient air quality measurements. Some monitoring instruments collect measurements on a continuous automated basis and the data are displayed via TAMIS in "near real-time," usually within one hour of collection. Non-continuous data are collected by manually retrieving a canister and submitting the canister to a laboratory for analysis. All the data loaded into the database are reviewed and verified for quality assurance and quality control. The data may be accessed at <https://gisweb.tceq.texas.gov/geotam3/index.html>.

**Comment 26:** Denise Snyder asked where the 12 closest monitors to Bryan-College Station are located, the location of other monitors within 100 miles, and which pollutants are monitored at each and how often. Ms. Snyder also asked where this information can be found on the TCEQ website.

**Response 26:** The closest air monitors within 100 miles of Bryan-College Station are listed in the following table by county, pollutant, and number of monitors. The data for the monitors may be accessed on the Environmental Protection Agency Website: <https://www.epa.gov/outdoor-air-quality-data>. Additional information is available on the TCEQ Air Monitoring Sites website: [https://www.tceq.texas.gov/airquality/monops/sites/mon\\_sites.html](https://www.tceq.texas.gov/airquality/monops/sites/mon_sites.html).

County	Pollutant					
	NO <sub>2</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	Ozone
Bell						2
Harris*	13	3	9	7	8	16
McLennan	1	1			1	1
Montgomery	1					
Travis	2		2	2	1	2

\*Some of the monitors in Harris County are greater than 100 miles away.

Comments Related to Permit Conditions and Evaluation of the Permit Application

**Comment 27:** Commenters requested that the company apply BACT and requested that the TCEQ ensure that the controls selected were adequately evaluated (Gunnar Schade, David Stasny). Commenters stated that new control technologies have been developed since Tunnel Kiln #1 was permitted and constructed; however, the emissions from Tunnel Kiln #1 and the proposed new kiln are nearly identical. As a result, commenters concluded that the project is not making use of the best available technology (Denise Snyder, Richard Woodward). Justin Stancil stated there should be a device to cut down on the emissions and it should be inspected yearly.

**Response 27:** As part of the evaluation of applications for new or amended permits, the permit reviewer audits all sources of air contaminants in the proposed project and assures that each facility will be using the BACT applicable for the facility and types of contaminants emitted. BACT is the maximum degree of emission control achievable considering technical feasibility and economic reasonableness. BACT may be numerical limitations, the use of an add-on control technology, design considerations, the implementation of work practices, or operational limitations. Currently, there are no add-on control technologies that meet BACT requirements for tunnel kilns of this size. BACT for the tunnel kilns at the plant is limiting product throughput, limiting heat input, and requiring natural gas as the only fuel.

Although there are no add-on controls that meet BACT, the new kiln and modified kiln will be equipped with the current technology available for kilns of this size. Some of the improvements include: inner linings (refractory) with greater heat capabilities, which result in using less fuel to maintain heat requirements as well as less maintenance; the latest combustion burners to reduce NO<sub>x</sub> emissions; heat harvesting to shorten startups; and sophisticated computer systems that ensure the kilns are operated efficiently.

Saint-Gobain estimated emissions based upon the product and firing process that would result in the worst case emission rate. In addition, Saint-Gobain needs the business flexibility (depending on tunnel kiln availability) to process any order on any of the tunnel kilns. Therefore, each of the tunnel kilns are authorized to fire the worst-case scenario and hence the emission rates for the tunnel kilns are identical and protective of public health and the environment. If new technologies are developed which meet the requirements to be considered BACT, future applications for new kilns or modifications to existing kilns would be required to meet the new BACT.

**Comment 28:** Gunnar Schade stated that inexpensive abatement strategies (such as water washes) should be considered as part of this permit action. The abatement measures listed by the company have to be extended to the new emission source and should be monitored for compliance.

**Response 28:** Continuous kilns, like the tunnel kiln, most often fire large quantities of ceramics that have an established firing cycle. The firing cycle and temperature are

critical and specific for each type of product that is fired. Abatement strategies (such as water washes) that could result in the lowering of the kiln temperature could adversely affect the product and would introduce an additional waste stream that would require disposal.

**Comment 29:** Tim Touchstone stated that the permit is contradictory in that it requires the scrubbers to be maintained in good working order, because the scrubbers are critical for reducing air pollution, but allows the kilns to operate when the scrubbers are not working.

**Response 29:** The existing tunnel kilns and the proposed tunnel kiln are not equipped with scrubbers. Each of the rotary kilns are equipped with a scrubber that is required to be operational when the kilns are operating. The dryers associated with the rotary kilns are also equipped with scrubbers and are required to be operational when the dryers are operating. If a product that is usually fired in a rotary kiln needs to be fired in a tunnel kiln, the product must be pre-treated in the dryers (with scrubbers operating) prior to firing in the tunnel kiln.

**Comment 30:** Dan McAdams stated that before an area has bad air quality, the vast majority of businesses built comply with environmental rules. Nevertheless, the result can still be bad air quality. Mr. McAdams stated that Saint-Gobain should not just meet the minimum requirements for compliance, but should do the best they possibly can to reduce emissions.

**Response 30:** The TCEQs jurisdiction is established by the Legislature and is limited to the issues set forth in the TCAA. As part of the permit evaluation process, the permit reviewer audits all sources of air contaminants at the proposed facility. The reviewer assures that the facility will be using the BACT applicable for the sources and types of contaminants emitted, and determines that no adverse effects to public health, general welfare, or physical property are expected to result from a facility's proposed emissions. The permit conditions are developed such that a facility that is operated within the terms and conditions of the permit will be able to operate in compliance with standards outlined in the TCAA and applicable state and federal rules and regulations.

**Comment 31:** Robert Rose stated that the EPA usually characterizes a major source as emitting 100 tons per year (tpy) or more of a pollutant. The combined yearly total of contaminants listed in the application on Table 1(a) are in excess of 111 tpy. Therefore, the Prevention of Significant Deterioration (PSD) permitting should be triggered as it is a major modification at a major source.

**Response 31:** The plant is an existing major stationary source subject to the PSD permitting program. The FCAA established the PSD program to ensure that economic growth would occur in a manner consistent with the preservation of existing clean air resources. 42 U.S.C. § 7470(3). The PSD program is only applicable to a major emitting facility, which is a facility that is one of the 28 named sources and emits or has the

potential to emit 100 tpy or more of any air pollutant, or any other source with the potential to emit 250 tpy or more of any air pollutant. 42 U.S.C. § 7479(1). The plant is not a named source but does have the potential to emit greater than 250 tpy; therefore, the plant is subject to the PSD permitting program.

A Federal Applicability Analysis was performed to determine if the project was a major modification requiring a PSD review. The first step in the analysis is to evaluate the emission increases from the project for each pollutant against the defined significant emission rates (SER) to determine if the project would be considered a major modification. The table below illustrates the comparison between the individual proposed increases against the major modification SER. Because the project increases for each pollutant were below the PSD SER, this project is not a major modification, and therefore, did not trigger PSD review.

Pollutant	Project Increase (tpy)	PSD SER Major Modification Trigger (tpy)	PSD Review Triggered (Y/N)
NO <sub>x</sub>	13.14	40	N
CO	57.40	100	N
VOC	7.40	40	N
PM	12.20	25	N
PM <sub>10</sub>	8.50	15	N
PM <sub>2.5</sub>	6.40	10	N
SO <sub>2</sub>	5.30	40	N

**Comment 32:** John R. Ellison asked what pollutants are going to be added as part of this permit action.

**Response 32:** This amendment project will not result in emissions of any new air contaminants that are not currently authorized in the permit. However, the project proposes increases of NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, and PM, including PM<sub>10</sub> and PM<sub>2.5</sub>. See Response 31 for the project increases in tpy. Additionally, the project increases for hydrogen chloride is 1.0 tpy, and hydrogen fluoride is 0.27 tpy. However, these increases are not subject to the PSD program, and therefore, were not included in the table provided in Response 31 above.

**Comment 33:** Robert Rose stated that there is a control level more stringent than BACT called Lowest Achievable Emission Rate (LAER).

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**Response 33:** The application of LAER control levels applies to those permit actions that trigger a nonattainment review. A nonattainment review is only triggered if the site of the project is located in a nonattainment area and the project requires federal review. Brazos County, where the site is located, is classified as attainment/unclassifiable for all NAAQS; therefore, a project occurring in this county would not be subject to nonattainment review or nonattainment permitting requirements. BACT is the appropriate control level for this project.

**Comment 34:** Denise Snyder asked why some filters are only 90 percent effective and if a higher percentage is available.

**Response 34:** The control efficiencies listed in the permit are for sources not involved in this permit action. Therefore, filter effectiveness was outside the scope of the review of this permit application.

**Comment 35:** John N. Miller stated that although the proposed emissions are below the current standards, the future could show that the current standards are inadequate.

Denise Snyder asked whether other facilities would be required to reduce emissions if the air quality monitored is worse than predicted. She also asked if other companies would be allowed to continue to release emissions at current levels if stricter standards are adopted.

**Response 35:** The TCEQ can only evaluate a proposed project based on the standards in effect at the time the project is evaluated. The TCEQ cannot initiate a change to an issued permit if the company is in compliance with all requirements of the permit. Should stricter standards be enacted in the future, all new or modified facilities would have to demonstrate compliance with those standards.

**Comment 36:** Commenters asked about the type of monitoring and emissions reporting required for Saint-Gobain. They stated that monitoring is needed to ensure the emissions are in compliance with the permit and asked about who conducts the sampling (Denise Snyder, Tim Touchstone, and Hugh R. Walker).

Robert Van Brunt requested annual emissions reports be provided to the public with comparisons to monitored levels. Mayor Bienski requested that the TCEQ forward the most current annual air quality monitoring report submitted by Saint-Gobain to the City of Bryan and that the TCEQ send an annual report each year.

**Response 36:** As set forth in 30 TAC § 116.115(b), the Applicant is responsible for providing the sampling facilities and conducting sampling operations. Permit holders may contract with an independent sampling consultant. Prior to sampling, the Applicant is required to contact the Waco Regional Office to obtain the proper data forms and procedures. All sampling and testing must be approved by the TCEQ Executive Director and must be coordinated with the Waco Regional Office. Saint-



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Gobain contracts with an independent third party sampler to conduct sampling and testing at the plant.

Saint-Gobain is required to perform an initial compliance test on new or modified combustion equipment. The pollutants required to be tested on the new and modified equipment at the site are NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, hydrogen chloride, and hydrogen fluoride. Saint-Gobain is not required to perform any further testing beyond the initial compliance test.

Continuous stack monitoring of the emissions from the facilities at the plant is not required. The installation of a Continuous Emission Monitor System (CEMS) to measure the emissions from the facilities at the plant is not economically reasonable for kilns of this size. Saint-Gobain is required to monitor the parameters (i.e. heat input and fuel usage) that are established during the required initial demonstration of compliance test, which confirms the emission representations in the permit application.

In response to this comment, a condition was added to the permit, which requires that the new kiln be equipped with a fuel flow meter. The new kiln and existing kilns' fuel usage is demonstrated through recordkeeping. The records shall be kept at the plant site for a period of five years and made available upon request to any TCEQ representative or to any pollution control authority representative with jurisdiction.

The Waco Regional Office performs a required annual investigation of the plant. The investigation may include an inspection of the site including all equipment, control devices, monitors, and a review of all calculations and required recordkeeping. Additionally, the TCEQ evaluates all complaints received. If a plant is found to be out of compliance with the terms and conditions of its permit, it will be subject to investigation and possible enforcement action. Individuals are encouraged to report any concerns about nuisance issues or suspected noncompliance with terms of any permit or other environmental regulation by contacting the TCEQ Waco Regional Office at 254-751-0335 or by calling the 24-hour toll-free Environmental Complaints Hotline at 1-888-777-3186.

Saint-Gobain is required by 30 TAC § 101.10(a)(3) to annually report actual emissions to the TCEQ Emissions Inventory. The emissions inventory information is available online at the TCEQ website at <https://www.tceq.texas.gov/airquality/point-source-ei/psei.html>. Saint-Gobain's Air Emissions Inventory account number is BM0026Q. On that website, under the heading "Detailed Data from the Point Source Emissions Inventory", site level summary data is available in Microsoft Excel format for 2012, 2013, and 2014. The data for 2015 is currently undergoing validation.

Older emissions data can be located by following the Instructions for Obtaining Site Specific Emissions Inventory Reports at the TCEQ website <http://www.tceq.texas.gov/assets/public/implementation/air/ie/pseiforms/eireports.pdf>.

The results of the initial performance test and any investigation reports are publicly available through TCEQ's Open Records Request site <https://www.tceq.texas.gov/agency/data/records-services/reqinfo.html>. The public may also visit the TCEQ Waco Regional Office located at 6801 Sanger Avenue, Suite 2500, Waco, Texas to review the test results and investigation reports.

**Comment 37:** Commenters expressed concern about the noncompliance history of Saint-Gobain's parent company and the sites that they own in Texas and the rest of the country. Commenters provided statistics on violations of the FCAA and penalties assessed for locations across the country. (Mark Caffey, Frances DeGelia, David Flash, Rene Graham, Marilyn Gulledge, Chris Lawrence, John N. Miller, Denise Snyder).

**Response 37:** During the technical review of the permit application, a compliance history review of both the company and the site is conducted based on the criteria in 30 TAC Chapter 60. These rules may be found at the following website: <https://www.tceq.texas.gov/rules/index.html>.

The compliance history is reviewed for the five-year period prior to the date the permit application was received and includes multimedia compliance-related components about the site under review. These components include: enforcement orders, consent decrees, court judgments, criminal convictions, chronic excessive emissions events, investigations, notices of violations, audits and violations disclosed under the Audit Act, environmental management systems, voluntary on-site compliance assessments, voluntary pollution reduction programs, and early compliance.

This permit application was received after September 1, 2002, and the company and site have been rated and classified pursuant to 30 TAC Chapter 60. A company and site may have one of the following classifications and ratings:

- High: rating below 0.10 - complies with environmental regulations extremely well;
- Satisfactory: rating 0.10 - 55.00 - generally complies with environmental regulations;
- Unsatisfactory: rating greater than 55.00 - fails to comply with a significant portion of the relevant environmental regulations.

This site has a rating of 8.8 and a classification of satisfactory. The company rating has a rating of 4.54, and a classification of satisfactory. The company rating reflects the average of the ratings for all sites the company owns in Texas. 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 violations outside of the State of Texas.

**Comment 38:** Commenters requested that the application be reviewed judiciously and not be a part of the expedited program. They questioned the economic benefit justification required to be in the expedited program. (Mary M. Gartner, Robert Rose,

Richard Woodward, Maurice Jacob, Jennifer McGrath, Denise Snyder, Justin Stancil, BIRD)

**Response 38:** Senate Bill 1756, 83rd Legislature, 2013, amended the TCAA to provide TCEQ with the authority to accept a surcharge from applicants to cover the expenses incurred by expediting the processing of an application. This surcharge may be used to fund the use of additional resources in the form of overtime or contract labor to process the application in an expedited manner. In this case, TCEQ staff worked overtime hours in order to expedite the application review for this application. Expedited applications undergo the same level of scrutiny and review as non-expedited applications and follow all air permitting process requirements.

The commission has not specified criteria for evaluating economic benefit and will consider any demonstration of economic benefit to this state or an area of this state. The economic benefit analysis and determination is only used to determine whether the application can be expedited. The economic benefit analysis is not part of the administrative or technical review and does not impact the issuance of a permit.

Guidance on the implementation of the Expedited Permitting Program is available on the TCEQ website:

[https://www.tceq.texas.gov/permitting/air/nav/air\\_docs\\_newsource.html](https://www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html).

**Comment 39:** Commenters requested that the TCEQ provide an environmental justice assessment, particularly because census data for the 77803 zip code suggests a large (80%) minority population (African American and Hispanic) while the surrounding zip codes show far lower percentages (23.5% to 56.6%) (Robert Rose). Commenters stated that environmental justice should have been part of the permit process (Tawnya Anderson, Olivia Jade Wolford, Robert Rose, Wendy Jepson).

**Response 39:** Air permits evaluated by the TCEQ are reviewed without reference to the socioeconomic or racial status of the surrounding community. Although there are no TCEQ rules addressing environmental equity issues such as the location of permitted facilities in areas with minority and low-income populations, disparate exposures of pollutants to minority and low-income populations, or the disparate economic, environmental, and health effect on minority and low-income populations, the TCEQ has made a strong policy commitment to address environmental equity. The Office of the Chief Clerk works to help citizens and neighborhood groups participate in the regulatory process, to ensure that commission programs that may affect human health or the environment operate without discrimination, and to make sure that citizens' concerns are considered thoroughly and are handled in a way that is fair to all. You may contact the Office of the Chief Clerk at 512-239-3300 for further information. More information on Environmental Equity may be found on the TCEQ website: <https://www.tceq.texas.gov/agency/hearings/envequ.html>.

**Comment 40:** Commenters stated that the percent increase in emissions from the current authorization is very large considering that the plant has a total of 18 emission points (Denise Snyder, Richard Woodward).

**Response 40:** Percentage of increase at a site is not part of the NSR permitting process. Proposed emission increases are reviewed for accuracy and evaluated against the appropriate NAAQS and ESL guidelines. Emissions are reviewed for protectiveness on a pollutant-by-pollutant basis and not by a total tonnage increase. See Responses 1 and 2 for information regarding the impacts from the project.

#### Other Comments

**Comment 41:** Dwight Rabe stated that when facilities want to change their permits, the public should be informed about what they want to change, the reasons why, and how it will affect health. Anja Schwalen stated they only learned about the proposed project through letters to the editor for *The Eagle*. Robert Rose stated that school administrators should be directly informed and given an opportunity to participate in public comment. Mr. Rose stated that there has been no education of the public about potential risks and only a publication in the public notice section of the newspaper.

**Response 41:** The Executive Director directs applicants to provide public notice in accordance with statutory requirements and commission rules. TCEQ rules in 30 TAC Chapter 39 specify the requirements for public notice for air permit applications. As part of the application process, applications are required to conduct notice to the public. In the case of this project, two public notices were required to be published by the Applicant. The first public notice alerts the public that a company has submitted an application. The second public notice alerts the public that the draft permit is available for review. The public may then review the draft permit at either the TCEQ regional office or at a local public location, such as a library.

Both the first and second public notices were published in accordance with the commission rules. The required newspaper notice invites citizens to request mailed notice on matters of interest by submitting their contact information to the Office of the Chief Clerk so that they may receive information regarding particular matters. The Executive Director is required to mail notice to persons on mailing lists maintained by the Office of the Chief Clerk.

Additionally, the Applicant was required to post signs at the site in accordance with the TCEQ rules in 30 TAC § 39.604. A public meeting was held on July 28, 2016, in Bryan, Texas to provide the public with information about the project and the review process.

**Comment 42:** Robert Rose requested an extension of the comment period beyond July 6th.

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**Response 42:** In accordance with 30 TAC § 55.152(b), the public comment period was extended to the close of the public meeting. The comment period was open until the end of the public meeting held on July 28, 2016, in Bryan, Texas.

**Comment 43:** Gunnar Schade stated that the application materials were only available at the local library, and that the library lacked copying facilities and had limited hours. Commenters stated the local news could not find the application at the library (Robert Rose, Gunnar Schade).

**Response 43:** Section 382.056(d) of the TCAA requires the Applicant to make a copy of the application available for review and copying at a public place in the county in which the facility is located or proposed to be located. 30 TAC § 39.405(g) requires that the application, including any subsequent revisions to the application, be available for review for the duration of the comment period. This application was made available at Clara B. Mounce Public Library in Brazos County. The application was also available for review in the Waco Regional Office. When it was reported the application was not available at the Clara B. Mounce Library, the Applicant verified with the library that the application was available to the public.

**Comment 44:** Richard Woodward questioned why the permit authorizes 7.699 tpy of hydrogen fluoride emissions, but Saint-Gobain reported only 0.63 tons on the EPA's Toxic Release Inventory Database (TRI) report.

**Response 44:** The emission rate authorized by the permit represents the maximum allowable emission the facility is authorized to emit and not the actual emission rate. Actual emission rates are reported to TRI and to TCEQ's Emission Inventory.

**Comment 45:** Commenters stated that the TRI report lists mercury contaminated waste as being transferred off-site. They asked how much mercury is released or stored on site and expressed concern that there is not a limit for mercury or other inorganic ingredients in the air permit (Richard Woodward and Denise Snyder).

**Response 45:** The mercury waste reported to the TRI is generated in Saint-Gobain's laboratory from bench testing and is not emitted into the air. Therefore, mercury is not listed as a contaminant on the Maximum Allowable Emission Rate Table of the permit and is not part of the evaluation of this air permit application.

**Comment 46:** Denise Snyder asked for details on how the proposed expansion would impact the plant's water discharge amounts and permits, and the handling of hazardous waste.

**Response 46:** Although the TCEQ is responsible for the environmental protection of all media, including water, the TCAA specifically addresses air-related issues. This permit, if issued, will regulate the control and abatement of air emissions only; therefore, issues regarding water quality or discharge and the handling of hazardous waste are not within the scope of this review. Additionally, should the nature of the

facility's operation require, the Applicant may be required to apply for separate authorizations that regulate water quality, water usage, or the handling of hazardous waste. The issuance of an air quality permit does not negate the responsibility of an applicant to apply for any additional required authorizations prior to operating a facility.

**Comment 47:** Frances Degelia stated that the proposed emissions affect the environment, including contributing to the destruction of the ozone layer, causing acid rain, and causing global warming.

**Response 47:** This application does not include an affected source that would be subject to the acid rain program. This application is also not subject to PSD permitting for emissions of greenhouse gases. The EPA regulates pollutants which may affect stratospheric ozone. The overall evaluation process provides a conservative prediction such that, if issued, the permit would be protective of human health and the environment. See Response 1 for more information regarding emissions from this project.

**Comment 48:** Commenters asked how neighbors would be notified if there was an accident and if there was an evacuation plan (Denise Snyder, Gunnar Schade).

**Response 48:** As set forth in 30 TAC § 101.201(a), regulated entities are required to notify the TCEQ regional office within 24 hours of the discovery of releases into the air and in advance of maintenance activities that could or have resulted in emissions in excess of a reportable quantity. This quantity varies based on the air contaminant released.

These notifications are available to the public upon request. In the event a citizen is adversely impacted by air emissions from this or any other facility, they may register a complaint with the Waco Regional Office (telephone 254-751-0335 or toll free 1-888-777-3186). Complaints are addressed in accordance with TCEQ procedures. In the event of an emergency, the Local Emergency Planning Committee and the regulated entity have the primary responsibility of notifying potentially impacted parties regarding the situation.

Occasionally a permit application may require a disaster review. Whether a permit application requires a disaster review depends on the chemicals handled, the location of facility, and the processes involved. Proposed projects which involve toxic chemicals that are known or suspected to have potential for life threatening effects upon off-facility property in the event of a disaster, and involve manufacturing processes that may contribute to the potential for disastrous events, are candidates for disaster review. This application did not require a disaster review.

**Comment 49:** Nick Ortega questioned how many long-term employees have died from cancer or have heart issues.

**Response 49:** The TCEQ's jurisdiction for reviewing air quality applications and issuing authorizations under the TCAA does not extend beyond the issues of protection of public health and physical property, and BACT. For this reason, the TCEQ does not have jurisdiction to consider employee safety regulations or other requirements of the Occupational Safety and Health Act when considering whether to approve or deny an application for an air authorization.

**Comment 50:** Commenters stated that oil and gas production, more students, and more vehicles in the area are contributing to air pollution (Nora Rabe, Robert Rose, Denise Snyder, Justin Stancil, Tim Touchstone).

**Response 50:** As part of the review process, air dispersion modeling was performed to evaluate potential impacts to human health and welfare or the environment from the project. When appropriate, background concentrations are added to the modeled project concentrations to account for other emission sources in the area surrounding the plant. Background concentrations are obtained from ambient air monitors and would include emissions from other industries, population, and vehicles. TCEQ cannot evaluate future emissions that may result from economic and population growth. See Response 1 for a detailed discussion of the modeling results.

**Comment 51:** Commenters requested information on oil and gas operations in the Bryan area, monitoring of these operations, and their impacts on air quality. (Denise Snyder, Robert Rose)

**Response 51:** This is an air permit application at a specific facility, and oil and gas production is outside the scope of this review. Additionally, certain activities related to oil and gas production are outside of TCEQ's jurisdiction. Additional information can be found on the TCEQ webpage: <https://www.tceq.texas.gov/assistance/industry/oil-and-gas/oilgas.html>.

**Comment 52:** Commenters expressed general opposition to approval of the air permit application. (Cassidy Barton, Candice Bellis, Thomas Michael Cavaness, Heather Crenwelge, Will Davis, Kim Gallego, John Grant, Marilyn Gullede, Donald Hall, Rodney Hill, Helen Hensley, Maurice Jacob, Rachel Konderla, Chris Lawrence, Monica Love, Tai Lee, Rosa Ledezma, Christine McGee, Joey McGee, John N. Miller, Melinda Pollard, Mark Purcell, Jennifer Rich, Denise Snyder, Justin Stancil, Anja Schwalen, Tim Touchstone, Katherine Willyard)

**Response 52:** The TCEQ appreciates the comments and interest from the public in environmental matters before the agency and acknowledges the comments in opposition of the proposed project. The TCEQ cannot deny a permit if the applicant demonstrates that all applicable statutes, rules, and regulations will be met. Special conditions and maximum allowable emission rates are established to set enforceable limitations for the operation of the facility. The permit conditions are developed so a facility that is operated in accordance with the terms and conditions of the permit will

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be in compliance with the standards outlined in the TCAA, as well as applicable state and federal rules and regulations.

**Comment 53:** Ron Schmidt supports issuance of the permit. Mr. Schmidt stated that Saint-Gobain has been a responsible corporate citizen and has been good from an economic development standpoint.

**Response 53:** The TCEQ appreciates the comments and interest from the public in environmental matters before the agency and acknowledges the comment in support of the proposed project.



CHANGES MADE IN RESPONSE TO COMMENT

In response to public comment, the Executive Director has changed certain provisions of the draft permit. These changes and the reasons for these changes are more fully described above.

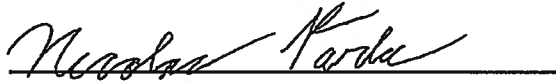
Respectfully submitted,

Texas Commission on Environmental Quality

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REPRESENTING THE  
EXECUTIVE DIRECTOR OF THE  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

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