TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AGENDA ITEM REQUEST

for Approval of a Recommendation to the Governor for Area Designations under the 2010 Sulfur Dioxide (SO_2) Primary National Ambient Air Quality Standards (NAAQS)

AGENDA REQUESTED: April 20, 2011

DATE OF REQUEST: April 1, 2011

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Joyce Spencer, 239-5017

CAPTION: Docket No. 2011-0204-RES. Consideration of a proposed recommendation for area designations under the 2010 one-hour sulfur dioxide (SO_2) primary National Ambient Air Quality Standard (NAAQS). If approved, this recommendation will be submitted to the governor for his consideration to transmit to the United States Environmental Protection Agency (EPA).

Effective August 23, 2010, the EPA revised the SO_2 NAAQS to include a 2010 one-hour 75 parts per billion (ppb) primary standard. States are required to recommend to the EPA no later than June 2, 2011, area designations depicting attainment status for areas under the 2010 SO_2 standard. Staff is making recommendations based on available ambient monitoring data. Area designation recommendations for Texas counties are: nonattainment designation for Texas counties with SO_2 regulatory design values exceeding 75 ppb; attainment designation for counties with SO_2 regulatory design values equal to or less than 75 ppb; and identification as unclassifiable for each county in Texas not otherwise designated nonattainment or attainment for the standard because of the lack of regulatory monitoring data.

Staff recommends nonattainment designation for Jefferson County; attainment designations for Dallas, Ellis, Kaufman, El Paso, Galveston, Harris, Gregg, McLennan, and Nueces Counties; and all other Texas counties identified as unclassifiable at this time. The EPA will consider state recommendations before finalizing area designations and boundaries for the 2010 SO_2 primary NAAQS. (Mary Ann Cook, John Minter)

Susana M. Hildebrand
Chief Engineer

David Brymer
Division Director

Joyce Spencer
Agenda Coordinator

Copy to CCC Secretary? NO

Texas Commission on Environmental Quality
Interoffice Memorandum

To: Commissioners **Date:** April 1, 2011

Thru: LaDonna Castañuela, Chief Clerk
Mark R. Vickery, P.G. Executive Director

From: Susana M. Hildebrand, P.E., Chief Engineer

Docket No.: 2011-0204-RES

Subject: Commission Approval for Designation Recommendations for the 2010 Sulfur Dioxide (SO_2) Primary National Ambient Air Quality Standard (NAAQS)

Background and reason(s) for the recommendation:
The Federal Clean Air Act (FCAA) requires the United States Environmental Protection Agency (EPA) to set NAAQS for sulfur dioxide and five other criteria pollutants and to periodically review the standards and revise them if necessary to ensure requisite health and environmental protection.

The EPA first set air quality standards for SO_2 in 1971. Two primary standards were implemented to protect health, one at 140 parts per billion (ppb) (24-hour) and another at 30 ppb (annual average). A secondary standard of 500 ppb (three-hour average) was implemented to protect public welfare. Per a judicial consent decree, the EPA recently reviewed the 1971 SO_2 primary NAAQS and revised it on June 2, 2010. The SO_2 secondary standard was not changed and will undergo separate review. A new 75 ppb maximum one-hour primary standard became effective on August 23, 2010, and the previous SO_2 primary standards were revoked but will remain in effect until one year after area designations for the new standard are final.

The 2010 SO_2 standard imposes new state implementation plan (SIP) requirements. Attainment demonstration plans for all nonattainment areas will be due to the EPA by February 2014. For all attainment or unclassifiable areas of the state, infrastructure and maintenance plans for the new standard are due to the EPA by June 2, 2013. All areas of every state must attain the standard as soon as practicable but no later than August 23, 2017.

Section 107(d) of the FCAA requires that states recommend designations to the EPA within one year of NAAQS promulgation. The designation recommendations to be signed by the governor are due to the EPA by June 2, 2011.

For designation recommendations, the EPA expects states will use 2008 through 2010 monitoring data from the existing SO_2 network, as well as any recent and available refined SO_2 dispersion modeling provided by states for sources that may have the potential to cause or contribute to a NAAQS violation. The EPA references Appendix W of 40 Code of

Federal Regulations (CFR) Part 51 for modeling information; however, because final source-specific air dispersion modeling guidance was not issued in time for modeling and designation recommendations, the EPA does not expect states will perform modeling. Instead, the EPA expects states will recommend nonattainment designation for areas with violations indicated from regulatory monitors already in place and to identify all other areas as unclassifiable.

Preliminary guidance in the EPA's preamble to the rule setting the 2010 SO_2 primary NAAQS provides that each area with monitored data or modeling results showing one or more exceedances of the standard should be designated nonattainment. An attainment designation is indicated for each area with both monitoring and modeling results showing no violations. The guidance further indicates that all other areas, including those with SO_2 monitors showing no violations but without modeling showing no violations, and areas with no SO_2 monitors at all should be identified unclassifiable. In contrast, however, the preamble also provides that if an area's monitor(s) shows no violation of the NAAQS, the EPA's designation decisions for that area will be made on a case-by-case basis, with one possibility being identification of the area as unclassifiable. Initial guidance indicates that default nonattainment boundaries will fall along county lines and include full counties.

The EPA intends to finalize designations by June 1, 2012, based on certified, quality-assured, 2008 through 2010 or 2009 through 2011 monitored air quality data generated from the current regulatory monitoring network and modeling results if provided by states. If the Administrator intends to modify any state's boundary recommendation, the EPA will notify the governor no later than 120 days prior to designations. In the event of insufficient information, the FCAA provides that the EPA may take an additional year to designate areas.

No counties in Texas are currently designated nonattainment or in maintenance status for the 1971 SO_2 NAAQS. Data from regulatory air quality monitors indicate no violations of the 2010 SO_2 standard in Texas except in Jefferson County. The preliminary regulatory design value for Jefferson County, calculated with 2008 through 2010 data from regulatory monitors in that county, is 77 ppb. The regulatory air quality monitored data for 2008 and 2009 has been certified, but certification of the 2010 regulatory monitored data is not expected to occur before the commission's consideration of this recommendation. The design value for Jefferson County based on certified 2007 through 2009 regulatory monitoring data is 80 ppb.

The monitored SO_2 data considered in developing this recommendation was obtained from regulatory air quality monitors for criteria pollutants that are in the TCEQ NAMS/SLAMS network and meet all 40 CFR Part 58 requirements. All air quality monitoring activities conducted at these regulatory monitoring sites must use a methodology approved by the EPA such as a federal reference method (FRM) or a federal equivalent method (FEM).

Re: Docket No. 2011-0204-RES

Scope of the recommendation:
This recommendation was developed with consideration of initial guidance provided by the EPA in the preamble to the rule setting the 2010 SO_2 primary NAAQS. The attached document provides supporting data for this recommendation in the form of regulatory design values for 2009 and 2010, each calculated from three years of monitored data from all of the regulatory monitors in Texas. The EPA recommends states identify areas not in compliance with the 2010 SO_2 NAAQS using the most recent three years of air quality data, preferably data from calendar years 2008 through 2010, stored in the EPA Air Quality System (AQS), from Federal Reference Method and Federal Equivalent Method monitors that are sited and operated in accordance with 40 CFR Part 58.

Guidance regarding designated area boundaries and modeling was not provided by the EPA in time for designation recommendation considerations, and the EPA does not expect states to provide modeling support for recommendations. Because of a lack of guidance from the EPA and limited resources, no modeling was performed by staff for use in determining this recommendation, and no modeling results were submitted to the TCEQ from outside the agency.

This package provides staff's recommendation for designations under the 2010 SO_2 NAAQS for all counties in Texas. If approved, the proposed recommendation will be provided to the governor. The governor's recommendation is due to the EPA by June 2, 2011.

A.) Summary of what the recommendation will do:
Staff recommends a nonattainment area designation for each Texas county with an SO_2 regulatory design value exceeding 75 ppb, and an attainment area designation for each county with an SO_2 regulatory design value equal to or less than 75 ppb. For all counties not recommended to be designated nonattainment or attainment for the 2010 SO_2 primary standard, staff recommends an unclassifiable designation at this time because of the lack of regulatory monitoring data.

Based on regulatory monitoring data available from 2008 through 2010, staff recommends that only Jefferson County be designated nonattainment for the 2010 SO_2 NAAQS. Staff further recommends that Dallas, Ellis, El Paso, Galveston, Gregg, Harris, Kaufman, McLennan, and Nueces Counties be designated attainment, and that all other Texas counties be identified unclassifiable at this time.

B.) Scope required by federal regulations or state statutes:
None

C.) Additional staff recommendations that are not required by federal rule or state statute:
None

Statutory authority:
The authority to propose and adopt the implementation plan and similar documents is derived from Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.002, which provides that the policy and purpose of the TCAA is to safeguard the state's air resources from pollution; TCAA, §382.011, which authorizes the commission to control the quality of the state's air; and §382.012, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air.

Effect on the:

A.) Regulated community: The recommendation has no initial impact on the regulated community; however, industries located in areas designated nonattainment by the EPA may eventually be required to further control SO_2 emissions. Sources may be required to perform air dispersion modeling to demonstrate attainment or to report additional information to the TCEQ. The complete impact of compliance with the new standard is unknown until implementation and modeling guidance is issued by the EPA.

B.) Public: The recommendation has no initial effect on the public, but public health benefits could eventually be realized as counties comply with the 2010 SO_2 NAAQS.

C.) Agency programs: The recommendation has no initial effect on agency programs; however, new monitoring network and reporting requirements introduced by the 2010 SO_2 NAAQS impose additional costs for monitor installations and/or relocations. In addition, depending on the outcome of existing legal challenges, source-specific air dispersion modeling requirements will impose significant new resource demands on the agency and increase staff workloads. Final designations would be expected to ultimately lead to new SIP requirements for all areas of Texas, resulting in additional resource demands.

Stakeholder meetings:
Two public meetings were held by staff to provide information about the 2010 SO_2 NAAQS and its requirements. The first meeting was held on January 20, 2011, in Austin at the TCEQ headquarters and was video-teleconferenced to the TCEQ regional offices. A second meeting was held on January 24, 2011, in Port Arthur.

Public comment:
Generally, the public meeting attendees wanted to know what designations Texas will recommend and what designations will be imposed by the EPA. Questions included what modeling Texas is going to perform, when would that be done, and what actions from industries with SO_2 emission sources would be required and/or could be used to show the standard being met by those sources.

Informal written comments were invited by the newspaper advertisements, e-mail, and public meetings. A two-week comment period ending February 7, 2011, was provided. Two written comments were received. One commenter suggested immediate implementation of

the new SO_2 standard to improve air quality and reduce acid rain. The commenter also stated that enforcement should be increased and suggested requiring on-site air monitoring equipment capable of reporting one-hour violations at all industries permitted to emit SO_2. Another commenter urged the TCEQ to reduce allowable SO_2 emissions for the sake of human and environmental health and suggested that closer monitoring and increased fines for violations are needed.

Significant changes:
There were no changes made to staff's recommendation based on the comments received.

Potential controversial concerns and legislative interest:
Although regulatory SO_2 air quality monitors indicate attainment of the 2010 SO_2 standard in Nueces County, there is one non-regulatory monitor in the county monitoring exceedances, as shown by a 2009 design value of 89 ppb and a preliminary 2010 design value of 103 ppb for that monitor. A nonattainment designation for Nueces County may be expected from some members of the public. Staff is meeting with industry in this area to address SO_2 concentrations measured by this nonregulatory monitor.

A representative of Exxon-Mobil operations in Jefferson County has conveyed a desire for the state to recommend only a portion of Jefferson County as nonattainment. However, because final EPA guidance to support that action has not been provided to date and because regulatory monitor readings in Jefferson County do not appear to support such an action, staff is not making that recommendation.

The EPA anticipates requiring air dispersion modeling to demonstrate attainment of the 2010 SO_2 primary standard; however, guidance for such modeling has not yet been issued. The EPA indicates that initial modeling should focus on larger sources with a potential to emit at or above 100 tons per year (tpy), and then on medium sources that may cause or contribute to violations. The Office of the Attorney General of Texas previously petitioned the EPA to reconsider aspects of the 2010 SO_2 primary NAAQS, specifically the hybrid approach with modeling requirements, as well as other deviations from proposal to final rule made without the opportunity for public comment. The EPA has now denied the petition, claiming in part that implementation requirements for the 2010 SO_2 primary standard were not yet final and therefore arguments presented in the petition regarding the modeling requirements of concern were not appropriately timed.

Does this recommendation affect any current policies or require development of new policies?
No

What are the consequences if this recommendation does not go forward? Are there alternatives to the recommendation?
A recommendation is needed to provide the governor's office with sufficient information upon which to base the state designation recommendation to the EPA. Not providing this

information to the governor would abdicate Texas' opportunity to provide input to the EPA before area designations for the new standard are finalized.

Key points in the recommendation schedule:

- April 20, 2011: Commission agenda date
- May 1 2011: Recommendation submittal to governor's office
- June 2, 2011: EPA deadline for state designation recommendations
- By June 2, 2012: Final SO_2 area designations issued by the EPA (this date could be delayed by up to one year due to insufficient information)
- By January 1, 2013: Deadline for SO_2 monitoring network in place and operational
- By June 2013: Infrastructure, transport, and attainment/maintenance SIP revisions for all areas designated attainment or unclassifiable due to the EPA
- By February 2014: Attainment Demonstration SIP revisions for nonattainment areas due to the EPA
- August 23, 2017: Attainment deadline for all areas

Agency contacts:
Mary Ann Cook, Project Manager, 239-6739, Air Quality Division
John Minter, Staff Attorney, 239-0663

Attachments

cc: Chief Clerk, 2 copies
Executive Director's Office
Susana M. Hildebrand, P.E.
Anne Idsal
Curtis Seaton
Ashley Morgan
Office of General Counsel
Mary Ann Cook

Regulatory and Nonregulatory Sulfur Dioxide (SO_2) Air Quality Monitors in Texas

2009 Design Value	Preliminary 2010 Design Value (ppb)	Monitor Site Name	MSA	Regulatory?	County
34	44	Fayette County C601	AUS	N	FAYETTE
	6	CAPCOG Lake Georgetown C690	AUS	N	WILLIAMSON
80	77	Beaumont C2/C112	BPA	Y	JEFFERSON
80	75	Port Arthur West C28/C128	BPA	Y	JEFFERSON
55	41	SETPRC Port Arthur C628	BPA	N	JEFFERSON
18	17	Corpus Christi West C4	CC	Y	NUECES
9	9	Corpus Christi Tuloso C21	CC	Y	NUECES
28	33	Corpus Christi Huisache C98	CC	Y	NUECES
23	22	Dona Park C199	CC	N	NUECES
30	26	Port Corain Elevator C629	CC	N	NUECES
89	103	J.I. Hailey C630	CC	N	NUECES
32	21	Inner Harbor C631	CC	N	NUECES
17	13	FHR Easement C632	CC	N	NUECES
21	11	Solar Estates C633	CC	N	NUECES
9	8	Dallas Hinton St. C401/C60/C	DFW	Y	DALLAS
57	31	Midlothian OFW C52/C137	DFW	Y	ELLIS
10	9	Italy C1044	DFW	N	ELLIS
14	14	Kaufman C71	DFW	Y	KAUFMAN
9	9	El Paso UTEP C12/C125/C151	ELP	Y	EL PASO
11	11	El Paso Sun Metro C40/C116	ELP	Y	EL PASO
6	5	Skyline Park C72	ELP	Y	EL PASO
41	42	Texas City Ball Park C147	HGB	Y	GALVESTON
28	23	Houston North Wayside C405	HGB	Y	HARRIS
23	21	Houston Croquet C409	HGB	Y	HARRIS
34	27	Houston Monroe C406	HGB	Y	HARRIS
43	40	Houston Regional Office C81	HGB	Y	HARRIS
56	47	Park Place	HGB	Y	HARRIS
47	41	Clinton C403/C113/C304	HGB	Y	HARRIS
15	15	Seabrook Friendship Park C45	HGB	Y	HARRIS
75	66	Longview C19/C127	NETX	Y	GREGG
14	14	CPS Pecan Valley C678	SAN	N	BEXAR
32	38	Heritage Middle School C622	SAN	N	BEXAR
6	6	Waco Mazanec C1037	WACO	Y	MCLENNAN

*2009 verified design values calculated using 2007 through 2009 verified monitored data

** 2010 preliminary design values calculated using 2008 and 2009 verified data and 2010 data not yet verified

Note: Shaded areas depict DVs exceeding the 2010 SO_2 primary NAAQS of 75 ppb.

Also included is 2009 and 2010 design value calculations from three years of monitored data from all continuous SO_2 air quality monitors in Texas, including those identified as non-regulatory, for which the TCEQ receives but does not certify data.

One-Hour Design Values (DV) in Texas Counties with Regulatory Sulfur Dioxide (SO2) Monitors

County	2009 Design Values*	2010 Preliminary Design Values**
Jefferson	**80**	**77**
Gregg	75	66
Ellis	57	31
Harris	56	47
Galveston	41	42
Nueces	28	33
Kaufman	14	14
El Paso	11	11
Dallas	9	8
McLennan	6	6

* 2009 DV calculated using 2007 through 2009 verified monitoring data

** 2010 DV calculated using 2008 and 2009 verified data and 2010 data not yet verified

Note: Bolded text depicts DVs exceeding the 2010 SO2 primary NAAQS of 75 ppb.

Resolution Concerning Sulfur Dioxide
National Ambient Air Quality Standard Designations

2011-0204-RES

WHEREAS, the Texas Commission on Environmental Quality (Commission) met on April 20, 2011, to discuss and consider designation recommendations for the 2010 one-hour primary sulfur dioxide (SO_2) National Ambient Air Quality Standard (NAAQS) for submittal to the Governor for his consideration and transmittal to the United States Environmental Protection Agency (EPA); and

WHEREAS, the Commission finds that the EPA revised the SO_2 NAAQS effective August 23, 2010, establishing a new one-hour primary SO_2 NAAQS at 75 parts per billion (ppb); and

WHEREAS, the Commission acknowledges that the Federal Clean Air Act (FCAA), § 107(d), requires the EPA, after the promulgation of a new or revised NAAQS, to designate areas as attainment, nonattainment, or unclassifiable; and

WHEREAS, the Commission acknowledges that the FCAA, § 107(d), also establishes a process for each Governor to provide recommendations to the EPA regarding appropriate designations for the 2010 one-hour primary SO_2 NAAQS for their state, including appropriate geographic boundaries; and

WHEREAS, the Commission acknowledges that the EPA has specified a deadline for the submittal of recommended designations for the 2010 one-hour primary SO_2 NAAQS of June 2, 2011; and

WHEREAS, the Commission acknowledges that the EPA recommends States identify areas not in compliance with the new or revised NAAQS using the most recent three years of air quality data, preferably data from calendar years 2008 through 2010, stored in the EPA Air Quality System (AQS), from Federal Reference Method and Federal Equivalent Method monitors that are sited and operated in accordance with 40 Code of Federal Regulations (CFR) Part 58; and

RESOLVED, that the Commission hereby requests the Governor of Texas to submit a recommendation for the 2010 one-hour primary SO_2 NAAQS to the EPA for consideration, consisting of nonattainment designations for Texas counties with SO_2 regulatory design values exceeding 75.4 ppb; attainment designations for counties with SO_2 regulatory design values of 75.4 ppb or less; and identification as unclassifiable for all other counties in Texas, along with data analysis supporting this recommendation, by June 2, 2011.

Issued date:

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

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Bryan W. Shaw, Ph.D., Chairman

The Honorable Rick Perry
Governor of Texas
State Capitol
P. O. Box 12428
Austin, TX 78711-2428

Dear Governor Perry:

The United States Environmental Protection Agency (EPA) revised the National Ambient Air Quality Standard (NAAQS) for sulfur dioxide (SO_2) to 75 parts per billion (ppb) for the one-hour standard on June 2, 2010. Section 107(d)(3) of the Federal Clean Air Act (FCAA) requires the governor of each state to submit to the EPA no later than June 2, 2011, a list of all areas with a designation recommendation of attainment, nonattainment, or unclassifiable.

The Texas Commission on Environmental Quality (TCEQ) recommends nonattainment designation for Texas counties with SO_2 regulatory design values exceeding 75.4 ppb; attainment designations for counties with SO_2 regulatory design values of 75.4 ppb or less; and identification as unclassifiable for all other counties in Texas at this time. Staff recommends a nonattainment designation for Jefferson County; attainment designations for Dallas, Ellis, El Paso, Galveston, Gregg, Harris, Kaufman, McLennan, and Nueces Counties; and identification as unclassifiable for all other Texas counties.

Enclosed are a resolution, cover letter, and attachment containing the designation recommendation for your signature to be submitted to the EPA by the June 2, 2011, deadline.

If I can be of any assistance, please contact me at 512-239-5510.

Sincerely,

Bryan W. Shaw, Ph.D
Chairman

Enclosures

cc: Toby Baker, Office of Budget, Planning and Policy, Office of the Governor
Mark R. Vickery, P.G., Executive Director, TCEQ

Alfredo Armendariz, Ph.D.
Regional Administrator
United States Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Dr. Armendariz:

Pursuant to the requirements in Section 107(d)(3) of the Federal Clean Air Act, enclosed is the State of Texas' recommendation for area designations under the 2010 one-hour sulfur dioxide (SO_2) primary National Ambient Air Quality Standard (NAAQS) of 75 parts per billion (ppb).

The Texas Commission on Environmental Quality (TCEQ) recommends nonattainment designation for Texas counties with SO_2 regulatory design values exceeding 75.4 ppb; attainment designations for counties with SO_2 regulatory design values of 75.4 ppb or less; and identification as unclassifiable for all other counties in Texas at this time. Staff recommends a nonattainment designation for Jefferson County; attainment designations for Dallas, Ellis, El Paso, Galveston, Gregg, Harris, Kaufman, McLennan, and Nueces Counties; and identification as unclassifiable for all other Texas counties.

Enclosed is a resolution containing the State of Texas' recommendation for area designations under the 2010 SO_2 one-hour primary NAAQS, along with supporting documentation.

If you have any questions or need additional information, please feel free to contact TCEQ Chairman Bryan W. Shaw, Ph.D., at 512-239-5510.

Sincerely,

Rick Perry
Governor

Enclosures

cc: Bryan W. Shaw, Ph.D., Chairman, TCEQ