

APPENDIX C

HEARING NOTICES

2013-013-SIP-NR

Adoption
February 26, 2014

Notice of Proposal

Texas Register

Notice Sample

List of Newspapers

Announcement Letters

Sample Letters

List of States, EPA, Planning Organizations, Other Offices

Electronic Announcements

Federal Agencies

CENSARA, New Mexico and Colorado

Govdelivery and TCEQ Web Site Postings

Hearing (not opened)

Commenters

United States Environmental Protection Agency

National Park Service

United States Fish and Wildlife Service

United States Forest Service

National Park Conservation Association and Sierra Club

NOTICE OF PROPOSAL

TEXAS REGISTER

The existing general permit is scheduled to expire on December 15, 2013. This notice is being published to comply with 30 TAC §205.5(d), which requires the TCEQ to propose reissuance of an existing general permit at least 90 days prior to expiration. The existing general permit will remain in effect for dischargers authorized under the general permit until the date the commission takes final action on the revised draft general permit. However, no new notices of intent will be accepted or authorizations issued under the existing general permit after December 15, 2013. TCEQ will provide the additional public notice required by §205.3 following approval of the revised draft general permit by the United States Environmental Protection Agency.

INFORMATION. If you need more information about this general permit or the permitting process, please call the TCEQ Office of Public Education Program, toll free, at 1-800-687-4040. General information about the TCEQ can be found at our Web site at <http://www.tceq.texas.gov>.

Further information may also be obtained by calling the TCEQ's Water Quality Division, Stormwater and Pretreatment Team, at (512) 239-4671.

TRD-201303367
Robert Martinez
Director, Environmental Law Division
Texas Commission on Environmental Quality
Filed: August 13, 2013



Notice of Public Hearing on Proposed Revisions to the State Implementation Plan

The Texas Commission on Environmental Quality (commission) will conduct a public hearing to receive testimony regarding proposed revisions to the state implementation plan (SIP) under the requirements of Texas Health and Safety Code, §382.017; Texas Government Code, Chapter 2001, Subchapter B; and 40 Code of Federal Regulations (CFR) §51.102 of the United States Environmental Protection Agency (EPA) concerning SIPs.

The proposed SIP revision would satisfy the Regional Haze Rule requirements to submit a progress report for the mandatory Class I federal areas in the state in the form of SIP revisions every five years (40 CFR §51.308(g)). According to the rule, the deadline for Texas to submit a five-year regional haze SIP revision is March 19, 2014, five years after submittal of the initial regional haze SIP revision. 40 CFR §51.308(g) provides that the report must evaluate improvement towards the reasonable progress goal for each Class I area located within the state and in each Class I area outside the state that may be affected by emissions from Texas.

The commission will hold a public hearing on this proposal in Austin on September 24, 2013 at 2:00 p.m. in Building E, Room 201, at the commission's central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Joyce Spencer-Nelson, Air Quality Division, at (512) 239-5017. Requests should be made as far in advance as possible.

Written comments may be submitted to Margaret Earnest, MC 206, Air Quality Division, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087 or faxed

to (512) 239-6188. Electronic comments may be submitted at: <http://www5.tceq.texas.gov/rules/ecomments>. File size restrictions may apply to comments being submitted via the *eComments* system. All comments should reference Non-Rule Project Number 2013-013-SIP-NR. The public comment period closes on October 1, 2013. Federal Land Manager comments will be available on August 21, 2013. Copies of the proposed SIP and Federal Land Manager comments can be obtained from the commission's Web site at http://www.tceq.texas.gov/airquality/sip/bart/haze_sip.html. For further information, please contact Margaret Earnest, Air Quality Planning, (512) 239-4581.

TRD-201303365
Robert Martinez
Director, Environmental Law Division
Texas Commission on Environmental Quality
Filed: August 13, 2013



Notice of Water Quality Applications

The following notices were issued on August 2, 2013, through August 9, 2013.

The following require the applicants to publish notice in a newspaper. Public comments, requests for public meetings, or requests for a contested case hearing may be submitted to the Office of the Chief Clerk, Mail Code 105, P.O. Box 13087, Austin, Texas 78711-3087, WITHIN 30 DAYS OF THE DATE OF NEWSPAPER PUBLICATION OF THE NOTICE.

INFORMATION SECTION

AIR PRODUCTS LLC which operates La Porte Plant, which produces industrial gases, has applied for a renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0001280000, which authorizes the discharge of process wastewater, utility wastewater, laboratory test solution water, hydrostatic test water, and storm water at a daily average flow not to exceed 500,000 gallons per day via Outfall 001; and storm water on an intermittent and flow variable basis via Outfalls 002, 003, and 004. The facility is located at 10202 Strang Road, approximately 1,500 feet northwest of the intersection of State Highway 225 and Miller Cutoff Road, bordered on the north by Strang Road, on the east by Miller Cutoff Road, on the south by the Union Pacific railroad tracks, and on the west by the Houston Light and Power right way power lines, northwest of the City of La Porte, Harris County, Texas.

BAYER MATERIALSCIENCE LLC which operates Bayer MaterialScience Baytown WWTP, an inorganic and organic chemical manufacturing facility, has applied for a renewal of TPDES Permit No. WQ0001499000, which authorizes the discharge of stormwater and hydrostatic test water on an intermittent basis via Outfalls 002, 003, 004, and 006, and treated process wastewater, treated sanitary wastewater (previously monitored at internal Outfall 107), utility wastewater, and stormwater via Outfalls 007 and 008 at a daily average flow not to exceed 10,000,000 gallons per day. The facility is located east of Cedar Bayou, approximately 0.5 mile south of the intersection of Farm-to-Market Road 1405 (West Bay Road) and Farm-to-Market Road 565 northeast of the City of Baytown, Chambers County, Texas 77253.

PABTEX I, L.P. (OWNER) AND SAVAGE GULF SERVICES LTD LLP (OPERATOR) which operate a marine cargo handling facility that stores and loads soft coal and petroleum coke, have applied for a renewal of TPDES Permit No. WQ0001702000, which authorizes the intermittent and variable discharge of storm water associated with industrial activity from Outfall 001. The facility is located approximately

NOTICE SAMPLE

NOTICE OF PROPOSAL

NOTICE OF PUBLIC HEARING ON PROPOSED REVISIONS TO THE STATE IMPLEMENTATION PLAN

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The proposed SIP revision would satisfy the Regional Haze Rule requirements to submit a progress report for the mandatory Class I federal areas in the state in the form of SIP revisions every five years (40 CFR §51.308(g)). According to the rule, the deadline for Texas to submit a five-year regional haze SIP revision is March 19, 2014, five years after submittal of the initial regional haze SIP revision. 40 CFR §51.308(g) provides that the report must evaluate improvement towards the reasonable progress goal for each Class I area located within the state and in each Class I area outside the state that may be affected by emissions from Texas.

The commission will hold a public hearing on this proposal in Austin on September 24, 2013 at 2:00 p.m. in Building E, Room 201, at the commission's central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called

upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

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LIST OF NEWSPAPERS

The regional haze hearing announcement was placed in six newspapers around the state.

1. Austin American-Statesman: Example follows
2. Alpine Avalanche
3. El Paso Times (both English and Spanish versions)
4. Fort Worth Star-Telegram
5. Houston Chronicle
6. Midland Reporter-Telegram

Example of Newspaper Classified Ad

Austin American-Statesman, August 21, 2013

NOTICE OF PUBLIC HEARING ON PROPOSED REVISIONS TO THE STATE IMPLEMENTATION PLAN

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The commission will hold a public hearing on this proposal in Austin on September 24, 2013 at 2:00 p.m. in Building B, Room 201, at the commission's central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

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INVOICE

Star-Telegram

808 Throckmorton St.
FORT WORTH, TX 76102
(817) 390-7761
Federal Tax ID 26-2674582

Received
SEP 11 2013

Air Quality Division

Customer ID: TXN14
Invoice Number: 326793121
Invoice Date: 8/21/2013
Terms: Net due in 21 days
Due Date: 8/31/2013
PO Number:
Order Number: 32679312
Sales Rep: 073
Description: NOTICE OF PUBLIC HEARING
Publication Date: 8/21/2013

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
SEP -9 PM 3:17
CHIEF CLERK'S OFFICE

Bill To:

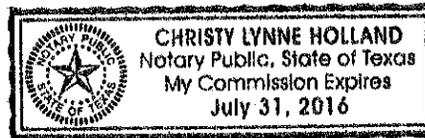
TEXAS COMMISSION ON ENVIROMEN
PO BOX 13087
AUSTIN, TX 78711-3087

Attn: ACCOUNTS PAYABLE

Description	Location	Col	Depth	Linage	MU	Rate	Amount
NOTICE OF PUBLIC HEARING ON	I3580	1	88	88	LINE	\$17.28	\$1,520.36
Misc Fee							\$10.00

Net Amount: \$1,530.36

THE STATE OF TEXAS
County of Tarrant



Before me, a Notary Public in and for said County and State, this day personally appeared Deborah Baylor Norwood, Bid and Legal Coordinator for the Star-Telegram, published by the Star-Telegram, Inc. at Fort Worth, in Tarrant County, Texas; and who, after being duly sworn, did depose and say that the attached clipping of an advertisement was published in the above named paper on the listed dates: BIDS & LEGAL DEPT. STAR TELEGRAM (817) 215-2323

Signed:

Deborah B Norwood

SUBSCRIBED AND SWORN TO BEFORE ME, THIS Thursday, August 22, 2013.

Notary Public

Christy G Holland

Thank You For Your Payment

Remit To: Star-Telegram
P.O. BOX 901051
FORT WORTH, TX 76101-2051

Customer ID: TXN14
Customer Name: TEXAS COMMISSION ON E
Invoice Number: 326793121
Invoice Amount: \$1,530.36
PO Number:
Amount Enclosed: \$

Air Quality Division
2013 Purchase Request

Originator(ASC): Kathe Boothby	Need by or Request Date: 8/15/13
Section: Air Quality Planning	
Phone: 239-3348	For RUSH orders, give justification in Purpose Function area <input type="checkbox"/>

Name of requestor – if training, date of training (include training justification form found on T-Net):

ITEM NO./SKU#	Class/Item	COMPLETE DESCRIPTION (Describe what the item or service is, include product name, color, dimensions & weight. Attach all pertinent information for services, i.e. scope of work/ specifications)	QTY	UNIT PRICE	EXT
1.		Publication of Public Hearing Notice for the Five-Year Regional Haze SIP Revision			\$238.00
2.					
3.					
		SHIPPING: \$ _____		Total	\$238.00

Purpose Function: Publication of notice of public hearing for the Five-Year Regional Haze SIP Revision to publish on Wednesday, August 21, 2013

Suggested Vendor: Alpine Avalanche

Section Manager Approval: _____ David Brymer, Director - Approval: (if required) _____ Steve Hagle, P.E., Deputy Director - Approval: (if required) _____	Date: <u>8/16/13</u>
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*****BELOW THIS LINE FOR PURCHASER/BUDGET USE ONLY*****

Contact Person: _____ Order Date: _____ Received Date: _____

VID# (Vendor's Federal Tax ID):

HUB Data: Woman ___ Minority ___ Non ___

Vendor Delivery Date (after receipt of order):

Unit #	Object Code	Category	PCA	Amount

Air Quality Division
2013 Purchase Request

Originator(ASC): Kathe Boothby	Need by or Request Date: 8/15/13
Section: Air Quality Planning	
Phone: 239-3348	For RUSH orders, give justification in Purpose Function area <input type="checkbox"/>

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ITEM NO./SKU#	Class/Item	COMPLETE DESCRIPTION (Describe what the item or service is, include product name, color, dimensions & weight. Attach all pertinent information for services, i.e. scope of work/ specifications)	QTY	UNIT PRICE	EXT
1.		Publication of Public Hearing Notice for the Five-Year Regional Haze SIP Revision			\$684.76
2.					
3.					
SHIPPING: \$ _____				Total	\$684.76

Purpose Function: Publication of notice of public hearing for the Five-Year Regional Haze SIP Revision to publish on Wednesday, August 21, 2013

Suggested Vendor: Austin American-Statesman

Section Manager Approval: _____ David Brymer, Director - Approval: (if required) _____ Steve Hagle, P.E., Deputy Director - Approval: (if required) _____	Date: <u>8/16/13</u>
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VID# (Vendor's Federal Tax ID):

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Vendor Delivery Date (after receipt of order):

Unit #	Object Code	Category	PCA	Amount

Air Quality Division
2013 Purchase Request

Originator(ASC): Kathe Boothby	Need by or Request Date: 8/15/13
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Phone: 239-3348	For RUSH orders, give justification in Purpose Function area <input type="checkbox"/>

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ITEM NO./SKU#	Class/Item	COMPLETE DESCRIPTION (Describe what the item or service is, include product name, color, dimensions & weight. Attach all pertinent information for services, i.e. scope of work/specifications)	QTY	UNIT PRICE	EXT
1.		Publication of Public Hearing Notice for the Five-Year Regional Haze SIP Revision			\$1,530.36
2.					
3.					
SHIPPING: \$ _____				Total	\$1,530.36

Purpose Function: Publication of notice of public hearing for the Five-Year Regional Haze SIP Revision to publish on Wednesday, August 21, 2013

Suggested Vendor: Fort Worth Star-Telegram

Section Manager Approval: _____ David Brymer, Director - Approval: (if required) _____ Steve Hagle, P.E., Deputy Director - Approval: (if required) _____	Date: <u>8/16/13</u>
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Contact Person: _____ **Order Date:** _____ **Received Date:** _____

VID# (Vendor's Federal Tax ID): _____

HUB Data: Woman ___ Minority ___ Non ___

Vendor Delivery Date (after receipt of order): _____

Unit #	Object Code	Category	PCA	Amount

Air Quality Division
2013 Purchase Request

Originator(ASC): Kathe Boothby	Need by or Request Date: 8/15/13
Section: Air Quality Planning	
Phone: 239-3348	For RUSH orders, give justification in Purpose Function area <input type="checkbox"/>

Name of requestor – if training, date of training (include training justification form found on T-Net):

ITEM NO./SKU#	Class/Item	COMPLETE DESCRIPTION (Describe what the item or service is, include product name, color, dimensions & weight. Attach all pertinent information for services, i.e. scope of work/ specifications)	QTY	UNIT PRICE	EXT
1.		Publication of Public Hearing Notice for the Five-Year Regional Haze SIP Revision			\$1,724.38
2.					
3.					
		SHIPPING: \$ _____		Total	\$1,724.38

Purpose Function: Publication of notice of public hearing for the Five-Year Regional Haze SIP Revision to publish on Wednesday, August 21, 2013

Suggested Vendor: Houston Chronicle

Section Manager Approval: _____ David Brymer, Director - Approval: (if required) _____ Steve Hagle, P.E., Deputy Director - Approval: (if required) _____	Date: <u>8/16/13</u>
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Contact Person: _____ **Order Date:** _____ **Received Date:** _____

VID# (Vendor's Federal Tax ID): _____

HUB Data: Woman ___ Minority ___ Non ___

Vendor Delivery Date (after receipt of order): _____

Unit #	Object Code	Category	PCA	Amount

Air Quality Division
2013 Purchase Request

Originator(ASC): Kathe Boothby	Need by or Request Date: 8/15/13
Section: Air Quality Planning	
Phone: 239-3348	For RUSH orders, give justification in Purpose Function area <input type="checkbox"/>

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ITEM NO./SKU#	Class/Item	COMPLETE DESCRIPTION (Describe what the item or service is, include product name, color, dimensions & weight. Attach all pertinent information for services, i.e. scope of work/specifications)	QTY	UNIT PRICE	EXT
1.		Publication of Public Hearing Notice for the Five-Year Regional Haze SIP Revision			\$204.84
2.					
3.					
SHIPPING: \$ _____				Total	\$204.84

Purpose Function: Publication of notice of public hearing for the Five-Year Regional Haze SIP Revision to publish on Wednesday, August 21, 2013

Suggested Vendor: Midland Reporter-Telegram

Section Manager Approval: _____ David Brymer, Director - Approval: (if required) _____ Steve Hagle, P.E., Deputy Director - Approval: (if required) _____	Date: <u>8/16/13</u>
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Contact Person: _____ **Order Date:** _____ **Received Date:** _____

VID# (Vendor's Federal Tax ID):

HUB Data: Woman ___ Minority ___ Non ___

Vendor Delivery Date (after receipt of order):

Unit #	Object Code	Category	PCA	Amount

ANNOUNCEMENT LETTERS



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

NOTICE OF PUBLIC HEARING ON PROPOSED REVISIONS TO THE STATE IMPLEMENTATION PLAN

The Texas Commission on Environmental Quality (commission) will conduct a public hearing to receive testimony regarding proposed revisions to the state implementation plan (SIP) under the requirements of Texas Health and Safety Code, §382.017; Texas Government Code, Chapter 2001, Subchapter B; and 40 Code of Federal Regulations §51.102 of the United States Environmental Protection Agency (EPA) concerning SIPs.

The proposed SIP revision would satisfy the Regional Haze Rule requirements to submit a progress report for the mandatory Class I federal areas in the state in the form of SIP revisions every five years (40 CFR §51.308(g)). According to the rule, the deadline for Texas to submit a five-year regional haze SIP revision is March 19, 2014, five years after submittal of the initial regional haze SIP revision. Section 51.308(g) provides that the report must evaluate improvement towards the reasonable progress goal for each Class I area located within the state and in each Class I area outside the state that may be affected by emissions from Texas.

The commission will hold a public hearing on this proposal in Austin on September 24, 2013 at 2:00 p.m. in Building E, Room 201, at the commission's central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

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ADJACENT STATES MAILING LIST

Mr. Michael Vince, Administrator
Air Quality Assessment Division
Louisiana Department of Environmental Quality
Office of Environmental Assessment
P.O. Box 4314
Baton Rouge, Louisiana 70821-4314

Mr. Mike Bates, Chief
Air Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

Mr. Eddie Terrill, Director
Air Quality Division
Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677

Mr. Richard Goodyear, Bureau Chief
Air Quality Bureau
New Mexico Environmental Department
525 Camino de los Marquez, Suite 11
Santa Fe, New Mexico 87505-1816

Mr. Garry Kaufman, Deputy Director
Air Pollution Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Ms. Kyra Moore
Chief, Air Pollution Control Program
Missouri Department of Natural Resources
1659 E. Elm Street
Jefferson City, MO 65102

August 23, 2013

Mr. Michael Vince, Administrator
Air Quality Assessment Division
Louisiana Department of Environmental Quality
Office of Environmental Assessment
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

Dear Mr. Vince:

In accordance with 40 Code of Federal Regulations §51.102(d)(5), Procedural Requirements, Public Hearings, I am enclosing a Notice of Public Hearing scheduled by the Texas Commission on Environmental Quality to be held on September 24, 2013, at 2:00 p.m. in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. The purpose of this hearing is to receive testimony regarding proposed revisions to the state implementation plan (SIP) under the requirements of Texas Health and Safety Code, §382.017; Texas Government Code, Chapter 2001, Subchapter B; and 40 Code of Federal Regulations (CFR) §51.102 of the United States Environmental Protection Agency (EPA) concerning SIPs.

You may download all of the documents to be considered at this public hearing at the following Web site: http://www.tceq.texas.gov/airquality/sip/bart/haze_sip.html.

Your attendance and comments are invited. Comments may now be submitted online by accessing the e-comments Web page located at <http://www5.tceq.texas.gov/rules/ecomments>. If you have any questions or need additional information, please contact Ms. Margaret Earnest, (512) 239-4581.

Sincerely,



Walker Williamson
Air Quality Division

WW/kg

Enclosure

August 23, 2013

Mr. Richard Goodyear, Bureau Chief
Air Quality Bureau
New Mexico Environmental Department
525 Camino de los Marquez, Suite 11
Santa Fe, New Mexico 87505-1816

Dear Mr. Goodyear:

In accordance with 40 Code of Federal Regulations §51.102(d)(5), Procedural Requirements, Public Hearings, I am enclosing a Notice of Public Hearing scheduled by the Texas Commission on Environmental Quality to be held on September 24, 2013, at 2:00 p.m. in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. The purpose of this hearing is to receive testimony regarding proposed revisions to the state implementation plan (SIP) under the requirements of Texas Health and Safety Code, §382.017; Texas Government Code, Chapter 2001, Subchapter B; and 40 Code of Federal Regulations (CFR) §51.102 of the United States Environmental Protection Agency (EPA) concerning SIPs.

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Sincerely,



Walker Williamson
Air Quality Division

WW/kg

Enclosure

August 23, 2013

Mr. Garry Kaufman, Deputy Director
Air Pollution Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Dear Mr. Kaufman:

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Sincerely,



Walker Williamson
Air Quality Division

WW/kg

Enclosure

August 23, 2013

Ms. Kyra Moore
Chief, Air Pollution Control Program
Missouri Department of Natural Resources
1659 E. Elm Street
Jefferson City, Missouri 65102

Dear Ms. Moore:

In accordance with 40 Code of Federal Regulations §51.102(d)(5), Procedural Requirements, Public Hearings, I am enclosing a Notice of Public Hearing scheduled by the Texas Commission on Environmental Quality to be held on September 24, 2013, at 2:00 p.m. in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. The purpose of this hearing is to receive testimony regarding proposed revisions to the state implementation plan (SIP) under the requirements of Texas Health and Safety Code, §382.017; Texas Government Code, Chapter 2001, Subchapter B; and 40 Code of Federal Regulations (CFR) §51.102 of the United States Environmental Protection Agency (EPA) concerning SIPs.

You may download all of the documents to be considered at this public hearing at the following Web site: http://www.tceq.texas.gov/airquality/sip/bart/haze_sip.html.

Your attendance and comments are invited. Comments may now be submitted online by accessing the e-comments Web page located at <http://www5.tceq.texas.gov/rules/ecomments>. If you have any questions or need additional information, please contact Ms. Margaret Earnest, (512) 239-4581.

Sincerely,



Walker Williamson
Air Quality Division

WW/kg

Enclosure

August 23, 2013

Mr. Mike Bates, Chief
Air Division
Arkansas Department of Pollution Control & Ecology
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

Dear Mr. Bates:

In accordance with 40 Code of Federal Regulations §51.102(d)(5), Procedural Requirements, Public Hearings, I am enclosing a Notice of Public Hearing scheduled by the Texas Commission on Environmental Quality to be held on September 24, 2013, at 2:00 p.m. in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. The purpose of this hearing is to receive testimony regarding proposed revisions to the state implementation plan (SIP) under the requirements of Texas Health and Safety Code, §382.017; Texas Government Code, Chapter 2001, Subchapter B; and 40 Code of Federal Regulations (CFR) §51.102 of the United States Environmental Protection Agency (EPA) concerning SIPs.

You may download all of the documents to be considered at this public hearing at the following Web site: http://www.tceq.texas.gov/airquality/sip/bart/haze_sip.html.

Your attendance and comments are invited. Comments may now be submitted online by accessing the e-comments Web page located at <http://www5.tceq.texas.gov/rules/ecomments>. If you have any questions or need additional information, please contact Ms. Margaret Earnest, (512) 239-4581.

Sincerely,



Walker Williamson
Air Quality Division

WW/kg

Enclosure

August 23, 2013

Mr. Eddie Terrill, Director
Air Quality Division
Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677

Dear Mr. Terrill:

In accordance with 40 Code of Federal Regulations §51.102(d)(5), Procedural Requirements, Public Hearings, I am enclosing a Notice of Public Hearing scheduled by the Texas Commission on Environmental Quality to be held on September 24, 2013, at 2:00 p.m. in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle. The purpose of this hearing is to receive testimony regarding proposed revisions to the state implementation plan (SIP) under the requirements of Texas Health and Safety Code, §382.017; Texas Government Code, Chapter 2001, Subchapter B; and 40 Code of Federal Regulations (CFR) §51.102 of the United States Environmental Protection Agency (EPA) concerning SIPs.

You may download all of the documents to be considered at this public hearing at the following Web site: http://www.tceq.texas.gov/airquality/sip/bart/haze_sip.html.

Your attendance and comments are invited. Comments may now be submitted online by accessing the e-comments Web page located at <http://www5.tceq.texas.gov/rules/ecomments>. If you have any questions or need additional information, please contact Ms. Margaret Earnest, (512) 239-4581.

Sincerely,



Walker Williamson
Air Quality Division

WW/kg

Enclosure

Mr. Thomas Diggs, Assistant Director
Air Programs
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Mr. Diggs:

We have scheduled a public hearing in Austin on September 24, 2013, at 2:00 p.m. in Building E, Room 201S at the commission's central office located at 12100 Park 35 Circle. The purpose of this hearing is to receive public testimony concerning proposed revisions to the state implementation plan (SIP) under the requirements of Texas Health and Safety Code, §382.017; Texas Government Code, Chapter 2001, Subchapter B; and 40 Code of Federal Regulations (CFR) §51.102 of the United States Environmental Protection Agency (EPA) concerning SIPs. Enclosed for your information is a copy of the proposal that will be discussed and a hearing notice. Please submit comments regarding this proposal to Ms. Margaret Earnest at the address listed in the enclosed hearing notice. Comments may now be submitted online by accessing the e-comments Web page located at <http://www5.tceq.state.tx.us/rules/ecomments>.

If you have any questions or need additional information, please contact Ms. Margaret Earnest, (512) 239-4581.

Sincerely,

Walker Williamson
Air Quality Division

WW/kg

cc: Mr. Ron Curry, Regional Administrator, U.S. Environmental Protection Agency,
Region 6, Dallas

Enclosures

LOCAL-PROGRAM MAILING LIST

(A copy of this letter was sent to each person on this list)

1.

Mr. Al Melero
City of El Paso
Environmental Services
7968 San Paulo
El Paso, Texas 79907

cc: Ms. Ellen A. Smyth, P.E., Director, Environmental Services, City of El Paso
Ms. Lorinda Gardner, Regional Director, El Paso (*via electronic email*)
Mr. Kent Waggoner, Air/Water/Waste Program Manager, El Paso (*via electronic email*)

2.

Mr. Stephen Williams, Director
City of Houston
Department of Health and Human Services
8000 North Stadium Drive
Houston, Texas 77054

Attention: Mr. Ron Sandberg, Assistant Director for Environmental Control

cc: Mr. Arturo Blanco, Chief, Bureau of Air Quality Control, Department of Health and Human Services, Houston
Ms. Ashley K. Wadick, Regional Director, Houston (*via electronic email*)

3.

Mr. B.Z. Karachiwala, Division Director
Environmental Public Health
Harris County Public Health and Environmental Services
101 South Richey Road, Suite G
Pasadena, Texas 77506

cc: Ms. Ashley K. Wadick, Regional Director, Houston (*via electronic email*)

4.

Mark Guidry, M.D., M.P.H., Director
Galveston County Health District
Post Office Box 939
La Marque, Texas 77568

Attention: Mr. Ronald B. Schultz, Director, Pollution Control Division

cc: Ms. Ashley K. Wadick, Regional Director, Houston (*via electronic email*)

5.
Mr. Brian Boerner, Director
City of Fort Worth
Environmental Management Department
1000 Throckmorton Street
Fort Worth, Texas 76102

Attention: Mr. T. C. Michael, Program Manager, Air Quality

cc: Mr. Tony Walker, Regional Director, Dallas/Fort Worth (*via electronic email*)

6.
Mr. Eric Griffin, Assistant Director
Office of Environmental Quality
Management Services Department
1500 Marilla Street, Room L2FS
Dallas, Texas 75201

cc: Mr. Tony Walker, Regional Director, Dallas/Fort Worth (*via electronic email*)
Mr. David Miller, P.E., Manager, Air Pollution Control, Public Works and
Transportation Department, Dallas

7.
Sam Peacock, Ph.D.
City of Dallas Department of Aviation
LB16 Love Field Terminal Bldg.
8008 Cedar Springs Road
Dallas, Texas 75235

cc: Mr. Tony Walker, Regional Director, Dallas/Fort Worth (*via electronic email*)

COG-MPO MAILING LIST

(A copy of this letter was sent to each person on this list)

8.

Mr. Bob Dickinson, Director
Transportation and Environmental Resources
South East Texas Regional Planning Commission
2210 Eastex Freeway
Beaumont, Texas 77703-4929

cc: Ms. Heather Feldman, Regional Director, Beaumont (*via electronic mail*)
Ms. Kathryn Saucedo, Air Program Manager, Beaumont (*via electronic email*)

9.

Mr. Mike Medina, Assistant Director
El Paso Metropolitan Planning Organization
The Gateway Business Center
10767 Gateway Blvd. West, Suite 605
El Paso, Texas 79935

cc: Ms. Lorinda Gardner, Regional Director, El Paso (*via electronic email*)
Mr. Kent Waggoner, Air/Water/Waste Program Manager, El Paso (*via electronic email*)

10.

Mr. Michael Eastland, Executive Director
North Central Texas Council of Governments
P.O. Drawer 5888
Arlington, Texas 76005-5888

cc: Mr. John Promise, P.E., Director, Environment and Development, North Central
Texas Council of Governments, Arlington
Mr. Michael Morris, Director of Transportation, North Central Texas Council of
Governments, Arlington
Mr. Tony Walker, Regional Director, Dallas/Fort Worth (*via electronic email*)

11.

Mr. Ray Miller Jr., Assistant Director
Victoria Metropolitan Planning Organization
City of Victoria Planning Department
P.O. Box 1758
Victoria, Texas 77902-1758

cc: Ms. Susan Clewis, Regional Director, Corpus Christi (*via electronic email*)

12.
Mr. Mike Leary
Federal Highway Administration
Planning and Program Development
826 Federal Office Building
300 East 8th Street
Austin, Texas 78701

cc: Mr. David Van Soest, Regional Director, Austin (*via electronic email*)

13.
Ms. Dianna Noble, P.E., Director
Environmental Affairs Division
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701

cc: Mr. David Van Soest, Regional Director, Austin (*via electronic email*)

14.
Mr. Jack Foster, P.E., Director
Systems Planning Section
Transportation Planning and Programming Division
Texas Department of Transportation
P.O. Box 149217
Austin, Texas 78714-9217

cc: Mr. David Van Soest, Regional Director, Austin (*via electronic email*)

15.
Mr. Jack Steele, Executive Director
Houston-Galveston Area Council
3555 Timmons Lane, Suite 120
Houston, Texas 77027-6466

cc: Mr. Steve Howard, Chief Operating Officer, Houston-Galveston Area Council,
Houston
Mr. Alan Clark, Director, Transportation Planning, Houston-Galveston Area
Council, Houston
Ms. Ashley Wadick, Regional Director, Houston (*via electronic email*)

16.

Mr. Dean Danos, Executive Director
Alamo Area Council of Governments
8700 Tesoro Drive, Suite 700
San Antonio, Texas 78217

cc: Mr. Joel Anderson, Regional Director, San Antonio (*via electronic email*)
Ms. George Ortiz, Air Section Manager, San Antonio (*via electronic email*)

17.

Ms. Betty Voights, Executive Director
Capital Area Planning Council
6800 Burluson Road, Building 310, Suite 165
Austin, Texas 78744

cc: Mr. David Van Soest, Regional Director, Austin (*via electronic email*)

18.

Mr. David Cleveland, Executive Director
East Texas Council of Governments
3800 Stone Road
Kilgore, Texas 75662

cc: Mr. Leroy Biggers, Regional Director, Tyler (*via electronic email*)

Texas Mayors and Judges

The Honorable Sam Biscoe
Travis County Judge
County Courthouse
P. O. Box 1748
Austin, Texas 78767

The Honorable Lee Leffingwell
Mayor, City of Austin
P.O. Box 1088
Austin, Texas 78767

ELECTRONIC ANNOUNCEMENTS

2013 Federal Land Managers for Texas & adjacent states and EPA

National Park Service (correct 2-17-12)

Pat Brewer
NPS, Air Resources Division
PO Box 25287
Denver, Colorado 80225
Environmental Protection Specialist
303-969-2153 [Patricia F Brewer@nps.gov](mailto:Patricia_F_Brewer@nps.gov)

US Fish and Wildlife Service (correct 2-23-12)

Tim Allen
USFWS, National Wildlife Refuge System
Branch of Air Quality
7333 W. Jefferson Ave., Suite 375
Lakewood, CO 80235-2017
Meteorologist / Modeler
303-914-3802 [Tim Allen@fws.gov](mailto:Tim_Allen@fws.gov)

US Forest Service (revised 10-22-13)

Bret A. Anderson, USDA Forest Service
2150A Centre Avenue, Suite 368
Fort Collins, CO 80526
National Air Modeling Coordinator
970-295-5981 baanderson02@fs.fed.us

Judy Logan, FS National Forests: Ouachita, Ozark-St. Francis, Kisatchie, and National Forest Texas
Class I Areas: Caney Creek and Upper Buffalo

P.O. Box 1270
Hot Springs, AR 71902
501-321-5341 jlogan@fs.fed.us

Charles (Chuck) E. Sams, FS
Air Quality Program Manager for Eastern and Southern Regions
USDA Forest Service
1720 Peachtree Road
Atlanta, GA 30309
404-347-4083 csams@fs.fed.us

EPA –Region 6 Dallas

Joe Kordzi Kordzi.Joe@epa.gov (EPA Project Manager for Regional Haze)
Michael Feldman Feldman.Michael@epa.gov (SIP modeler)
Erik Snyder, Regional Air Modeler
Guy Donaldson, Chief of Air Planning Section
Tom Diggs, Associate Director of Air Programs

Electronic Announcement

NOTE: M. Earnest, Project Manager sent to CenSARA, who sent to all Censara states, including OK, LA, AR, MO

OK - Lee.Warden@deq.ok.gov, eterrill@deq.ok.gov, Beverly.Botchlet-Smith@deq.ok.gov, Cheryl.Bradley@deq.ok.gov, heather.lerch@deq.ok.gov, Jacob.Petre@deq.ok.gov, Robert.Singletary@deq.ok.gov, scott.thomas@deq.ok.gov

LA - Vivian Aucoin, Gilberto.Cuadra@LA.GOV, john.babin@la.gov, Vennetta.Hayes@LA.GOV

AR - MAC@adeq.state.ar.us, pettyjohn@adeq.state.ar.us, bates@adeq.state.ar.us, davis@adeq.state.ar.us (Mark McCorkle, Mary Pettyjohn, Mike Bates, Tony Davis)

MO - ashley.jurgensmeyer@dnr.mo.gov, kyra.moore@dnr.mo.gov, patricia.maliro@dnr.mo.gov, stacy.allen@dnr.mo.gov, stephen.hall@dnr.mo.gov, wendy.vit@dnr.mo.gov

From: Theresa Pella <tpella@censara.org>

Sent: Wednesday, June 19, 2013 11:12 AM

To: eterrill@deq.ok.gov; Ashley Jurgensmeyer; Beverly Botchlet-Smith; Bradley, Cheryl; Brian Kozisek; Brown, David [DNR]; Catharine Fitzsimmons; David L. Brown; Donna Huff; Gilberto Cuadra; Heather Lerch; Jim Price; Jocelyn Mellberg; John Babin; John Minter; Kathy Pendleton; Kim Herndon; Kyra Moore; Lee Warden; Lisa Alam; Lynn Deahl; Margaret Earnest; Mark McCorkle; Mary Pettyjohn; Matthew Johnson; Mike Bates; Miles Stotts; Patricia Maliro; Petre, Jacob; Rick Brunetti; Scott Thomas; Shelley Schneider; Singletary, Robert; Stacy Allen; Stephen Hall; Terry Salem; Tom Gross; Tony Davis; Vennetta Hayes; Vivian Aucoin; Walker Williamson; Wendy Vit; Wendy Walker

Subject: Texas proposal for Regional Haze Five Year Progress Report

Attachments: 13013SIP_pro_package.pdf

Categories: saved, Urgent

FYI – if you have questions, Margaret’s contact info is included in the info below.

Theresa,

Please share with our CenSARA partners. Feel free to put links to our proposed regional haze sip or just link to the TCEQ page. We look forward to seeing other CenSARA haze 5-year reports.

Thanks,

Margaret

Margaret Earnest
SIP Planner, Office of Air
Texas Commission on Environmental Quality
Austin, TX
512-239-4581

From: Margaret Earnest

Sent: Tuesday, June 18, 2013 5:46 PM

To: Kordzi.joe@Epa.gov; Tim_Allen@fws.gov; Patricia_F_Brewer@nps.gov; baanderson02@fs.fed.us

Cc: tpella@censara.org; Walker Williamson; Donaldson.guy@Epa.gov
Subject: Texas Commission approved Proposed 2014 Five-Year Regional Haze SIP revision; Sending for your 60-day review, due back by August 20, 2013

Hello Federal Land Managers and EPA Region 6,

On Tuesday June 18, 2013, the TCEQ commissioners approved the Texas proposal for the 2014 Five-Year Regional Haze SIP Revision. As required, Texas is providing the Federal Land Managers and EPA a 60-day comment period before the public comment period. Texas has allocated June 19 through August 20, 2013 to be your comment period.

The SIP narrative is attached with links to the SIP and 7 appendixes. This is exactly what the commissioners approved today. No changes were made from 19-day backup documents. Please call me if you have any troubles downloading. Texas will not be sending paper copies or discs for the proposal to save resources. Texas will send discs for the final commission adopted 2014 Five-Year Regional Haze SIP Revision. All SIP documents are also available on the web for the public.

- * 2014 Proposed SIP Narrative
(www.tceq.texas.gov/assets/public/implementation/air/sip/haze/13013SIP_pro_package.pdf)
- * 2014 Proposed Appendixes
 - Appendix A: Regional Haze Rule
(www.tceq.texas.gov/assets/public/implementation/air/sip/haze/13AppA_RHR.pdf)
 - Appendix B: Petroleum Refinery Consent Decree Emission Reduction Assessment for Ozone and Regional Haze SIPs
(www.tceq.texas.gov/assets/public/implementation/air/sip/haze/13AppB_RefineryCDs.pdf)
 - Appendix C: Mobile Source Control Programs Applicable to Texas
(www.tceq.texas.gov/assets/public/implementation/air/sip/haze/13AppC_MobileControls.pdf)
 - Appendix D: TERP Report to 83rd Legislature, 2011-2012
(www.tceq.texas.gov/assets/public/implementation/air/sip/haze/13AppD_Terp.pdf)
 - Appendix E: TCEQ SO2 Special Inventory
(www.tceq.texas.gov/assets/public/implementation/air/sip/haze/13AppE_SO2Inventory.pdf)
 - Appendix F: IMPROVE Data Results by State
(www.tceq.texas.gov/assets/public/implementation/air/sip/haze/13AppF_ImproveApp_g.pdf)
 - Appendix G: Statistical Calculations
(www.tceq.texas.gov/assets/public/implementation/air/sip/haze/13AppG_Calc.pdf)

I will be contacting you in the near future for phone consultation dates regarding this SIP.

2 other sites of interest: Texas web page with 2009 and 2014 regional haze SIPs:

www.tceq.texas.gov/airquality/sip/bart/haze_sip.html

2009 Regional Haze SIP Appendixes

www.tceq.texas.gov/airquality/sip/bart/haze_appendices.html

Thanks,

Margaret Earnest, SIP Planner, Office of Air
Texas Commission on Environmental Quality, Austin, TX

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

NOTICE OF PUBLIC HEARING ON PROPOSED REVISIONS TO THE STATE IMPLEMENTATION PLAN

The Texas Commission on Environmental Quality (commission) will conduct a public hearing to receive testimony regarding proposed revisions to the state implementation plan (SIP) under the requirements of Texas Health and Safety Code, §382.017; Texas Government Code, Chapter 2001, Subchapter B; and 40 Code of Federal Regulations §51.102 of the United States Environmental Protection Agency (EPA) concerning SIPs.

The proposed SIP revision would satisfy the Regional Haze Rule requirements to submit a progress report for the mandatory Class I federal areas in the state in the form of SIP revisions every five years (40 CFR §51.308(g)). According to the rule, the deadline for Texas to submit a five-year regional haze SIP revision is March 19, 2014, five years after submittal of the initial regional haze SIP revision. Section 51.308(g) provides that the report must evaluate improvement towards the reasonable progress goal for each Class I area located within the state and in each Class I area outside the state that may be affected by emissions from Texas.

The commission will hold a public hearing on this proposal in Austin on September 24, 2013 at 2:00 p.m. in Building E, Room 201, at the commission's central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Joyce Spencer-Nelson, Air Quality Division at (512) 239-5017. Requests should be made as far in advance as possible.

Written comments may be submitted to Margaret Earnest, MC 206, Air Quality Division, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-6188. Electronic comments may be submitted at: <http://www5.tceq.texas.gov/rules/ecomments>. File size restrictions may apply to comments being submitted via the *eComments* system. All comments should reference Non-Rule Project Number 2013-013-SIP-NR. The public comment period closes on October 1, 2013. Federal Land Manager comments will be available on August 21, 2013. Copies of the proposed SIP and Federal Land Manager comments can be obtained from the commission's Web site at http://www.tceq.texas.gov/airquality/sip/bart/haze_sip.html. For further information, please contact Margaret Earnest, Air Quality Planning, (512) 239-4581.

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • tceq.texas.gov

How is our customer service? tceq.texas.gov/goto/customersurvey

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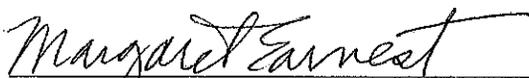
HEARING

HEARING OFFICER REPORT

I am the hearing officer assigned to conduct the public hearing regarding the proposed 2014 Five-Year Regional Haze State Implementation Plan Revision; this report evaluates improvement towards the reasonable progress goal for each Class I area located within the state and in each Class I area outside the state that may be affected by emissions from Texas. Non-Rule Project Number 2013-013-SIP-NR.

A public hearing was scheduled for September 24, 2013 at 2:00 p.m. in Building E, Room 201, at the Texas Commission on Environmental Quality's central office located at 12100 Park 35 Circle in Austin, Texas.

At 1:30 p.m., the room was open and TCEQ staff members were available to discuss the proposal. At 2:00 p.m., TCEQ staff and a court reporter were present and ready to open the hearing for public comment. After waiting for 20 minutes, no one had arrived to make comments on the record. Therefore, the public hearing was not formally opened for comment and a transcript was not prepared.



Hearing Officer

September 24, 2013

Date signed

Texas Commission on Environmental Quality

Public Hearing Registration

September 24, 2013
2:00 p.m.

1 - 2:30 TCEQ available

Non-Rule Project No.: 2013-013-SIP-NR

Short Title: Proposed 2014 Five-Year Regional Haze State Implementation Plan Revision

Location: Austin, TCEQ Headquarters, Building E, Room 201

Concerning: Proposed SIP comments

Name (Please Print)	Representing	Presenting Oral Testimony? (Circle One)
<i>No one attended</i>		Yes No
<i>no public participants</i>		Yes No
		Yes No

Margaret V. Samard
9-24-13 2:30pm

COMMENTS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

NATIONAL PARK SERVICE

UNITED STATES FISH AND WILDLIFE SERVICE

UNITED STATES FOREST SERVICE

NATIONAL PARK CONSERVATION ASSOCIATION AND SIERRA CLUB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

EPA Comments on the Texas Regional Haze Progress Report

9/30/13

1. Section 51.308(g)(1) and (2) of the Regional Haze Rule (RHR) require that Texas provide a description of the status of the implementation of all measures included in the SIP for achieving reasonable progress goals for mandatory Class I Federal areas both within and outside Texas, and a summary of the emissions reductions achieved throughout Texas through implementation of those measures. The following comments address Texas' response to this requirement.
 - a. Texas states on page 2-1. "The EPA's 1999 Rule required the installation of Best Available Retrofit Technology (BART) or equivalent emission controls for emission sources constructed before 1977 that were not regulated under subsequent provisions of the Federal Clean Air Act (FCAA) (EPA 2005a)." Neither the Clean Air Act (CAA) nor the RHR specify that BART is limited to emission sources that were not regulated under subsequent provisions of the CAA. Therefore Texas should correct this statement.
 - b. In addressing the status of CAIR, Texas only presents a general summary of the NO_x and SO₂ CAIR caps for the state. In order to properly assess the true impact of CAIR and compare actual emission reductions to those included in the CENRAP modeling, it would be helpful if Texas presented a unit-by-unit summary of the impact of CAIR on the emissions in the state. Such a summary could include a summary of which units included in CAIR reduced their SO₂ and NO_x emissions and which units acquired allowances. It would be especially helpful if Texas would provide details of any future controls it knows will be installed by CAIR sources.
 - c. There are a number of programs Texas cites in Section 2.6, including rules related to ozone nonattainment, rules related to EGU generation in East and central Texas, and SB7. However, besides CAIR, for which it mentions emission reductions, Texas has not estimated the tonnage of emission reductions achieved from these programs. It would be helpful in understanding the impact of these programs if this information was provided.
 - d. In Section 2.11, Texas notes that 4,700 tpy of SO₂ was avoided due to shut downs of EGUs. It would be helpful to have a listing by unit of these shut downs and a summary of the NO_x and SO₂ emissions reductions resulting from those shut downs.
 - e. Texas provides emissions inventory trends. Texas should explain which estimates are significantly different from CENRAP estimates. For example, there seems to be a very large adjustment to PM estimates due to changes in the treatment of fugitive road dust. Was this factored into CENRAP estimates? If not how might it be expected to change the projections for visibility improvements? Similarly, how do NO_x and VOC projections in CENRAP modeling compare to the more

recent estimate for area sources considering the growth in oil and gas production in many areas of the State? Another area of interest are the CENRAP estimates for SO_x emissions from area sources and how these might compare to more recent emissions inventory estimates.

2. Section 51.308(g)(3) requires that Texas assess the current visibility conditions for the most impaired and least impaired days; the difference between current visibility conditions for the most impaired and least impaired days and baseline visibility conditions; and the change in visibility impairment for the most impaired and least impaired days over the past 5 years. The following comments address Texas' response to this requirement.
 - a. Texas uses the report, *Interagency Monitoring of Protected Visual Environments (IMPROVE) Report V (2011), Appendix G: Regional Haze Rule IMPROVE Progress Tracking Site Data Results by State*. This report draws upon monitoring data up to 2009. As our guidance¹ indicates, "For "current visibility conditions, the reports should include the 5-year average that includes the most recent quality assured public data available at the time the state submits its 5-year progress report for public review." This would include data at least through 2011. Therefore, Texas should revise its report to include this data. We note that there is no data for the Wichita Mountains for 2009, due to an equipment failure that resulted in that monitoring being offline for some time. We are in the process of working with the FLMs in reconstructing that data, and will forward it when it is available. We do not anticipate that data will be available for inclusion in the TX 5-year report.
 - b. As required, Texas assesses the visibility conditions at Big Bend and the Guadalupe Mountains, on both the 20% worst and 20% best days. This stems from the basic requirement in section 51.308(d)(1) that the reasonable progress goals must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period. For both Class I areas, Texas notes that progress is being made on the 20% worst days. However, Big Bend exhibits a slight degradation of visibility on the 20% best days. In contrast, the Texas regional haze SIP predicted a slight visibility improvement on the 20% best days. In light of the above, Texas should investigate, using more recent data, whether Big Bend continues to exhibit a slight degradation on the 20% best days. Should more recent data reinforce a conclusion that visibility is degrading at Big Bend on the 20% best days, Texas should conduct an in depth investigation of the cause of this degradation.
 - c. Texas should further evaluate the visibility conditions observed on the 20% worst days and identify the changes in contributions to visibility impairment for each

¹ General Principles for the 5-Year Regional Haze Progress Reports for the Initial Regional Haze State Implementation Plans (Intended to Assist States and EPA Regional Offices in Development and Review of the Progress Reports), April 2013

species that impacts visibility. For example, the difference in visibility impact from sulfate should be assessed to provide an understanding of how reductions in sulfate emissions are affecting visibility. A similar analysis should be performed for the 20% best days.

3. Section 51.308(g)(6) requires Texas to make an assessment of whether its SIP elements and strategies are sufficient to enable it, or other States with mandatory Federal Class I areas affected by emissions from it, to meet all established reasonable progress goals. As section 51.308(d)(1) indicates, the reasonable progress goals must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period. Section 51.308(h) requires that Texas perform a review of the adequacy of its SIP. The following comments address Texas' response to this requirements.
 - a. If, after incorporating more recent data as discussed above, TX confirms that Big Bend still experiences a slight degradation on the 20% best days, it should include this information in the assessment of its conclusion under section 51.308(g)(6) and (h) regarding Big Bend.
 - b. In addition to the visibility degradation on the 20% best days noted above for Big Bend, Texas also reports that the Wichita Mountains Class I area is also experiencing a slight degradation in visibility on the 20% best days. As is discussed in the Texas regional haze SIP, sources within Texas have a much greater impact on the visibility at the Wichita Mountains than do the sources in Oklahoma. Adopting the controls discussed in the Texas SIP, the Oklahoma SIP predicted improvement on the 20% best days for the Wichita Mountains. Texas should therefore consider this fact in its assessments of sections 51.308(g)(6) and (h) regarding the Wichita Mountains.
4. Texas makes a number of commitments in its SIP regarding the need for further study for various items. It would be helpful if Texas included an update of these commitments in its progress report. Below is a summary:
 - a. In section 10.5 of the Texas Regional Haze SIP, the TCEQ states: "In the five-year periodic progress report required by 40 CFR §51.308(g), the TCEQ plans to review emissions inventory and permit information to evaluate the accuracy of the predicted emissions used in the CENRAP modeling." As discussed in 1.b. above, a unit-by-unit analysis of reductions due to CAIR compliance and a comparison of actual reductions and planned reductions to the CENRAP predictions would be useful to assess the reductions and visibility improvements due to reductions made in response to CAIR.
 - b. In Section 10-1.2 of the Texas Regional Haze SIP, TCEQ states "The TCEQ will continue its research analysis of emissions from oil and gas production. We will

re-examine these sources in the five-year update of the Regional Haze SIP. By that time, we expect to have much improved information on the inventory and the economic and technical feasibility of additional controls.” Texas should include a more detailed discussion of emission inventory development for oil and gas production that has occurred since the CENRAP emission inventories were developed, as well as a comparison of current oil and gas emission estimates to those included in the 2002 and 2018 CENRAP emission inventories. Texas should also include a discussion on the results of any additional analysis on the technical feasibility and cost-effectiveness of controls for these sources.

- c. In Section 5.4 of the Texas Regional Haze SIP discussing the estimates of natural conditions, TCEQ states “Since the natural concentrations and statistics of all components important for Regional Haze have significant uncertainties, the TCEQ will be continuing to evaluate data, modeling, and any other sources of information, as well as potentially devising additional monitoring, sampling and/or analysis schemes, in order to further improve these estimates. Furthermore, the TCEQ plans to work with the EPA, FLMs, and other experts and researchers to refine natural conditions estimates for future five-year reports and major regional haze SIP revisions.” Texas should provide a detailed discussion of any ongoing analysis and efforts to evaluate and refine estimates of natural conditions for the Texas Class I areas, as well as any ongoing consultation with New Mexico concerning establishing consistent natural conditions for Carlsbad Caverns and Guadalupe Mountains. These two Class I areas are represented by a single monitor and separated by a small distance.

NATIONAL PARK SERVICE



United States Department of the Interior

NATIONAL PARK SERVICE

Air Resources Division

P.O. Box 25287

Denver, CO 80225-0287

IN REPLY REFER TO:

N3615 (2350)

August 20, 2013

Ms. Margaret Earnest
Office of Air
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Dear Ms. Earnest:

Thank you for the opportunity to review and comment on the Texas Commission on Environmental Quality (TCEQ)'s proposed Five Year Regional Haze State Implementation Plan (SIP) Revision. The proposed Five-Year Review demonstrates that Texas has achieved emissions reductions from source sectors included in the Long Term Strategy in the Texas Regional Haze SIP. However the Review does not demonstrate that Texas is implementing all the reasonable control measures necessary to reduce Texas' proportional contribution to visibility impairment at Class I areas in Texas and impacted by Texas. Our 2008 comments on the draft SIP requested more complete justification on why Texas was relying on existing state and federal requirements and why no additional controls were required for regional haze. Since EPA has not taken action on Texas' 2009 Regional Haze SIP, we do not know if EPA accepts that Texas is implementing all reasonable controls measures.

Below we compare TCEQ' review to the requirements of 40 CFR 51.308(g) and EPA's 2013 General Principles for the Five-Year Regional Haze Progress Report. In our attached comments we discuss concerns that we raised with the 2008 draft SIP that were not addressed in the 2009 SIP submittal to EPA.

Visibility Trends

In Chapter 3, TCEQ provides a summary table showing that visibility at Big Bend and Guadalupe Mountains National Parks (NP) on the 20% worst days improved slightly between the baseline period 2000-2004 and the subsequent 5 year period 2005-2009. On the 20% best days, visibility was either slightly better or slightly worse than the baseline period. We request that Texas discuss the pollutant contributions to visibility impairment and how those contributions

have changed over the decade. TCEQ needs to establish which pollutants are most important to control to improve visibility on the 20% worst days, and which pollutants are responsible for the slight degradation on the 20% best days at Big Bend NP. TCEQ has included the IMPROVE report of 2005-2009 data as an appendix. We request that TCEQ discuss in the progress report the pollutant contributions for the Class I areas in Texas and impacted by Texas emissions, so that the reader understands how the emissions reductions discussed in Chapter 2 relate to visibility improvement.

EPA's 2013 General Principles for the Five-Year Regional Haze Progress Report instructs states to use the most recent IMPROVE data. IMPROVE data is currently available through 2011. For many Class I areas, including Big Bend and Guadalupe Mountains National Parks, visibility improvement is greater in the most recent 2007-2011 period than the 2005-2009 period. We request that TCEQ discuss the IMPROVE data through 2011.

Best Available Retrofit Technology (BART)

In Chapter 2, TCEQ asserts that none of the 125 potentially BART-eligible sources were required to install controls for BART because permitted emissions do not contribute to an impact at a Class I area greater than a 0.5 dv contribution threshold. As we commented in 2008, given the large number of sources, TCEQ should have considered the cumulative impacts of these sources and used a lower threshold to consider controls for an individual source. Otherwise, the cumulative impact of these sources is not addressed.

TCEQ asserts that to date, under the requirements of the Clean Air Interstate Rule (CAIR), Electric Generating Units (EGU) in Texas have reduced sulfur dioxide (SO₂) emissions by 23% and nitrogen oxide (NO_x) emissions by 44%. We request that TCEQ provide additional source specific information that indicates when sources installed controls or when they will install controls. From the information provided, we cannot tell if Texas is on track to meet the EGU reductions included in the CENRAP and WRAP modeling that was used to establish reasonable progress goals in Texas and neighboring states.

Status of Control Measures

Chapter 2 discusses consent decrees that have been implemented after the CENRAP modeling and that represent additional emissions reductions that were not included in the reasonable progress goals. However, it is not clear if the inventories in Chapter 4 include the emission reductions from these latest consent decrees and rule requirements (e.g. Owens Glass, MATS rule), or only those controls included in the CENRAP inventories. For example, are emissions reductions from the Texas Emissions Reduction Plans and grants programs (Chapter 2.9) included in inventories reported in Chapter 4? Please clarify.

Section 2.6.1 should be updated to include latest EPA and court actions on CAIR and the Cross State Air Pollution Rule.

Emissions Inventory

TCEQ presents emissions inventories for 2005, 2008, and 2011. We commend TCEQ for including the 2011 National Emissions Inventory data. Please provide tables with the 2002 and 2018 inventory data from the 2009 SIP so that the reader can compare previous and current

inventory projections. We agree that there are differences in inventory assumptions between years that complicate interpretation; these differences should be identified.

As discussed in the attached comments, in its 2009 SIP submittal TCEQ noted that CENRAP overestimated SO₂ emissions from areas sources by 96,000 tons per year (tpy). It appears that in the progress report, TCEQ did not correct this error in Figure 4-1 for 2002 and 2018 SO₂ emissions. Please clarify.

According to the Progress Report (pp 4-5):

The 2008 area source inventory was enhanced with additional categories as part of the commission's initiative to improve inventory estimations. In 2005, limited categories were used for the oil and gas inventory. The 2008 inventory was expanded with emissions estimates from additional oil and gas categories and improved fertilizer and livestock categories. These improvements combined with an increase in oil and gas activity increased the 2008 VOC emissions estimates. The improved agricultural estimates resulted in a decrease in the ammonia estimates.

Why did area source emissions of NO_x and VOC decrease between 2008 and 2011? Please present oil and gas emissions separately from all area source emissions so that the reader can understand the contributions from oil and gas. In other states, emissions due to oil and gas are increasing, often in the same remote and rural areas where national parks are located. Please present data specific to oil and gas and clarify if these data account for the refineries consent decree.

Natural Visibility Conditions

In its 2009 SIP submittal, TCEQ proposed revisions to the default natural visibility conditions. In the proposed Five-Year Review, TCEQ does not discuss natural conditions. Visibility improvement in Figures 5-1 through 5-4 is truncated to the period 2002-2018 and does not show the reader the full glidepath to natural visibility conditions by 2064. Please use the same vertical axis for the 20% worst and 20% best visibility days in Figures 5-1 through 5-4, including glidepaths to 2064. Please show the average deciview for the 20% worst days for each year and rolling 5-year averages.

In our attached comments we illustrate both the default and natural conditions. TCEQ estimated a higher value for natural visibility conditions on the 20% worst days than the EPA default value. Although this resulted in a shallower glidepath than the default, the CENRAP CMAQ modeling upon which Texas relied still projected that Class I areas in Texas would not meet the revised uniform rate of progress by 2018.

Reasonable Progress

Even after implementation of CAIR, in 2011 Texas EGU emitted 433,782 tons per year of SO₂ and 143,782 tons per year of NO_x. It is difficult to believe that these cumulative emissions do not impair visibility in Class I areas in TX and nearby states and that additional reductions beyond those required by CAIR are not reasonable compared to costs borne by EGU in other

states. Texas has not demonstrated that it is requiring all reasonable controls necessary to address its contribution to visibility impairment at Class I areas in neighboring states.

Summary

We disagree with Section 5.6, Summary Assessment, that TCEQ has demonstrated that Texas' current strategy is adequate for Class I areas in Texas and in areas affected by Texas to meet all established reasonable progress goals. We request that TCEQ compare current visibility conditions to the 2018 goals for Class I areas in Texas and those Class I areas impacted by Texas to show that reductions are sufficient and on track to meet reasonable progress goals by 2018. What additional emission reductions were included in the CENRAP modeling that are enforceable but have not been implemented?

We request that TCEQ discuss in Chapter 5 the CENRAP air quality modeling using the particulate source apportionment test (PSAT). This analysis estimated states' contributions to sulfate and nitrate at each Class I area. Texas contributed up to 28% of the sulfate at neighboring Class I areas. In the attached comments, we have included charts apportioning contributions to visibility impairment at Big Bend and Guadalupe Mountains NPs, and request that Texas provide similar charts for Class I areas outside its borders.

Texas has not demonstrated that implementation of existing Texas and federal rules are the only emission reductions that are reasonable to implement by 2018 to satisfy the requirements of the regional haze rule. Without additional discussion of Texas' contribution to Class I areas outside Texas, we cannot agree that TCEQ has demonstrated that the existing SIP is adequate for continued progress toward established reasonable progress goals in other states.

We appreciate the opportunity to work closely with Texas to improve visibility at Class I national park units. If you have questions, please contact Pat Brewer at 303-969-2153 or Don Shepherd at 303-969-2075.

Sincerely,



Susan Johnson
Chief, Policy, Planning, and Permit Review Branch

Enclosure

cc:

Joe Kordzi
EPA Region 6
1445 Ross Ave., Dallas, TX 75202-2733

**NPS Comments on the 2009 Texas Regional Haze SIP not addressed in the 2013 draft
Regional Haze Progress Report**
August 19, 2013

In its 2009 SIP submittal, Texas noted that:

The area source SO₂ emissions used by the CENRAP in their modeling are significantly higher than the 15,633 tons per year (tpy) reported by the TCEQ. The difference is industrial and residential coal combustion which was erroneously included in the CENRAP inventory. The TCEQ has been working with CENRAP to correct this error for future modeling, but there was not sufficient time to remodel with the more accurate TCEQ-supplied inventory. CENRAP's modeled emissions estimate is not expected to significantly impact visibility estimates for 2018 because of the relatively small contribution from these Texas sources on Class I areas.

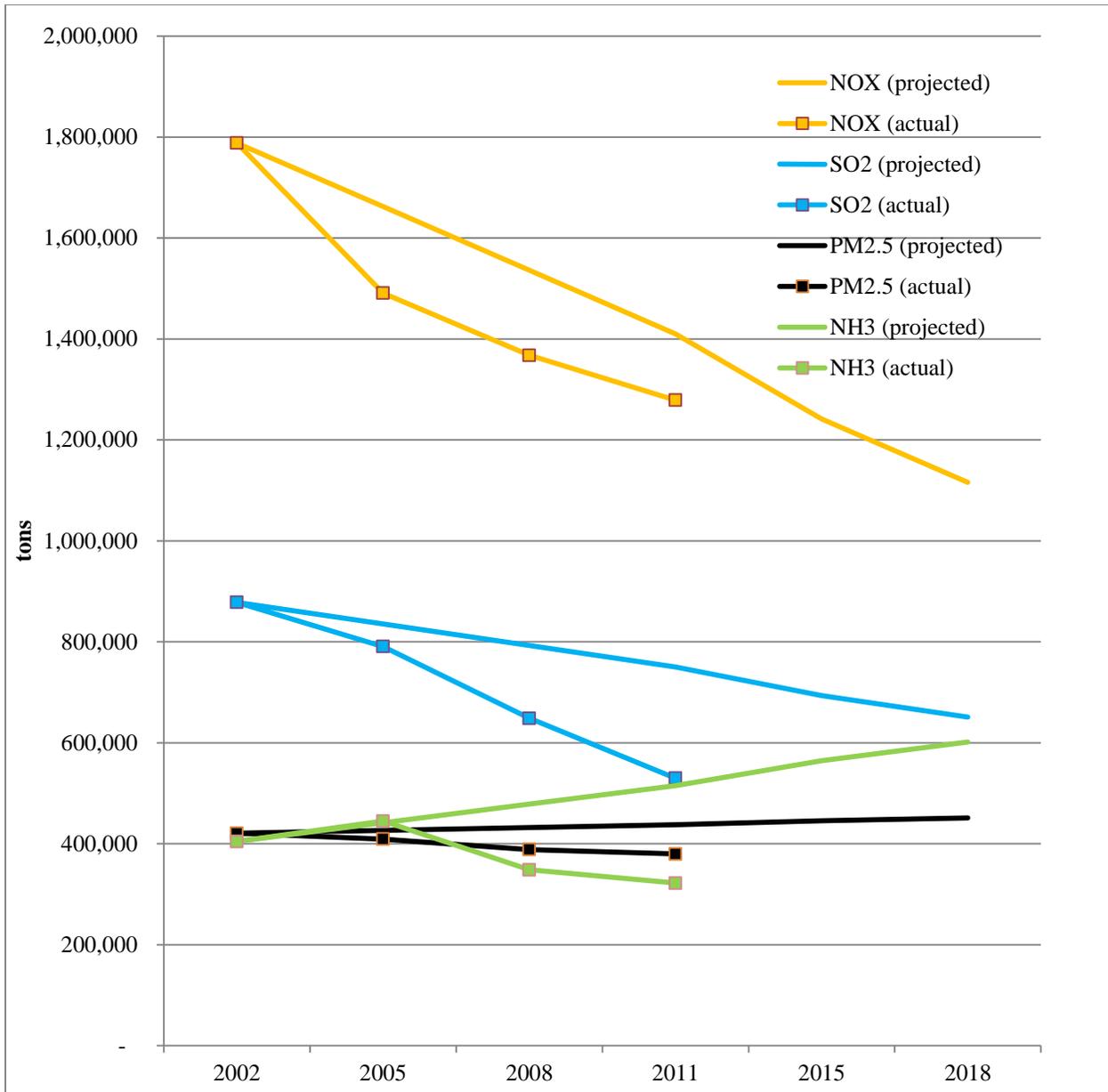
We request that Texas update this statement, "TCEQ has been working with CENRAP to correct this error for future modeling..."

CENRAP modeled 111,853 tpy of SO₂ from area sources, and 974,457 tpy SO₂ from all sources in 2002. The 96,000 tpy error is almost 10% of the SO₂ total. Figure 4-1 of the Progress Report appears to have used the erroneous value for 2002 SO₂; if that is true, then Figure 4-1 should be revised to use the correct value.

CENRAP appears to have carried the area source SO₂ overestimation into 2018¹ by estimating 114,138 tpy; this is a 2% increase in these incorrect emissions. Applying that same 2% increase to the correct 2002 area source SO₂ emissions yields 15,952 tons, a difference of 98,156 tpy, This corrected value should also be reflected in Figure 4-1 of the progress report.

Although Tables 4-1 thru 4-3 in the Progress Report show much lower (corrected?) values for area source SO₂ between 2005 and 2011, the 2002 and 2018 endpoints in Figure 4-1 continue to show the overestimated area source SO₂ estimates. We also question the value of including CO in Figure 4-1 because it causes the vertical axis to be compressed. Instead, we suggest showing ammonia emission trends because background ammonia concentration is a critical factor in particle formation. We have included below an example of how Figure 4-1 might look with corrected estimates for area source SO₂ and ammonia emissions (instead of CO). Our results indicate that actual emissions are tracking below the future projections.

¹ According to Texas, "The CENRAP projected the 2002 base year emissions for Texas and other central states to the 2018 future planning year primarily using the Economic Growth Analysis System (EGAS5) for non-electric generating unit point sources, area sources, and non-road mobile sources..."



Total Emissions corrected to remove the CENRAP overestimate of SO2 area sources

In its 2009 “Response to Comments” document, Texas stated:

The EPA, NPS, and FWS questioned that CENRAP’s modeled emissions estimate was not expected to significantly impact visibility estimates for 2018 because of the relatively small contribution from these Texas sources on Class I areas. The EPA, NPS and FWS commented that data presented in the SIP narrative suggested that Texas sources’ emissions constitute the majority of visibility impact at the Wichita Mountains Salt Creek, and Caney Creek; and indicated that Texas sources’ emissions have a great impact at White Mountain. The EPA, NPS and FWS asked that the TCEQ explain the specific difference between the reported TCEQ sulfur dioxide inventory and the CENRAP modeled inventory as well as the rationale for why TCEQ considers Texas’ contribution to visibility impairment in neighboring states’ Class I areas to not be significant.

The SIP statement that “the SO2 emissions modeled by the CENRAP are significantly higher than the 15,633 tpy reported by the TCEQ” was intended to refer specifically to the area sources of industrial and residential coal combustion that were over-represented in the CENRAP modeling inventory, not all SO2 emissions. The commission did not intend to imply that emissions or emissions contributions to visibility from its sources were insignificant. The erroneously modeled industrial and residential coal combustion sources are typically individually smaller and distant from Class I areas. As a result, their representation in the model does not significantly detrimentally affect visibility estimates or model conclusions. In response to this comment, additions were made to Chapter 7: *Emissions Inventory* and Appendix 7-1 of the SIP revision for clarity.

We request that Texas provide support for its assumptions that, “The erroneously modeled industrial and residential coal combustion sources are typically individually smaller and distant from Class I areas. As a result, their representation in the model does not significantly detrimentally affect visibility estimates or model conclusions.”

In its 2009 SIP submittal,² Texas noted that:

The CAIR cap is the total allowable emissions of SO2 from EGUs in Texas under CAIR. The IPM model analysis used by CENRAP predicts that by 2018 EGUs in Texas will purchase approximately 125,000 tpy of emissions allowances from out of state. The TCEQ requested that key EGUs in Texas review and comment on the predictions of the IPM model. However, no EGU made an enforceable commitment to any particular pollution control strategy and preferred to retain the flexibility offered by the CAIR program.

In the five-year periodic progress report required by 40 CFR §51.308(g), the TCEQ plans to review emissions inventory and permit information to evaluate the accuracy of the predicted emissions used in the CENRAP modeling.

What did TCEQ find?

Natural Conditions

In its 2009 SIP submittal,³ Texas states, “The TCEQ plans to work with the EPA, Federal Land Managers (FLMs), and other experts and researchers as Texas continues to refine natural condition estimates for future five-year reports and ten-year Regional Haze SIP revisions.” We encourage Texas to begin that effort with the FLMs.

In its 2009 “Response to Comments” document, TCEQ stated:

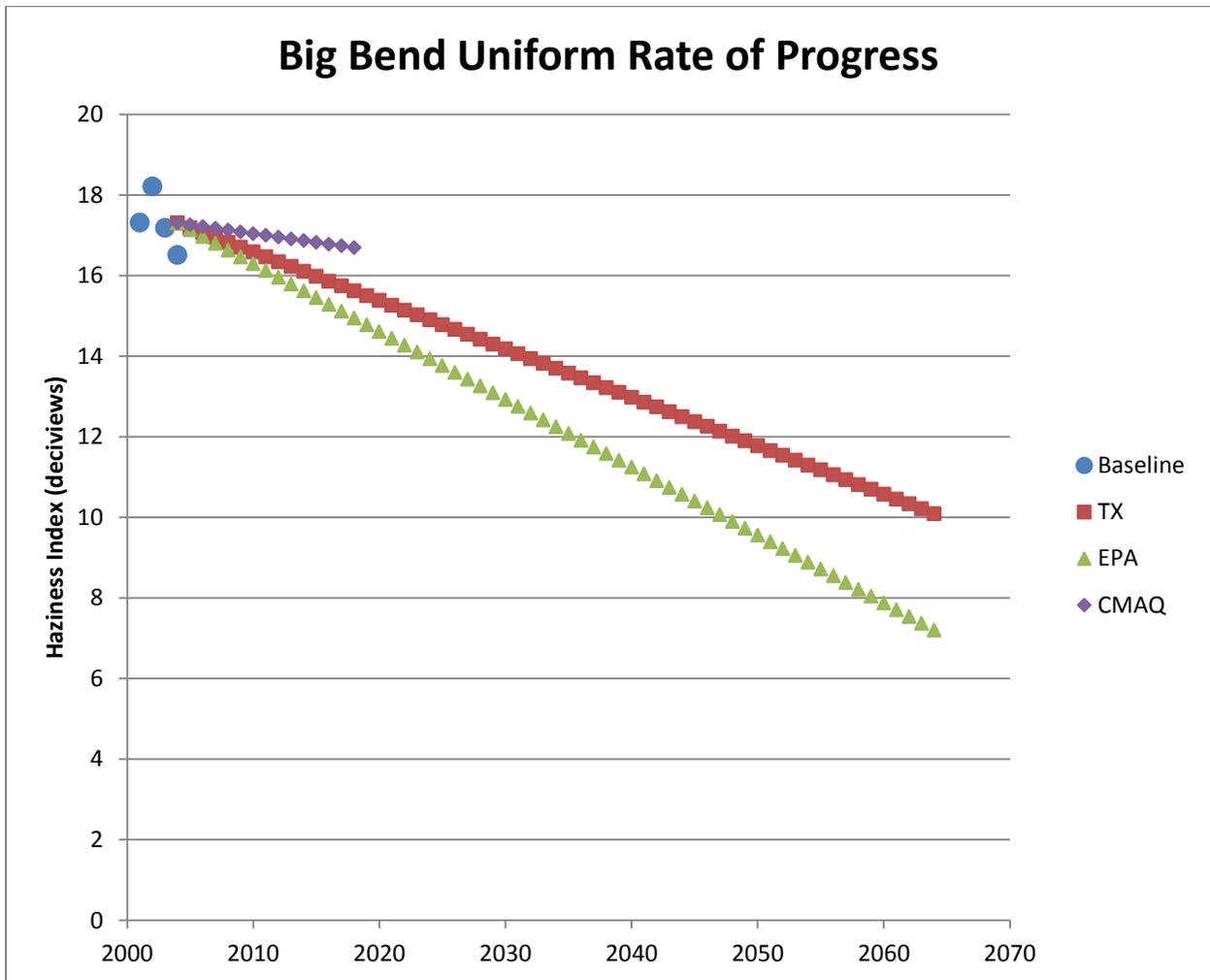
The NPS, FWS, and FS acknowledged Texas’ right to develop its own estimates of natural conditions, as established in 40 Code of Federal Regulations (CFR) 51.308; however, the FLMs requested that the EPA default estimates of natural conditions given equal weight in all tables, plots, and predictions that involve or depend upon an estimate of natural conditions.

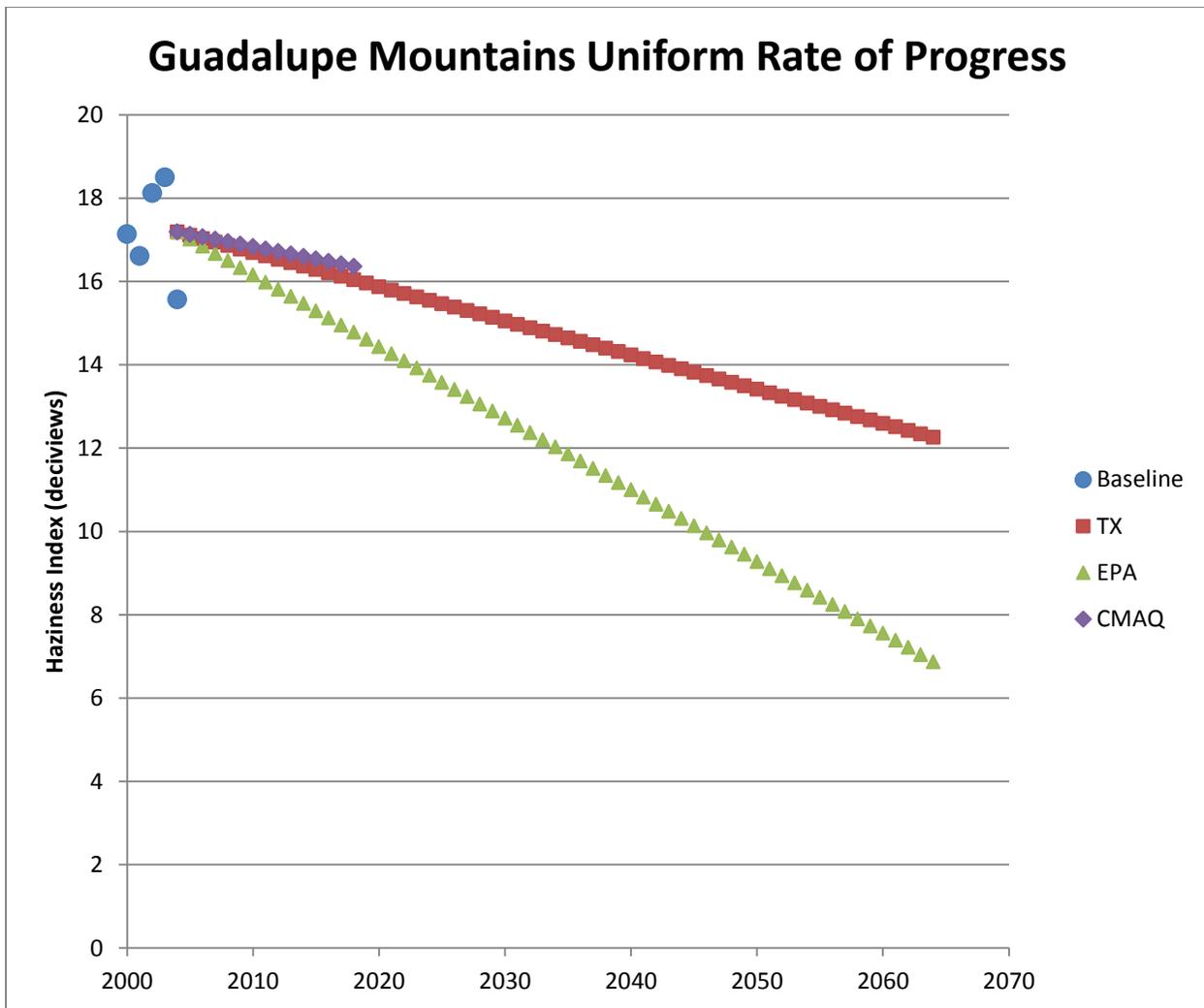
The comparisons with the EPA default, or more specifically, the Natural Conditions II (NC II) committee's estimates using the New/Revised IMPROVE Algorithm, are available in Appendix 5-2. The commission made some changes in response to this comment, however the NC II estimates will remain in the appendix.

² 10.5 UNCERTAINTY IN THE REASONABLE PROGRESS GOALS

³ CHAPTER 10. REASONABLE PROGRESS GOALS, 10.1 INTRODUCTION

Because TCEQ declined to show the EPA default glidepath in the SIP main text or the Progress Report, we are providing that information for public review.





In its 2009 SIP submittal,⁴ Texas noted that:

Because natural visibility estimates are calculated from complex environmental chemistry, require significant assumptions in the calculation and are ultimately calculated without a directly observable measurement, there remains considerable potential for improvement in estimation. Since the natural concentrations and statistics of all components important for Regional Haze have significant uncertainties, the TCEQ will be continuing to evaluate data, modeling, and any other sources of information, as well as potentially devising additional monitoring, sampling and/or analysis schemes, in order to further improve these estimates. Furthermore, the TCEQ plans to work with the EPA, FLMs, and other experts and researchers to refine natural conditions estimates for future five-year reports and major regional haze SIP revisions.

At this point, the component that most likely needs improved estimation is organic carbon.⁵ Improved sampling and/or analysis techniques are likely methods in the pursuit of an improved characterization of the

⁴ **5.4 NATURAL VISIBILITY CONDITIONS, AN ONGOING EFFORT**

⁵ Additionally, there is significant regulatory uncertainty with regard to what prescribed fires should or should not be considered as “natural.” When the EPA revises the *Interim Air Quality Policy on Wildland and Prescribed Fires*, it is expected such issues will be clarified.

natural contributions to this component. However, the application of such methods will depend upon available resources and estimates of potential benefits.

There is no mention of any effort to improve these estimates of natural visibility conditions in the Progress Report.

In our January 2008 comments to Texas, we expressed our concern about Texas use of its “refined” default natural conditions while its neighboring states were using the EPA default:

Therefore, we request that the Texas SIP specifically agree with its neighboring States’ use of EPA-IMPROVE default natural conditions estimates for the neighboring States’ Class I areas. In doing so, Texas would acknowledge that those States will be using EPA-IMPROVE calculations when addressing the possible need for additional controls on some Texas air pollution sources when setting reasonable progress goals for Class I areas outside of Texas. This is particularly important as it pertains to Carlsbad Caverns NP in New Mexico just northeast of Texas’ Guadalupe Mountains NP, since these two Class I areas share the same IMPROVE monitor. Furthermore, in its evaluations of Texas sources’ impacts to Class I areas located in other States, TCEQ needs to use the metric and approach that is selected by the State where each respective Class I area is located.

We again request that Texas respond to our concern.

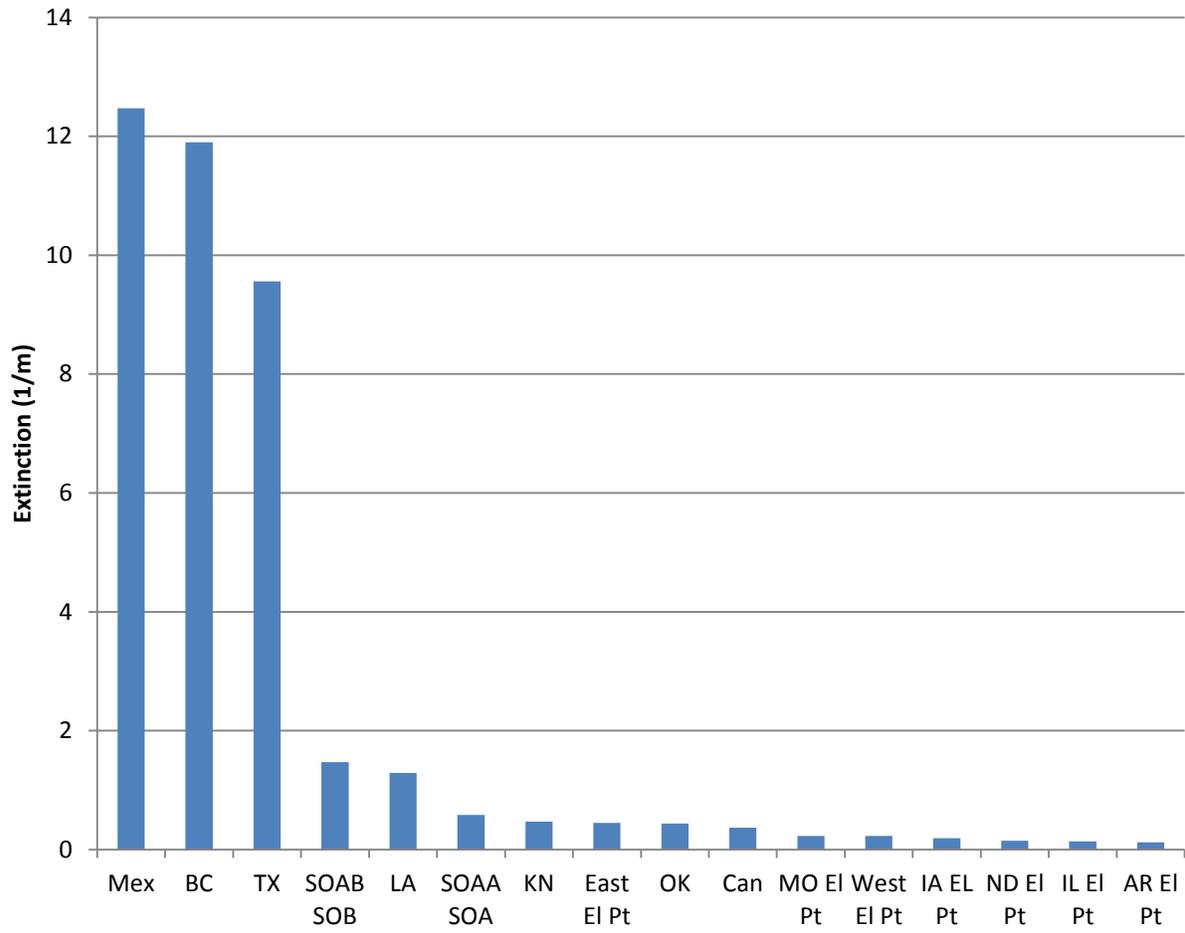
We have additional concerns that were not addressed in the Progress Report regarding SIP submittal section “**10.2 REASONABLE PROGRESS GOALS FOR TEXAS CLASS I AREAS**”

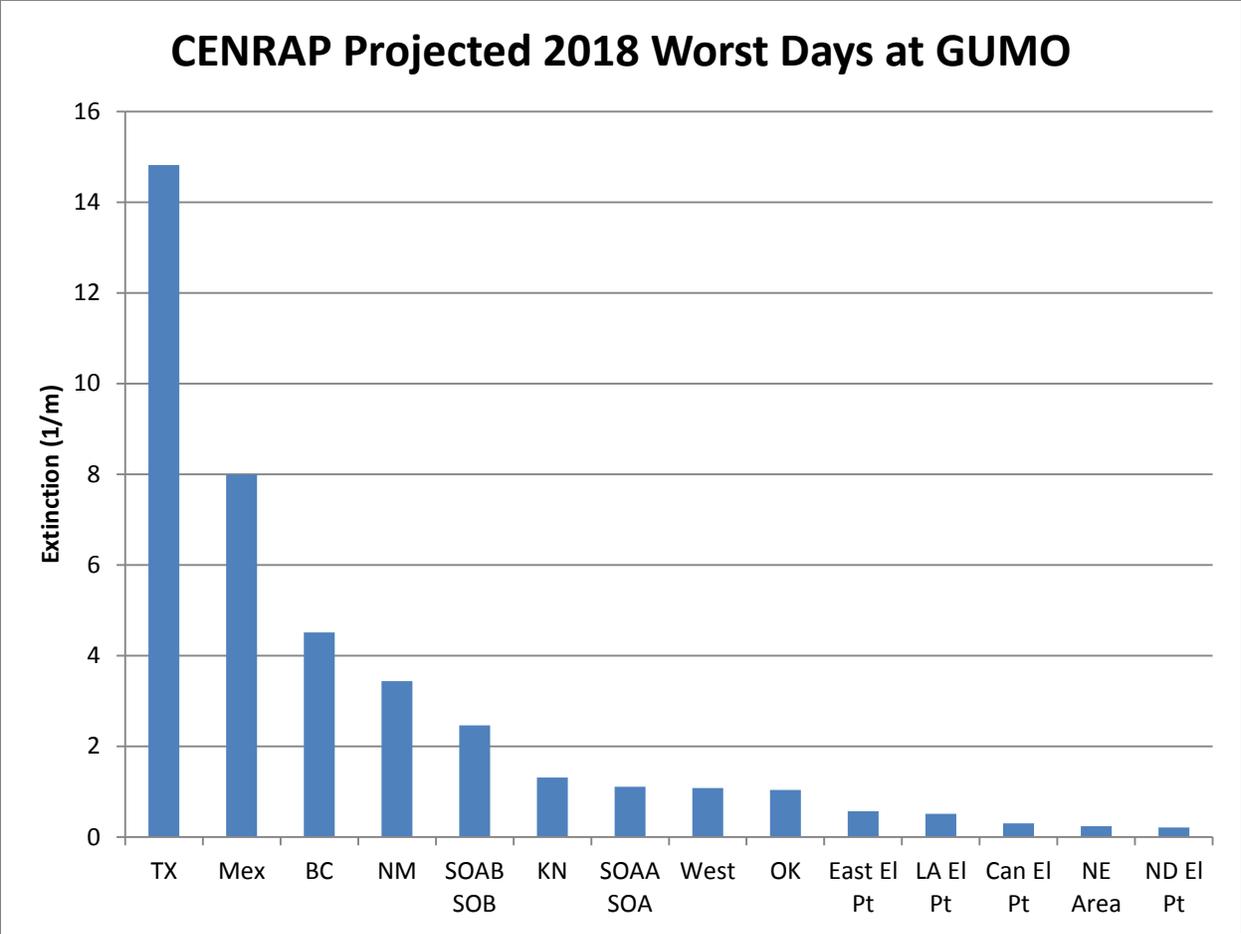
The TCEQ has determined that the rate of visibility improvement by 2018, shown in Table 10-2: *Reasonable Progress Goals for Class I Areas (Worst 20 Percent Days)*, is reasonable and will be implemented as the RPGs for the listed Class I areas.

Table 10-2 in the 2008 SIP shows 0.7 dv improvement at BIBE and 0.9 dv improvement at GUMO by 2018. However, Appendix 8-1 of the TSD for CENRAP Emissions and Air Quality Modeling predicts 16.69 dv at BIBE and 16.35 dv at GUMO by 2018. (The 2008 SIP figures 10-1 and 10-2 truncate these 2018 estimates to 16.6 dv at BIBE and 16.3 dv at GUMO.) The resulting improvement is 0.61 dv (0.04 dv/yr) at BIBE and 0.83 dv (0.06 dv/yr) at GUMO by 2018.

Table 10-2 also projects that natural conditions will be achieved in 151 years at BIBE and 77 years at GUMO. Even using the Texas’ estimates for natural conditions, those natural conditions would not be achieved for 165 years at BIBE and 83 years at GUMO. Use of the EPA default natural conditions means that natural conditions would not be achieved for 231 years at BIBE and 174 years at GUMO.

CENRAP Projected 2018 Worst Days at BIBE





It is clear from these charts that Texas contributes more to visibility impairment at these national parks than any other state.

From: Brewer, Patricia <patricia_f_brewer@nps.gov>
Sent: Wednesday, August 21, 2013 4:45 PM
To: Margaret Earnest
Subject: Re: NPS Comments on Texas Five Year Regional Haze Review
Attachments: Texas and Neighboring Class I Trends.pptx

Margaret,

Attached Powerpoint has speciated glidepaths for Big Bend, Guadalupe, Wichita Mtns and Caney Creek with data through 2011. Data came from WRAP Technical Support System. Under the site selection map, there is a link to a site list where you can download data for all IMPROVE sites, not just WRAP sites.

<http://vista.cira.colostate.edu/tss/Results/HazePlanning.aspx>

Tables show that visibility is better for the 2007-2011 5 year average than 2005-2009. 2005 was a high SO₄ year at many sites. EPA suggests using latest available IMPROVE data because states will be submitting 5 year review between 2012 and 2017. Emissions data are updated less frequently so latest available NEI makes sense as long as clear that methods have changed since RPO inventory development and several source categories are not directly comparable between RPO and NEI inventories.

Table for speciated contributions for Guadalupe shows the high contribution for coarse mass. Coarse mass events are intermittent and higher in the 2000-2004 baseline than subsequent years.

Big challenge for 2018 SIPs will be how to improve estimates of natural conditions when wildfire or dust events are major contributors in some years but not others. Hopefully EPA will be working with states and FLM on improving estimates of natural conditions for the 2018 SIPs.

You are welcome to include the attached ppt in public record or not, your choice.

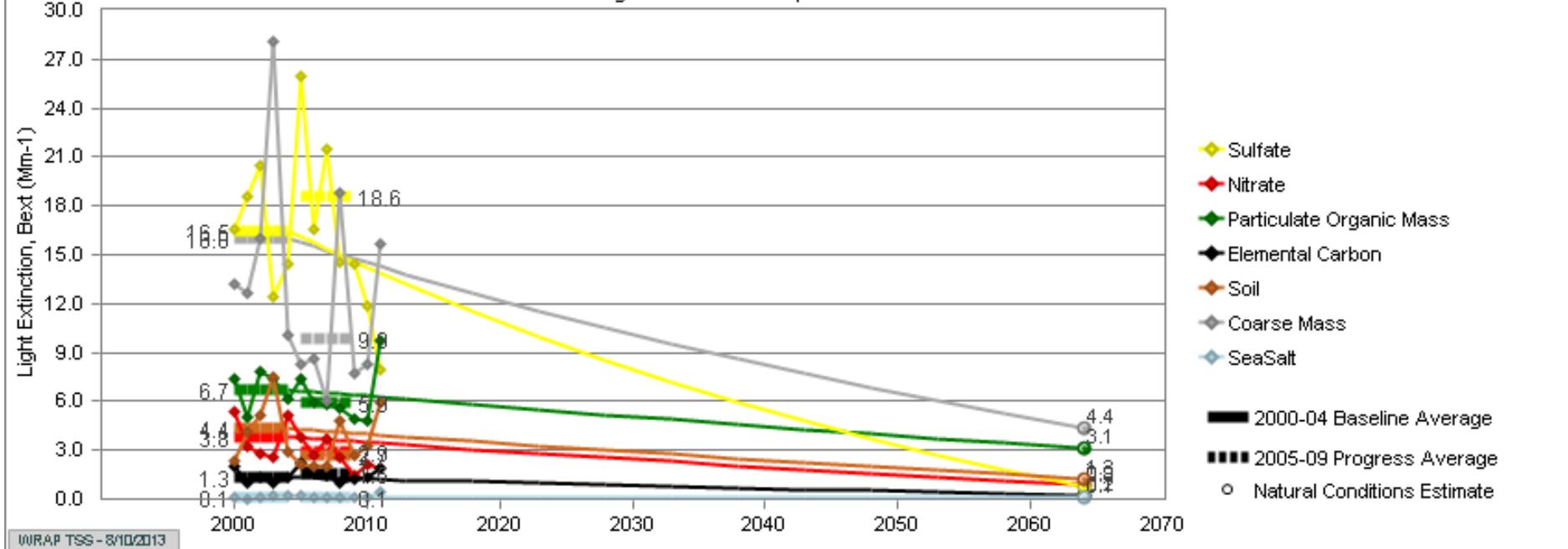
Thanks,

Pat Brewer

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Pat Brewer
NPS Air Resources Division
P.O. Box 25287
Denver, CO 80225-0287
303-969-2153

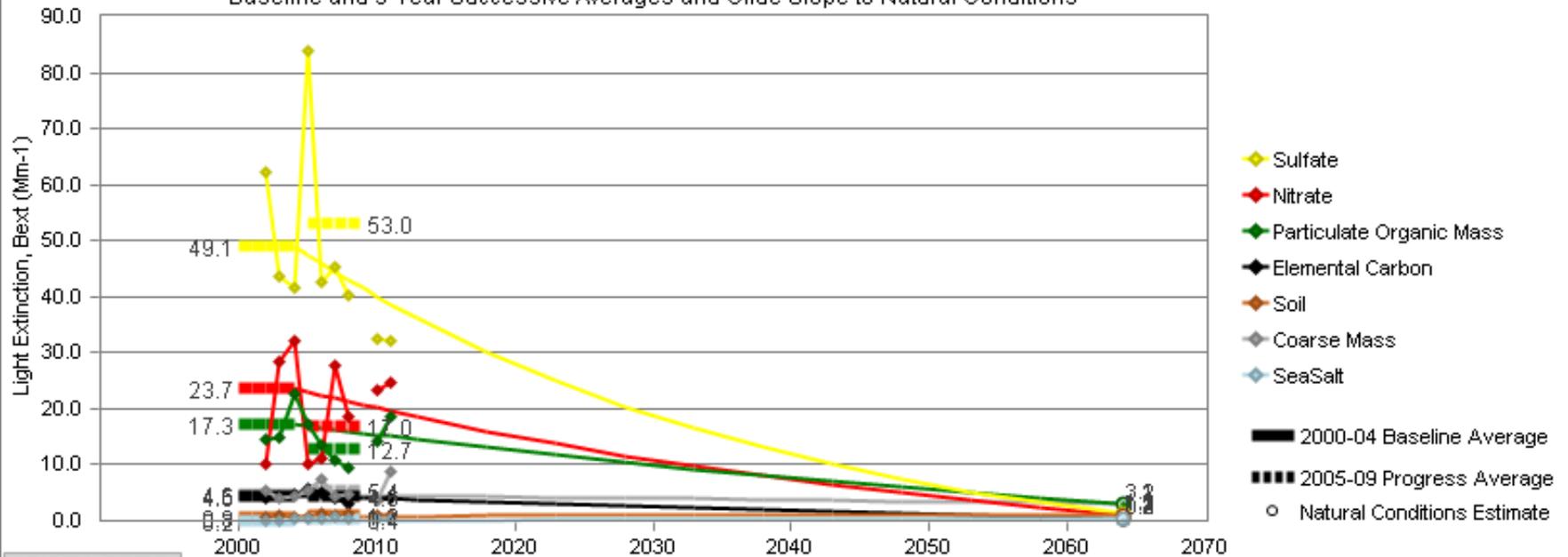
Carlsbad Caverns NP, NM: Guadalupe Mountains NP, TX Class I areas
 Worst 20% Visibility Days
 Baseline and 5-Year Successive Averages and Glide Slope to Natural Conditions



Wichita Mountains NWRW, OK Class I area

Worst 20% Visibility Days

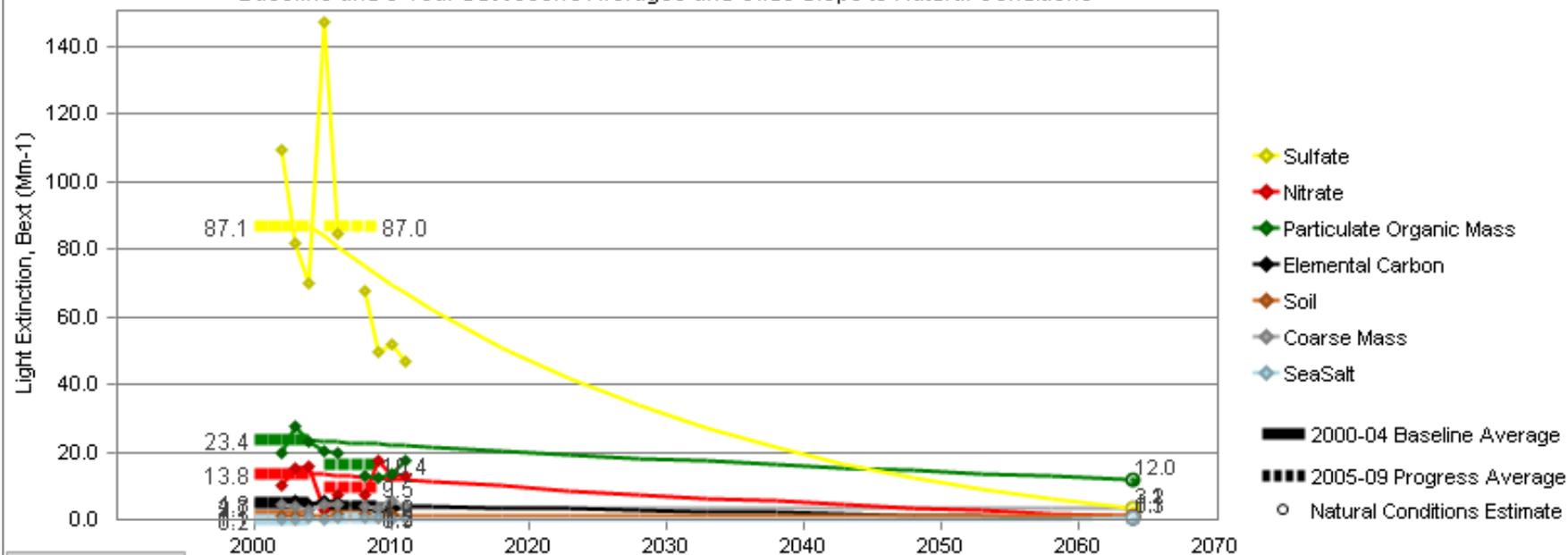
Baseline and 5-Year Successive Averages and Glide Slope to Natural Conditions



Caney Creek W, AR Class I area

Worst 20% Visibility Days

Baseline and 5-Year Successive Averages and Glide Slope to Natural Conditions



Visibility Progress Class I Areas

MM-1	2000-04 Baseline Conditions	2005-09 Progress Period	2006-10 Progress Period	2007-11 Progress Period
Big Bend, TX	17.3	16.7	16.3	16.7
Guadalupe, TX	17.2	15.9	15.1	15.3
Caney Creek, AR	26.4	25.3	23.7	23
Wichita Mtn, OK	23.8	23	22	22.2

Class I Area Visibility Summary: Carlsbad Caverns NP, NM: Guadalupe
Mountains NP, TX Class I areas

Visibility Conditions: Worst 20% Days

Reasonable Progress Summary

	2000-04 Baseline Conditions	2005-09 Progress Period	2006-10 Progress Period	2007-11 Progress Period
	(Mm-1)	(Mm-1)	(Mm-1)	(Mm-1)
Sulfate	16.5	18.6	15.8	14
Nitrate	3.8	2.9	2.5	2.3
Organic Carbon	6.7	5.9	5.4	6.2
Elemental Carbon	1.3	1.5	1.3	1.4
Fine Soil	4.4	2.7	2.9	3.7
Coarse Material	16	9.9	9.9	11.3
Sea Salt	0.1	0.1	0.1	0.2
Total Light Extinction	57.9	50.6	47	48.2
Deciview	17.2	15.9	15.1	15.3

Class I Area Visibility Summary: Big Bend NP, TX Class I area

Visibility Conditions: Worst 20% Days

Reasonable Progress Summary

	2000-04 Baseline Conditions	2005-09 Progress Period	2006-10 Progress Period	2007-11 Progress Period
	(Mm-1)	(Mm-1)	(Mm-1)	(Mm-1)
Sulfate	26.1	27.8	26.7	24.1
Nitrate	2	1.6	1.6	1.6
Organic Carbon	8	6.1	6.1	9.1
Elemental Carbon	2.1	2.2	2	2.4
Fine Soil	2.5	1.8	1.7	2
Coarse Material	7	5.3	5.1	7
Sea Salt	0.1	0.1	0.1	0.1
Total Light Extinction	57.9	54.9	53.2	56.2
Deciview	17.3	16.7	16.3	16.7

UNITED STATES FISH AND WILDLIFE SERVICE



United States Department of the Interior



FISH AND WILDLIFE SERVICE
National Wildlife Refuge System
Branch of Air Quality
7333 W. Jefferson Ave., Suite 375
Lakewood, CO 80235-2017

IN REPLY REFER TO:
FWS/ANWS-AR-AQ

August 21, 2013

Mr. David Brymer,
Director, Air Quality Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Dear Mr. Brymer:

On June 18, 2013, the State of Texas provided its draft 5-year progress report for the State's Regional Haze State Implementation Plan (SIP). Overall, the draft and appendices included most of the information and necessary elements needed to adequately address regional haze progress. In reviewing the draft, additional information is required to fully assess program progress or adequacy.

1. In several areas, the draft presents improvements to Class I area visibility impairment achieved from the original base year SIP period. Data is presented for both in-State and out-of-State Class I areas. Information comparing improvement to the uniform rate of progress, State (or out-of-State) derived reasonable progress goals, or long term natural condition goals was not provided. Because this report is intended to provide progress based on the previously submitted SIP, we think that comparisons to established reference points are necessary.

In the State's regional haze SIP submittal to EPA, modifications to natural condition estimates from EPA defaults were proposed. Since these modifications have not been approved, we request that all comparisons continue to be presented for both EPA default and Texas derived natural condition estimates. Separating this information does not properly inform the reader on regional haze related progress.

2. In assessing whether the State's regional haze plan is making sufficient progress, the State must consider its status as the largest contributor to visibility impairment at several neighboring Class I areas. Simply stating that visibility is improving is not sufficient in determining whether improvements are either the result of Texas controls or if Texas controls are contributing at an appropriate level.



This letter acknowledges that the U.S. Department of Interior, U.S. Fish and Wildlife Service (FWS), has conducted a substantive review of the draft Regional Haze SIP in fulfillment of the requirements identified in 40 CFR 51.308(i). Please note, that only the U.S. Environmental Protection Agency (EPA) can make a final determination regarding the document's completeness and, therefore, ability to receive federal approval from EPA.

We compliment you on your hard work and dedication to the significant improvement in our nation's air quality related values and visibility.

Sincerely,



Sandra V. Silva
Chief, Branch of Air Quality

cc:

Joe Kordzi, EPA Region 6
Bret Anderson, National Air Quality Technical Coordinator, US Forest Service
Carol McCoy, Chief, Air Resources Division, National Park Service
Meredith Bond, Deputy Branch Chief, FWS Branch of Air Quality

UNITED STATES FOREST SERVICE



United States
Department of
Agriculture

Forest
Service

Ouachita National Forest
P.O. Box 1270
Hot Springs, AR 71902
501-321-5202

Ozark-St. Francis
National Forests
605 West Main
Russellville, AR 72801
479-964-7200

File Code: 2500

Date: August 7, 2013

Margaret Earnest
Texas Commission of Environmental Quality
State Implementation Plan Team-Office of Air
MC 206
PO Box 13087
Austin, TX 78711-3087

Dear Ms. Earnest:

The Ouachita and Ozark-St. Francis National Forests appreciate the opportunity to review and comment on the 2013 Texas State Implementation Plan (SIP) revision by the Texas Commission on Environmental Quality (TCEQ).

We are providing these comments to TCEQ and ask that they be placed in the official public record. Please be reminded that the Ouachita and Ozark-St. Francis National Forests are considered Federal Land Managers under the 40 CFR regulations. We look forward to your response as per section 40 CFR §51.308 (i)(3) and are willing to work with TCEQ staff to address any of issues discussed in this letter.

Again, we appreciate the opportunity to work closely with TCEQ, and compliment you on your hard work and dedication to significant improvements in our nation's air quality values and visibility.

Sincerely,


(for) NORMAN L. WAGONER
Forest Supervisor
Ouachita National Forest


for REGGIE L. BLACKWELL
Acting Forest Supervisor
Ozark-St. Francis National Forests

Enclosures (2)



***FS Comments regarding TCEQ's Proposed Regional Haze Implementation Plan Revision of
June 18, 2013***

The Forest Service appreciated the opportunity to comment on the proposed Regional Haze plan revision.

Texas submitted a Regional Haze (RH) plan to the Environmental Protection Agency (EPA) on February 25, 2009. On December 30, 2011, the EPA issued notice to Texas (and other states) that because the states' regional haze SIP revisions relied on the Clean Air Interstate Rule (CAIR) to satisfy certain emission reduction requirements, the EPA was proposing a limited disapproval of the states' SIP revisions and a federal implementation plan (FIP) to replace reliance on CAIR with reliance on the Cross-State Air Pollution Rule (CSAPR). On August 21, 2012, the United States Court of Appeals for the District of Columbia vacated CSAPR and determined that CAIR will remain in place until the EPA develops a valid replacement rule. EPA has suggested states and the agency move forward as if a federal trading program will be functioning after court suits are settled.

It is our understanding that the Proposed Regional Haze Implementation Plan Revision makes no changes to the existing regional Haze SIP and calls for no additional controls. We feel this plan does not go far enough as we said in our previous comments in 2008. It appears that very few of the significant concerns we had with the original SIP have been addressed. While there have been some improvements to air quality we do not agree with the reasonable progress rate that Texas has chosen to use. The use of an alternative glide path adopted by Texas without the EPA default glidepaths does not allow a proper comparison for the reader. See our previous comment #3 in our letter dated January 10, 2008.

Even though Central Regional Air Planning Association (CENRAP)¹ modeling indicated that they would reach the Uniform Rate of Progress (URP), there is great uncertainty around this modeling. In addition, modeling from Both Midwest Regional Planning Organization (MWRPO) and The Visibility Improvement State and Tribal Association of the Southeast (VISTAS) indicated that the Class 1 areas in Arkansas and Missouri may not meet the URP. This proposed revision still does not identify the impacts to the Class 1 Areas for Texas's emissions. See our previous comment #2 in our letter dated January 10, 2008.

The impacts from Texas sources are still divided into 3 separate areas without the more relevant display of all Texas sources as a whole. Reductions stated in the proposed revision vary for each area, leading to pollutant control inconsistencies and a level of reductions lower than would otherwise be made. If one section can reduce emissions to a particular amount then they should all be able to reduce emissions to that same amount and not allow some areas to have higher emissions. See our previous comment #3 in our letter dated January 10, 2008.

¹ Central Regional Air Planning Association (CENRAP) is an organization of states, tribes, federal agencies and other interested parties that identifies regional haze and visibility issues and develops strategies to address them. CENRAP is one of the five Regional Planning Organizations (RPOs) across the U.S. and includes the states and tribal areas of Nebraska, Kansas, Oklahoma, Texas, Minnesota, Iowa, Missouri, Arkansas, and Louisiana.

There was still no analysis of area of influence for Class 1 areas affected by Texas to form the basis of an adequate four factor analysis supporting the reasonable progress goals (RPGs) set by states with Class 1 areas impacted by Texas sources. See our previous comment #6 in our letter dated January 10, 2008.

And lastly, under consultation with Federal Land Managers provisions (40 CFR §51.3-8 (i)), you failed to adequately consult with the Forest Service. While it is commendable that you consulted with the National Park Service and the Fish and Wildlife Service, it does not relieve you of your responsibility to consult with the Forest Service. The National Park Service does not speak for the Forest Service even though we often agree with their comments.

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cao

USDA United States
Department of
Agriculture

Forest
Service

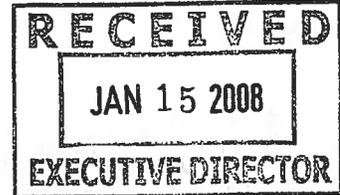
Ouachita National Forest

P.O. Box 1270
Hot Springs, AR 71902

File Code: 2580-2

Date: January 10, 2008

Glenn Shankle
Executive Director
Texas Commission on Environmental Quality
Mail Code 109
Post Office Box 13087
Austin, TX 78711-3087



Dear Mr. Shankle:

On November 16, 2007, the State of Texas submitted a proposed State implementation plan (SIP) describing its proposal to improve air quality regional haze impacts at mandatory Class I areas across your region (reference TCEQ project number 2007-016-SIP-NR). Technical appendixes that are referenced in the SIP were received from the State on November 26, 2007. We appreciate the opportunity to work closely with the State through the initial evaluation, development, and, now, subsequent review of this plan. Cooperative efforts such as these ensure that, together, we will continue to make progress toward the Clean Air Act's goal of natural visibility conditions at all of our most pristine National Parks and Wilderness Areas for future generations.

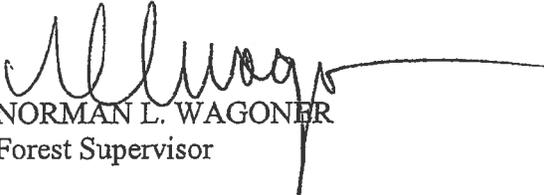
The U.S. Department of Agriculture, U.S. Forest Service, received and has conducted a substantive review of your draft Regional Haze Rule implementation plan, which you are preparing in fulfillment of your requirements under the federal regulations 40 CFR 51.308(i)(2). Please note, however, that only the U.S. Environmental Protection Agency (EPA) can make a final determination regarding the document's completeness and, therefore, ability to receive federal approval from EPA.

As outlined in a letter sent to each State in October, 2006, our review focused on eight basic content areas. The content areas reflect priorities for the Federal Land Manager agencies, and we have enclosed comments associated with these priorities. Note that we have highlighted comments in bold face that discuss what we consider to be major concerns of the proposed SIP that we believe warrant additional consultation prior to final adoption of the Texas Regional Haze Plan. The Forest Service air quality staffs stand ready to work with you towards resolution of these issues. We look forward to your response, per section 40 CFR 51.308(i)(3). For further information, please contact Judith Logan at (501) 321-5341.



Again, we appreciate the opportunity to work closely with the State of Texas and compliment you on your hard work and dedication to significant improvement in our nation's air quality values and visibility.

Sincerely,



NORMAN L. WAGONER
Forest Supervisor

cc: David C. Schanbacher, Susana Hildebrand, Richard A. Hyde, Annette Sharp, Patrick Cummins, Guy Donaldson, Joe Kordzi, Chris Pease

Enclosure

Forest Service Technical Comments on Texas' Commission on Environmental Quality (TCEQ) Draft Regional Haze State Implementation Plan (SIP)

Overall Comments

As stated in our letter, we appreciate the opportunity to work with your agency through the initial evaluation, development, and, now, subsequent review of this plan. To facilitate review, we have formatted in **bold** text those items that are of significant concern to the US Forest Service and we request additional consultation with TCEQ staff on these issues before final adoption of the Texas SIP. A list of some of the most significant issues is highlighted here:

1. **The adoption of an unprecedented 20% impact cutoff for evaluating impacts to Class I areas outside of Texas without supporting rationale for using this level of significance.** This level is 4 times higher than any other level we've seen in SIPs from other states to date. This cutoff allows Texas to disregard Class 1 areas outside of the state. **Since existing and predicted future visibility impairment at many nearby Class I areas outside of Texas is more attributable to Texas' emissions than those of the host States, it is imperative that Texas use an impact cutoff that is more reasonable or justify why this level of impact was chosen.** The Forest Service (FS) requests that an area of influence analyses (AOI) be conducted. It is also important to confer with the host States when generating and refining these AOIs and when interpreting whether controls at specific contributing sources are cost beneficial.
2. **Given the uncertainty of the modeling, and, in particular, the implementation of Clean Air Interstate Rule (CAIR), the disregard of impacts to Class I Areas in Arkansas and Missouri.** Although these two states ended their formal consultation with surrounding states when Central Regional Air Planning Association (CENRAP)¹ modeling indicated that they would reach the Uniform Rate of Progress (URP), there is great uncertainty around this and modeling from both Midwest Regional Planning Organization (MWRPO) and The Visibility Improvement State and Tribal Association of the Southeast (VISTAS) indicates that these Class I Areas may not meet this rate. The Federal Land Managers (FLMs) expressed this concern in our comments to Missouri regarding their draft SIP. As Particulate Source Apportionment Technology

¹ Central Regional Air Planning Association (CENRAP) is an organization of states, tribes, federal agencies and other interested parties that identifies regional haze and visibility issues and develops strategies to address them. CENRAP is one of the five Regional Planning Organizations (RPOs) across the U.S. and includes the states and tribal areas of Nebraska, Kansas, Oklahoma, Texas, Minnesota, Iowa, Missouri, Arkansas, and Louisiana.

(PSAT) results indicate that Texas sources are the largest contributor to visibility impacts at these wilderness areas, particularly at Caney Creek Wilderness in Arkansas, we request that Texas analyze and disclose fully their impacts to these Class I areas. The long term strategy and four factor analysis for reasonable progress should address these Class I areas (Caney Creek and Upper Buffalo).

3. **The use of alternate glidepaths throughout the body of the SIP without showing the United States Environmental Protection Agency (EPA) default glidepaths to allow proper comparison for the reader.**
4. **Display of impacts from Texas sources are divided into 3 separate areas without the more relevant display of impacts from Texas as a whole, and displaying only impacts from one portion of Texas in some discussions of impacts to out of state Class I areas.**
5. **The apparent lack of formal consultation with states showing a high level of contribution from Texas sources such as New Mexico, Louisiana, and Colorado.**
6. **The lack of area of influence analysis for Class I areas affected by Texas to form the basis of an adequate four factor analysis supporting the reasonable progress goals (RPGs) set by states with Class I areas impacted by Texas sources. The federal Regional Haze rule mandates that each State develop a plan to make progress toward visibility impairment at all Class I areas. The reasonable progress analyses are missing specific information about Texas's contributions to visibility impairment at Caney Creek Wilderness Area, Upper Buffalo Wilderness Area in Arkansas and other out-of-State Class I areas in Oklahoma, New Mexico, and Louisiana. Although the Proposed SIP references that the TCEQ consulted with Oklahoma at their request, the Texas Proposed SIP fails to document how emissions and impacts from Texas' sources were addressed. Although TCEQ concludes that the already planned controls between now and 2018 are reasonable, it fails to address how multiple issues which prevent the State from accurately determining future emissions from specific sources will result in anything more than luck with respect to addressing Texas' substantial contribution to visibility improvement at Class I areas inside and outside of its territory. The FS requests that an analysis based on an area of influence be developed and a full reasonable progress evaluation covering Texas' sources be established for Caney Creek Wilderness Area, and Upper Buffalo Wilderness Area as a precursor to a focused five-year review. The State should also establish in the regional haze SIP a process for ongoing discussions and consultations with neighboring States and FLMs on the progress of CAIR and PSD/NSR efforts.**

Specific Comments

The following comments are organized by Section of the draft SIP.

Executive Summary

Page 1, paragraph 1. The sentence defining Class I areas as those "... that Congress has recognized at significant sites" would be better worded as "Class I areas are national parks over 6000 acres and wilderness areas over 5000 acres that were in existence before August 7, 1977."

Page 1, paragraph 3. **Texas states that "Where Texas' emission impact visibility in Class I Federal Areas in other states, the Texas SIP must include plans to reduce Texas' visibility impacts in those areas too." However, later in the SIP, Texas indicates 20% is the level of visibility impact below which Texas will not plan to reduce those impacts. A 20% impact cutoff is arbitrarily and unrealistically high. Use of a 20% impact cutoff negates the legitimate need to address Texas source impacts to Class I areas in Arkansas, Missouri, and Louisiana. For example, the PSAT regional source apportionment work of ENVIRON, as contracted by CENRAP, demonstrates that Texas's approximate 13% contribution to the visibility extinction at Arkansas' Caney Creek on the 20% worst days during 2002 was greater than any other state's, including that of Arkansas. East Texas' 11% contribution alone exceeded Arkansas' 9% contribution (see Figure 5-10 in CENRAP's Technical Support Document). Contribution assessments of Upper Buffalo, Hercules-Glades, Mingo, and Breton may show similar if not as dramatic results. Texas not addressing its visibility impacts could jeopardize those Class I areas meeting their URP, as indicated by the Midwest Regional Planning Organization (MWRPO) 2018 R4S1a modeling run, results of which are graphed in Figure 5-1 of CENRAP's Technical Support Document. For all Class I areas in adjacent states, Texas should indicate what level of visibility impact abatement will result from its proposed 2018 control measures.**

Within the Executive Summary, Texas should quantitatively summarize its Reasonable Progress Goals and associated rationale for each Class I Area addressed in the SIP.

In the List of Acronyms on page ix, the following are listed as wilderness areas, but are, in fact, national parks: Badlands, Bandelier, and Great Sand Dunes.

Chapter 1 Background and Overview of the Federal Regional Haze Regulation

While Big Bend and Guadalupe Mountains, Class I areas within Texas, are identified in Chapter 1, other Class I areas identified elsewhere in the SIP as being impacted by Texas sources are not identified in this chapter. Including a summary of those other impacted Class I areas would provide balance to this chapter.

Chapter 2 General Planning Requirements

Page 2-1, Introduction. We appreciate that Texas documents coordination with the (FLMs) and abandoned one approach based on the FLM recommendations. We look forward to continued consultation in the future.

Chapter 4. State, Tribe, and Federal Land Manager Consultation

Page 4-1, Introduction. Texas states that “If a state determines it has emissions that are reasonably anticipated to contribute to visibility impairment in any Class I area in another state, that state must consult with the other states when developing its long-term strategy.” However, by arbitrarily setting a 20% impact level cutoff, and choosing not to consider its sources’ contributions as established by CENRAP’s establishment of Area of Influences (AOIs), Texas has not fully fulfilled its obligations relative to this statement (see comments related to the Executive Summary above).

Section 4.3, Consultations on Class I Areas in Other States, page 4-2, Last paragraph. Although these states (Louisiana, Colorado, and New Mexico) have not invited Texas to formal participation in their consultation process, this is, in some cases, simply a function of their timing, not an implicit acceptance of Texas’ long term strategy and SIP analysis.

Chapter 5. Assessment of Baseline and Current Conditions and Estimate of Natural Conditions in Class I areas

Section 5.3, Natural Visibility Conditions, page 5-3. Although Texas certainly has the right to develop an alternate methodology to determine natural conditions, as we requested in the consultation process, the default EPA methodology should also be displayed in comparison wherever natural conditions and glidepaths to those conditions are referenced in the document. They should not be segregated in an Appendix to the SIP.

Chapter 6. Monitoring Strategy

Section 6.2 and 6.4 Reporting Visibility Monitoring to the Administrator. Texas should have a contingency plan for monitoring and reporting of data in case the Interagency Monitoring of Protected Visual Environments (IMPROVE)² program curtails operation of IMPROVE monitors or funding for Visibility Information Exchange Web System (VIEWS).

² To aid the implementation of the Clean Air Act of 1977, the IMPROVE program was initiated in 1985. This program implemented an extensive long term monitoring program to establish the current visibility conditions, track changes in visibility and determine causal mechanism for the visibility impairment in the National Parks and Wilderness Areas.

Section 7.0: Emissions Inventory

Section 7 Emissions Inventory, page 7-1, paragraph 3. It is unclear to which SO₂ emissions this paragraph refers— on road emissions? Is this referring to 2002 or 2018 emissions? This should be clarified.

Page 7-2, paragraph 5. Is this stating that since point source emissions have declined in every year, that therefore the 2018 modeling over predicts? This needs to be thoroughly justified.

Section 8.0 Modeling Assessment

Section 8.4.16, pages 8-15 and 8-16, Figures 8- 4 and 8-5. The captions say these used the 2002 base F emission inventory, but the headings for the graph say that they were Typ02g. Please clarify?

Section 8.4.17, page 8-18, paragraph 2. While high contributions from international transport and/or natural sources certainly affect progress for Class I areas such as Big Bend, this statement doesn't necessarily apply to the northern Class I areas lumped in with it (Voyagers National Park (VOYA), Boundary Waters Canoe Area Wilderness (BOWA), and Isle Royal National Park (ISLE).) In fact, frequently transport from Canada is associated with the cleanest days at these Class I areas, rather than the dirtiest.

Figure 8-6, page 8-18. Please refer to Badlands National Park (NP), not Badlands Wilderness Area.

Section 8.4.18, page 8-19, paragraph 1. Midwest RPO used Integrated Planning Model (IPM) 3.0 rather than 2.1.9. Please correct, and justify the use of IMP 2.1.9. in light of EPA's recent indication that IPM 3.0 provides a significantly more accurate prediction of future EGU operating scenarios and emissions.

Chapter 9. Best Available Retrofit Technology

The Regional Haze rule establishes Best Available Retrofit Technology (BART)³ criteria for exempting sources that are determined to be non-significant. EPA offers an upper bound to that single source significance level at 0.5 deciviews (dv). Texas must provide a discussion or justification how it arrived at its selected threshold value. In the case of Texas, it appears that BART controls may have a cumulative effect on Class I area visibility and that a lower value than EPA's upper bound for BART exemption may have produced a noticeable difference. At a minimum, a lower threshold level could have provided the State with important specific source information on these sources. As Texas's own BART analysis showed on page 4-7 in BART final report...“The largest

³ BART-eligible sources are those sources that have the potential to emit 250 tons or more of a visibility-impairing air pollutant, were put in place or under construction between August 7, 1962 and August 7, 1977, and whose operations fall within one or more of 26 specifically listed source categories. Under CAA section 169A(b)(2)(A), BART is required for any BART-eligible source which “emits any air pollutant that may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area.”

estimated visibility impairments occurred at the Class I areas near northeast Texas, in Arkansas and southern Missouri (Caney Creek Wilderness Area, Hercules-Glades Wilderness Area, and Upper Buffalo Wilderness Area), while the next highest estimated visibility impacts occurred near western Texas (Big Bend NP (BIBE) and Guadalupe Mountains NP (GUMO)) and northern Texas (Wichita Mountains Wilderness in Oklahoma).”Given this information, Texas should justify their use of the 0.5 deciviews screening threshold for BART determinations.

Chapter 10. Reasonable Progress Goals

The use of 20% cutoff of impairment contributions to Class I areas outside the state is extremely high and is unprecedented. Without thorough justification as to how they arrived at this number, Texas’ threshold is considered unreasonable. Although Texas’ BART analysis showed most impacts from BART sources occurred to the northeast of Texas, using this 20% figure has effectively eliminated evaluation of Class I areas in this region. We vigorously object to the use of this 20% threshold.

Section 10.1, Table 10-1, page 10-1. It should be made clear that this table is based on Texas’ alternate calculation of natural background and does not use the EPA default method. The improvement needed based on the EPA default method is considerably more (10.14 dv by 2064 for BIBE instead of 7.2, and 11.24 dv for GUMO instead of 4.9). This comment carries through this entire section. During an FLM consultation call, the Forest Service recommended to Texas that they show the EPA default method and any alternate methodology together in the body of the SIP. Instead of following the FLM recommendation, the standard methodology is buried in the appendices, and therefore the public does not get the full picture and a comparison of the methods by reading the SIP as drafted.

Section 10.2, page 10-2. It would be most helpful if Texas would at least summarize the results of the four factor analysis in the body of the SIP.

Pages 10-2, 10-3. Texas should show the default glidepaths in the body of the SIP as well as their alternate glidepaths.

Page 10-3, paragraph 1 and Table 10-3. Texas correctly uses the modeled value for the 20% best days as their Reasonable Progress Goal. As part of the consultation process, the Forest Service has indicated to several other states their incorrect interpretation, we commend Texas for setting this RPG correctly.

Page 10-3, last paragraph. A summary of the four factor analysis should be brought into the body of the SIP.

Page 10-4, Table 10-4. If these are average control costs from the entire CENRAP region from Minnesota to Texas, this does not give a very accurate description of costs sources would incur in Texas. Texas should determine and utilize costs more representative of the Southern tier of CENRAP states.

Page 10-4, Table 10-5. Texas should show modeling results based on visibility improvements for all Class I areas affected by their emissions using a threshold more in line with that used by other states, not just looking at the effectiveness at the two Class I areas in western Texas.

Page 10-5, paragraph 4. Based on the sentence in the paragraph above that no electric generating unit (EGU) was able to make an enforceable commitment to any particular pollution control strategy, Texas has no basis to state that the IPM projections are an over prediction (as this first, partial sentence seems to indicate). In fact, the IPM projections could be an under prediction and therefore do not add to the justification for not pursuing any additional controls.

Section 10.5, page 10-6. Again, this uniform rate of progress shown is not the EPA default rate, and this should be indicated.

Chapter 11.0 Long-Term Strategy to Reach Reasonable Progress Goals

11.1 Long Term Strategy, page 11-1. The second paragraph refutes the argument that Texas makes later that assumes 100% of coarse mass (CM) is natural. Although we agree that the majority of coarse mass likely is natural, some portion of it is likely anthropogenic. Therefore, Texas should consider treating some percentage determined in consultation with the FLMs and EPA as anthropogenic.

Although CENRAP ran PSAT dividing Texas into 3 parts at the state's request, whenever Texas's contribution to extinction is shown relative to other states the three sections of Texas should be added together to show the state's contribution as a whole and to allow for a fair comparison with other states.

Section 11.2, page 11-3. As previously mentioned, the fact that Texas has not received a formal invitation for consultation from Colorado, Louisiana or New Mexico does not mean that these states accept Texas' Long Term Strategy as adequate for producing Texas' share of emissions reductions to help meet RPG's at each state's respective Class I areas. Colorado and New Mexico have not completed their RPG analysis and are further behind in the process. This lack of consultation should be noted in the SIP, and Texas should display its present and projected impacts to those state's Class I areas.

Pages 11-4 and 11-6, Figures 11-4 and 11-7. These analyses showing only the PSAT results for emissions from West Texas could be misleading, and would be more informative if they included all emissions from Texas.

Pages 11-5 – 11-8. It would be very informative and helpful if Texas would show the PSAT results for the 20% best days as well as the 20% worst days.

Again, it may be misleading to divide Texas into three parts, without also showing the impacts at each Class I from Texas as a whole. Throughout the rest of the document, the state is discussed as a whole and that should occur here also.

Section 11.4, page 11-9. We are concerned about the relationship between the Regional Haze Plan and the Prevention of Significant Deterioration (PSD) permitting process. The Regional Haze Rule seeks to improve visibility on the haziest days, while allowing no degradation on the clearest days, focusing primarily on existing emissions sources and incremental improvement by 2018. Prevention of Significant Deterioration also seeks no degradation of visibility on the clearest days, focusing on new sources of pollution that will be operating for many years into the future. The two "programs" have a similar goal of no degradation on the clearest days, but have different processes and timeframes for reaching the goal. Given the uncertainty in the new source growth estimates used to develop the 2018 emissions inventory, and ultimately the 2018 visibility projections, we feel it would be appropriate for the state to discuss the relationship between the Regional Haze Plan and requirements of the Prevention of Significant Deterioration (PSD) program within the SIP. Specifically, how does Texas anticipate addressing new sources of air pollution in the PSD process in regards to its reasonable progress goals and long term strategy; and, how will it analyze the effect of new emissions from these new sources on progress toward the interim visibility goals established under this SIP, as well as the ultimate goal of natural background visibility by 2064?

We understand that Texas has been providing notification to the FLMs only for major-source actions within 100 km of Class I areas and, in a letter dated August 21, 2007 requested that Texas reconsider that policy and work with the FLMs to come up with a mutually acceptable policy of notification to the FLMs and surrounding states regarding New Source Review. Including resolution of this issue in the SIP would greatly strengthen the position that clean days are being maintained.

Section 11.4.4, page 11-10. Does agricultural burning occur in Texas? Is it regulated? To maintain flexibility in being able to update smoke management provisions, these documents should not be included in the SIP or its appendices.

Chapter 12. Comprehensive Periodic Implementation Plan Revisions and Adequacy of the Existing Plan

Section 12, page 12-1. This section should specifically mention that the SIP review and revision will involve consultation with the FLMs.

Appendix 7-1, Texas Emissions Inventory Development

Section 7.2.2.4, discussion of IPM 2.1.9 vs. IPM 3.0. Since they state that IPM 2.1.9 was constructed when natural gas was prevalent, it is likely that projections for Texas under IPM 3.0 would have higher emissions due to more use of coal.

Texas goes on to say that statewide the emissions projected in both versions were very similar. It would be very helpful for a more detailed discussion of these results and the analysis of EGU impacts on visibility in the listed Class I areas. A map showing the groupings of EGUs would add to the discussion.

Section 7.4, Figures 7-2, 7-3, 7-4, 7-5, 7-6, 7-7, and 7-8. In any comparison with other states or anytime Texas is discussing their impacts as a state, they should add the emissions or visibility impacts in inverse mega meters for the entire state, rather than showing the state's emissions or impacts divided into 3 geographical areas.

Appendix 10-1, Analysis of Control Strategies and Determination of Reasonable Progress Goals

Chapter 11: Long-Term Strategy to Reach Reasonable Progress Goals. This chapter demonstrates that NO_x and SO₂ are the main anthropogenic pollutant emissions that affect visibility at Class I areas in Texas and in neighboring states. Table 1 summarizes the percentage contribution of various pollutants at the Texas Class I areas and those Class I areas in other states that PSAT modeling indicates receive more than 20% of their visibility impairing haze from Texas emissions in the 2002 base case modeling.

Table 1: Pollutant Impacts on Visibility at the Class I Areas with a 20 Percent or Greater Impact from Texas Emissions

Source	BIBE*	GUMO*	WIMO*	CACR*	WHIT*
SO ₄	49.7	57.7	54.7	43.2	52.9
NO ₃	4.4	10.2	22.5	26.1	14.7
POA	16.4	6.1	6.2	8.2	7.1
EC	9.1	6.6	5.3	7.4	7.4
Soil	6.7	6.8	4.6	6.0	6.8
CM	7.1	4.0	3.8	2.9	1.8
SOAA	1.9	2.7	1.4	2.2	3.4
SOAB	4.6	5.8	1.5	4.1	5.9

While we agree that SO₂ is the main anthropogenic pollutant affecting visibility at Class I areas in Texas and neighboring states, Table 1 is misleading because it limits Texas visibility impacts to an unprecedented 20%, a value four times greater than any other state surveyed by the Forest Service. As a starting point for all subsequent analyses, this 20% impact cutoff unjustifiably limits the number of sources Texas should consider for control, and minimizes the number of Class I areas which would benefit. This also has the effect of artificially raising the cost effectiveness of controls as many of the sources are in eastern Texas where the benefits of controls would be greatest in nearby Class I air sheds, not for those further to the west. For example, an analysis done for the CENRAP by Alpine Geophysics demonstrated that East Texas is included in the first level SO₄ Area of Influence (AOI) for Hercules Glades, Upper Buffalo, Caney Creek and Mingo Class I areas. In addition, the 20% impact cutoff, as utilized, does not take into account that many sources not considered in the SIP may impact more than one Class I area to an

January 10, 2008

extent that could be viewed as additive in nature, thus exceeding this arbitrary 20% level. This becomes more important when considering Class I areas in Louisiana, Arkansas, and Missouri, states that are not considered within the Texas SIP, are states modeled to not meet the URP by one or more Regional Planning Organizations. For example, Midwest RPO's 2018 R4S1a model run indicates that Breton, Caney Creek, Upper Buffalo, and Hercules Glades Wilderness Areas will not meet URP.

When looking at cost effectiveness of controls for sources, added emphasis and additional consideration should be given to those sources within the AOIs of more than one Class I area.

Table 2, page 2. Texas should explain what is meant by the terms, Elevated Point and Low Level Point. Is this referring to a high elevation or low elevation modeling point?

Section 1.3, page 4. Without analysis of sources on the Northeastern side of Texas and Class I areas affected by these sources, this section is of limited value. Also, Texas should show the four factor analysis by which it determined no further controls on cement kilns for NOx was reasonable.

Last paragraph in section. It is also entirely possible that the costs were overestimated.

Section 10-1.4 Proposed Controls, page 5, Table 5. Texas should display the results for all the Class I areas analyzed in other parts of the SIP, not just for the two within the state boundaries.

Cost: The \$300 million figure with no perceptible benefit determination stemmed from Texas arbitrarily limiting impact levels considered for Class I areas to 20% (see 20% section above). In addition, the approximate \$300 million figure was calculated utilizing sources that will be controlled by CAIR. Since those sources will be controlled with On The Books (OTB) controls, it is more appropriate to consider source-by-source controls for those sources not subject to OTBs controls. This would potentially push the incremental costs down considerably.

Time of Compliance: This paragraph simply provides the reason this was not considered and points to the need for a source by source analysis. No calculations are provided to justify the conclusion. The concept that instituting controls near the 2018 date would reduce the cost effectiveness in cost per ton is dubious. Cost per ton is determined at a fixed rate at a fixed time, independent of any year except that used in the determination.

Non-air quality environmental impacts of compliance: Texas states that source by source review would lead to a different conclusion from a control being unreasonable cannot be supported without actually conducting a source by source review.

January 10, 2008

Appendix 10-2 Estimating Visibility Impacts from Additional Point Source Controls

This entire section should estimate impacts to the other Class I areas listed, both in and out of state.

In Appendix 10-2, related to cost of additional point source controls, it is assumed that 2018c control data relate to the Texas components of Base G C1 Control Strategy as outlined in CENRAP's technical support document (TSD.) Texas provided no source-by-source determinations to identify sources that individually may have had a relatively high visibility impact on a particular Class I area(s). Without evaluating the benefits of controls for those sources, it is difficult to evaluate the validity of Texas' claim that additional controls are not cost effective. Also, by eliminating consideration of additional point source controls for those Class I Areas such as Breton, Wichita Mountains, and White Mountain that are not predicted to meet the URP, Texas does not justify how it is contributing to its proportion of controls necessary to help these states work toward the URP.

NATIONAL PARK CONSERVATION ASSOCIATION AND SIERRA CLUB



October 1, 2013

Submitted via the eComments system and U.S. Mail

Margaret Earnest
MC 206
SIP Team
Office of Air
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: 2014 Five-Year Regional Haze SIP Revision—Project No. 2013-013-SIP-NR

Dear Ms. Earnest:

On behalf of National Parks Conservation Association and Sierra Club, Earthjustice respectfully submits the following comments regarding the Texas Commission on Environmental Quality's (TCEQ's) proposed 2014 Five-Year Regional Haze SIP Revision (Project No. 2013-013-SIP-NR) (hereinafter, the "Progress Report").

The proposed Texas regional haze state implementation plan (SIP) does not require a single source to install any pollution controls to reduce haze-causing air pollution. As a result, Texas's proposed SIP comes nowhere close to making reasonable progress toward achieving natural visibility by 2064 at Big Bend National Park and Guadalupe Mountains National Park, as the Regional Haze Rule requires. TCEQ's 5-year progress report shows that visibility is regressing at Big Bend under the SIP, as well as at other Class I areas in Oklahoma and Arkansas where Texas sources disproportionately impair visibility. Multiple sources in these nearby states have been required to install modern pollution controls to comply with the regional haze program, yet Texas's proposed SIP provides a free pass to Texas sources. For these reasons and more, the proposed SIP fails to comply with the Clean Air Act and the Regional Haze Rule.

Despite the many flaws in the proposed SIP, TCEQ's 5-year progress report concludes that the SIP is making adequate progress toward the Clean Air Act's reasonable progress requirements. This conclusion is incorrect and contrary to the progress report's findings. Consequently, the Texas regional haze plan must be revised to require appropriate Best Available Retrofit Technology (BART) controls and reasonable progress controls on Texas sources to ensure Big Bend, Guadalupe Mountains, and the other impacted Class I areas are on the glide path to achieving natural visibility conditions by 2064.

BACKGROUND

I. The Clean Air Act's Regional Haze Program

Since the nation's founding, the United States has valued its diverse and stunning natural scenery. See, e.g., John Copeland Nagle, The Scenic Protections of the Clean Air Act, 87 N.D. L. Rev. 571, 576 (2011). In what has been lauded as "America's best idea," Congress first set aside national parks in the 19th century to preserve and celebrate some of the nation's most spectacular scenery. Id. With the nation's rapid industrialization, however, these remarkable scenic views have become increasingly marred by air pollution. See id. at 573. Today, air pollution is "perhaps the greatest threat to national parks," and pollution all too often degrades visibility in these iconic scenic areas. Id.

To reduce this threat to the national parks and other treasured public lands, Congress amended the Clean Air Act in 1977 to protect and improve visibility at national parks, wilderness areas, and other "Class I" federal areas. 42 U.S.C. § 7491. Finding that Class I areas should enjoy the highest level of air quality, Congress set a national goal of preventing and remedying all human-caused visibility impairment at these areas. Id. § 7491(a)(1). Congress again amended the Clean Air Act in 1990 to further spur reductions of regional haze after it concluded that the U.S. Environmental Protection Agency (EPA) and the states had not made adequate progress toward reducing haze. Id. § 7492. The Act delegates implementation of the regional haze program to EPA. EPA set a goal of achieving natural visibility conditions at every Class I area by 2064, and the agency directed states to make incremental, reasonable progress toward that goal. 40 C.F.R. § 51.308(d)(1)(i)(B), (d)(1)(ii).

The 2064 natural visibility goal is to be achieved, in part, by installing Best Available Retrofit Technology (BART) controls at certain fossil fuel-fired power plants and other sources that were in existence in 1977 but were not in operation before 1962. 42 U.S.C. § 7491(b)(2)(A); 40 C.F.R. § 51.308(e). BART is defined as "an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction." 40 C.F.R. § 51.301 (emphasis added). When determining BART, the states and EPA must analyze "the best system of continuous emission control technology available" and take into consideration five factors: (1) the costs of compliance, (2) the energy and non-air quality environmental impacts of compliance, (3) existing pollution controls at the source, (4) the remaining useful life of the source, and (5) the degree of visibility improvement. Id. § 51.308(e)(1)(ii)(A). BART is an essential component of the regional haze program because Congress largely grandfathered these antiquated sources into many of the Clean Air Act's requirements. See 70 Fed. Reg. 39,104, 39,111 (July 6, 2005). BART compels these older, disproportionately-polluting sources to install up-to-date and cost-effective pollution controls.

The Clean Air Act also directs states to develop a long-term strategy to achieve the 2064 natural visibility goal, including reasonable progress controls on sources that cause or contribute to visibility impairment. 42 U.S.C. § 7491(b)(2)(B); 40 C.F.R. § 51.308(d)(3)(v)(C). When a state selects reasonable progress goals and reasonable progress controls, it must consider four factors: (1) the costs of compliance, (2) the time necessary for compliance, (3) the energy and

non-air quality environmental impacts of compliance, and (4) the remaining useful life of potentially affected sources. 40 C.F.R. § 51.308(d)(1)(i)(A).

Each state must comprehensively analyze and revise its regional haze SIP every ten years and submit progress reports to EPA every five years. *Id.* § 51.308(f), (g), (h). The 5-year progress reports evaluate the SIP's progress toward the reasonable progress goals for each impacted Class I area. EPA has issued guidance that states:

This 5-year review is intended to provide a progress report on, and, if necessary, mid-course corrections to, the regional haze SIP. The progress report provides an opportunity for public input on the state's (and the EPA's) assessment of whether the approved regional haze SIP is being implemented appropriately and whether reasonable visibility progress is being achieved consistent with the projected visibility improvement in the SIP.

EPA, General Principles for the 5-Year Regional Haze Progress Reports for the Initial Regional Haze State Implementation Plans 3 (Apr. 2013).

The Clean Air Act's regional haze program provides states with the initial opportunity to develop regional haze SIPs that clean up the air in our nation's national parks and wilderness areas in accordance with the Regional Haze Rule and EPA guidance. *See* 40 C.F.R. § 51.308. The regional haze program thus presents states with an unparalleled opportunity to protect and restore regional air quality by curbing visibility-impairing pollution from some of the nation's oldest and most polluting sources. When a state's regional haze plan fails to establish a haze program that complies with the Regional Haze Rule and EPA's guidance, the Clean Air Act's cooperative federalism provisions require EPA to exercise federal oversight by disapproving the state plan and issuing a federal implementation plan (FIP) in its place. 42 U.S.C. § 7410(c)(1); North Dakota v. EPA, Nos. 12-1844, 12-1961, 12-2331, 2013 WL 5302700, at *6-7 (8th Cir. Sept. 23, 2013); Oklahoma v. EPA, 723 F.3d 1201, 1207-10 (10th Cir. 2013).

TCEQ's 5-year progress report is uniquely situated because EPA has not yet taken any actions to approve or disapprove TCEQ's regional haze SIP. Pursuant to a consent decree in National Parks Conservation Association v. Jackson (D.D.C. Case 1:11-cv-01548), EPA must propose its action on the Texas regional haze plan by May 15, 2014, and finalize its action by December 13, 2014. As discussed in detail below, Texas's proposed SIP violates the Clean Air Act and the Regional Haze Rule on multiple grounds and the plan must be revised. Accordingly, TCEQ must withdraw the progress report's "negative declaration" that the proposed SIP is adequate and issue a determination that the proposed SIP is, in fact, inadequate.

To the extent TCEQ revises its SIP to comply with the Clean Air Act and the Regional Haze Rule, it must provide adequate time for EPA to review the SIP revisions and propose its action on the SIP by the May 15, 2014 deadline. Delay and inaction have inexcusably set back improvements in air quality at the region's Class I areas. It is therefore imperative that Texas has a valid and legally-defensible haze cleanup plan in place by the end of 2014 to comply with the requirements of the regional haze program. Should TCEQ fail to develop a valid plan that

allows EPA to meet its consent decree obligations, EPA will be obligated to disapprove the SIP and promulgate an adequate FIP.

II. Big Bend, Guadalupe Mountains, And Other Impacted Class I Areas

Texas contains two Class I areas: Big Bend National Park and Guadalupe Mountains National Park. Both national parks are located in west Texas and contain spectacular scenic views that draw visitors from across the United States and the world. According to the National Park Service, “Big Bend National Park is known for its scenic beauty, which ranges from stark seemingly barren wastelands to majestic forested mountains to gigantic canyons.”¹ In addition, the Park Service has noted that Guadalupe Mountains National Park is “internationally significant,” in part because of its “[s]pectacular scenery,” which is a “major attraction for visitors.”²

Air pollution from Texas sources mars the unique scenic views at both Big Bend and Guadalupe Mountains. The National Park Service has acknowledged that “[t]he scenic beauty of Big Bend National Park is often spoiled by haze that obscures its many vistas.”³ This haze is primarily caused by nitrogen oxides (NO_x), sulfur dioxide (SO₂), and particulate matter (PM) pollution from power plants and other anthropogenic sources. *See, e.g.*, Texas Regional Haze SIP at 1-1 (hereinafter, the “Texas SIP”). For example, at Big Bend, baseline visibility impairment on the most impaired days is 17.3 deciviews (dv). *Id.* at App. 5-2, Figure 5-1.⁴ These baseline visibility conditions are far worse than natural visibility conditions at Big Bend, which are 7.2 dv on the most impaired days, according to EPA. *Id.* Similarly, at Guadalupe Mountains, baseline visibility impairment on the most impaired days is 17.2 dv, while natural visibility impairment is 6.8 dv, according to EPA. *Id.* at App. 5-2, Figure 5-2.

To determine the causes of this visibility impairment, the Park Service and EPA conducted the Big Bend Regional Aerosol and Visibility Observational (BRAVO) study in 1999.⁵ The BRAVO study found that sulfate emissions caused over 50% of the visibility impairment at Big Bend, and sulfate emissions during peak particulate sulfate episodes were largely from sources in east Texas.⁶

¹ Nat’l Park Serv. (NPS), Big Bend National Park General Management Plan 103 (2004) (Ex. 1), available at <http://www.nps.gov/bibe/parkmgmt/gmp.htm>. The exhibits cited in this letter exceed the file size limitations for the *eComments* system and will be submitted separately on CD via U.S. mail, as directed by TCEQ’s *eComments* guidelines.

² NPS, Guadalupe Mountains National Park Draft General Management Plan 152 (2008) (Ex. 2), available at <http://parkplanning.nps.gov/documentsList.cfm?parkID=69&projectID=11120>.

³ NPS, Understanding Haze in Big Bend National Park 1 (Ex. 3).

⁴ Visibility conditions are measured using the deciview (dv), which is a “haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired.” 40 C.F.R. § 51.301.

⁵ NPS, Understanding Haze in Big Bend National Park at 1 (Ex. 3).

⁶ *Id.* at 2.

Emissions from Texas power plants also impair visibility at several Class I areas in other states. Texas power plants and other Texas sources cause greater visibility impairment at Wichita Mountains Wilderness Area in Oklahoma than Oklahoma sources. Texas SIP at 11-15 to 11-16. Texas sources also cause significant visibility impairment at Caney Creek Wilderness Area in Arkansas. *Id.* at 11-21 to 11-22. In addition, Texas sources cause or contribute to visibility impairment at many other out-of-state Class I areas, including Carlsbad Caverns National Park, Bandelier National Monument, and the Salt Creek and White Mountain Wilderness Areas in New Mexico; Great Sand Dunes, Rocky Mountain, and Mesa Verde National Parks in Colorado; Upper Buffalo Wilderness Area in Arkansas; Hercules Glades and Mingo Wilderness Areas in Missouri; and Breton Wilderness Area in Louisiana. *Id.* at 1-5, 11-7 to 11-28.

III. The Regional Haze Program's Public Health, Economic, And Other Environmental Benefits

In addition to improving visibility, investments in modern pollution controls under the Texas regional haze plan will yield significant public health, economic, and other environmental benefits. The same pollutants that mar scenic views at national parks and wilderness areas also cause significant public health impacts. NO_x are a precursor to ground level ozone, which is associated with respiratory diseases, asthma attacks, and decreased lung function. In addition, NO_x react with ammonia, moisture, and other compounds to form particulates that can cause and worsen respiratory diseases, aggravate heart disease, and lead to premature death.⁷ Similarly, SO₂ increases asthma symptoms, leads to increased hospital visits, and can form particulates that aggravate respiratory and heart diseases and cause premature death.⁸ PM can penetrate deep into the lungs and cause a host of health problems, such as aggravated asthma, chronic bronchitis, and heart attacks.⁹ The emissions reductions required by the regional haze program will reduce the serious public health toll imposed on Texans by the state's power plants and other sources of pollution.

The regional haze program also provides substantial economic benefits. These economic benefits far outweigh the costs of investment in modern pollution control technologies. EPA values the regional haze program's health benefits nationally at \$8.4 to \$9.8 billion annually.¹⁰ Requiring antiquated power plants and other sources to invest in modern pollution controls is a job-creating mechanism in itself, as each installation creates short-term construction jobs, as well

⁷ EPA, Health – Nitrogen Dioxide, <http://www.epa.gov/air/nitrogenoxides/health.html> (last visited Sept. 30, 2013) (Ex. 4).

⁸ EPA, Health – Sulfur Dioxide, <http://www.epa.gov/air/sulfurdioxide/health.html> (last visited Sept. 30, 2013) (Ex. 4).

⁹ EPA, Health – Particulate Matter, <http://www.epa.gov/air/particlepollution/health.html> (last visited Sept. 30, 2013) (Ex. 4).

¹⁰ EPA, Fact Sheet – Final Amendments to the Regional Haze Rule and BART Guidelines (Ex. 5), [available at http://www.epa.gov/visibility/fs_2005_6_15.html](http://www.epa.gov/visibility/fs_2005_6_15.html).

as permanent operations and management positions.¹¹ As EPA has explained, installing BART “will require well-paid, skilled labor which can potentially be drawn from the local area and support local growth.” 77 Fed. Reg. 57,864, 57,909 (Sept. 18, 2012) (final Montana regional haze FIP). Moreover, the regional haze program protects national parks and wilderness areas, which are of great natural and cultural value, in addition to serving as engines for sustainable local capital. A National Park Service study found that national park visitors contribute approximately \$30 billion to local economies and support 300,000 jobs, that every dollar invested in park operations generates about \$10 in local communities, and that every two Park Service jobs yield one job outside the parks.¹² Nearly 300 million people visit national parks every year, and communities near national parks enjoy greater-than-average economic growth due to the economic impacts of park visitors and related businesses.¹³

Texas’s two national parks are important components of west Texas’s economy. In 2010, over 372,000 people visited Big Bend and over 192,000 people visited Guadalupe Mountains.¹⁴ Tourism at Big Bend in 2010 supported 372 jobs and resulted in over \$16.6 million in visitor spending.¹⁵ Tourism at Guadalupe Mountains that same year supported 258 jobs and resulted in over \$13.3 million in visitor spending.¹⁶ Studies show that national park visitors highly value clean air and prioritize the enjoyment of beautiful scenery when visiting national parks.¹⁷ Moreover, national park visitors readily perceive haze, enjoy their visit less when haze is bad, and are willing to cut short visits to national parks based on their perception of air quality.¹⁸ A decrease in visits means less time and money spent in Texas’s national parks and surrounding communities.

The regional haze program also provides important environmental benefits. In addition to impairing visibility, NO_x, SO₂, and PM pollution harms plants and animals, soil health, and

¹¹ Ceres, New Jobs – Cleaner Air: Employment Effects Under Planned Changes to the EPA’s Air Pollution Rules 1–3 (2011) (Ex. 6), available at <http://www.ceres.org/resources/reports/new-jobs-cleaner-air>.

¹² Daniel J. Stynes, Mich. State Univ., Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010, at page v (2011) (Ex. 7), available at <http://nature.nps.gov/socialscience/docs/NPSSystemEstimates2010.pdf>; see also NPS, National Park System – Summary: 1990 to 2008 (Ex. 8) (in 2008, National Park Service units received over 274 million visits, accounting for over \$2.5 billion in expenditures and revenue), available at <http://www.census.gov/compendia/statab/2010/tables/10s1215.pdf>.

¹³ See Jared Hardner & Bruce McKenney, Hardner & Gullison, The U.S. National Park System, An Economic Asset at Risk 5 (2006) (Ex. 9).

¹⁴ Headwater Economics, Nat’l Park Serv. Units: Economic Impacts of Visitation & Expenditures, <http://headwaterseconomics.org/apps-public/nps/impacts/> (last visited Oct. 1, 2013) (Ex. 10).

¹⁵ Id.

¹⁶ Id.

¹⁷ Abt Assocs. Inc., Out of Sight: The Science and Economics of Visibility Impairment, at ES-7 (2000) (Ex. 11), available at <http://www.abtassociates.com/reports/ES-clear.pdf>.

¹⁸ Id.

entire ecosystems. NO_x and SO₂ are the primary causes of acid rain, which acidifies lakes and streams and can damage certain types of trees and soils. Acid rain also accelerates the decay of building materials and paints, including irreplaceable buildings and statues that are part of our nation's cultural heritage.¹⁹ In addition, nitrogen deposition—caused by wet and dry deposition of nitrates derived from NO_x emissions—causes well-known adverse impacts on ecological systems. At times, nitrogen deposition exceeds “critical loads” beyond the tolerance of various ecosystems.²⁰ NO_x is also a precursor to ozone, and ground-level ozone impacts plants and ecosystems by interfering with plants' ability to produce food and increasing their susceptibility to disease and insects.²¹

DISCUSSION

Texas's proposed regional haze SIP does not require a single source to install any controls to reduce haze-causing air pollution. As a result, the Texas SIP will not achieve natural visibility conditions at Big Bend and Guadalupe Mountains for hundreds of years beyond the Regional Haze Rule's 2064 natural visibility goal. In addition, because the proposed SIP lacks any pollution controls, Texas sources disproportionately impair visibility at out-of-state Class I areas. In many of these Class I areas, in-state sources are required to reduce their pollution in order to comply with the regional haze program while Texas sources get a free pass under the proposed Texas SIP. Texas's proposed regional haze SIP thus violates the Clean Air Act on multiple grounds.

TCEQ's 5-year progress report ignores these flaws and concludes that the proposed Texas SIP is making adequate progress toward the regional haze program's reasonable progress requirements. The progress report's conclusion is divorced from the projected visibility impacts that TCEQ itself found would persist as a result of the inadequate SIP. Despite the many flaws in the proposed SIP and new information showing that many Class I areas are failing to meet even the SIP's inadequate reasonable progress goals, the progress report glosses over these problems. Consequently, the Texas regional haze plan should be revised to comply with the Clean Air Act and ensure that Big Bend, Guadalupe Mountains, and the other impacted Class I areas are on the glide path to achieve reasonable progress by 2018 and natural visibility by 2064.

¹⁹ EPA, Effects of Acid Rain, <http://www.epa.gov/acidrain/effects/index.html> (last visited Sept. 30, 2013) (Ex. 12).

²⁰ See, e.g., William D. Bowman et al., Nitrogen critical loads for alpine vegetation and soils in Rocky Mountain National Park, 103 *Journal of Env'tl. Mgmt.* 165–71 (2012) (Ex. 13); NPS, Nitrogen Deposition: Issues and Effects in Rocky Mountain National Park (2005) (Ex. 14), available at http://www.nps.gov/romo/parkmgmt/upload/ROMO_N_Fact_Final.pdf.

²¹ EPA, Ground-level Ozone – Ecosystem Effects, <http://www.epa.gov/airquality/ozonepollution/ecosystem.html> (last visited Sept. 30, 2013) (Ex. 15).

I. The Proposed Regional Haze SIP Does Not Adequately Meet The Regional Haze Program’s Reasonable Progress Requirements.

TCEQ’s 5-year progress report must evaluate whether the proposed regional haze SIP makes adequate progress toward the reasonable progress goals (RPGs) at each impacted Class I area. 40 C.F.R. § 51.308(g). Specifically, the progress report must include “[a]n assessment of whether the current implementation plan elements and strategies are sufficient to enable the State, or other States with . . . Class I areas affected by emissions from the State, to meet all established reasonable progress goals.” *Id.* § 51.308(g)(6). In its 5-year progress report, TCEQ concluded that the proposed regional haze SIP “is adequate for continued progress” toward the RPGs at Big Bend, Guadalupe Mountains, and the out-of-state Class I areas where visibility is impaired by Texas sources. Progress Report at 7-1. However, the progress report instead demonstrates that Texas’s SIP does not adequately reduce haze-causing air pollution and does not make reasonable progress toward visibility restoration. Therefore, TCEQ’s conclusion is incorrect and not supported by the progress report’s findings.

A. The Proposed Regional Haze SIP’s Extended Reasonable Progress Goals Violate The Clean Air Act.

The proposed regional haze SIP for Texas does not make adequate progress toward eliminating human-caused visibility impairment at Big Bend and Guadalupe Mountains by 2064, as the Regional Haze Rule requires. *See* 40 C.F.R. § 51.308(d)(1)(i)(b), (d)(1)(ii). In section 169A of the Clean Air Act, Congress established a national goal of eliminating all human-caused visibility impairment and restoring to natural conditions the scenic vistas at national parks, wilderness areas, and other Class I areas. 42 U.S.C. § 7491(a)(1). To implement this national goal, the Regional Haze Rule requires each state’s regional haze plan to establish RPGs for every Class I area that make reasonable progress toward achieving natural visibility by 2064. 40 C.F.R. § 51.308(d)(1). These RPGs must provide for improvement in visibility on the most impaired days, and ensure that visibility is not degraded on the best days. *Id.*

The Regional Haze Rule makes clear that a “primary purpose[.]” of the regional haze program is the development of a series of regional haze plans with RPGs that make incremental progress toward eliminating human-caused visibility impairment in Class I areas by 2064. *Id.* § 51.300(a). The D.C. Circuit has also recognized that the 2064 natural visibility goal and reasonable progress requirements are the cornerstone and overarching mandate of the regional haze program. *Util. Air Regulatory Grp. v. EPA*, 471 F.3d 1333, 1340 (D.C. Cir. 2006) (agreeing with EPA that the ultimate measure of a regional haze plan’s compliance with “the regulatory scheme as a whole” is whether it achieves reasonable progress); *Ctr. for Energy & Econ. Dev. v. EPA*, 398 F.3d 653, 660 (D.C. Cir. 2005) (explaining that the primary goal of the Clean Air Act’s visibility program is achievement of reasonable progress toward the natural visibility goal); *Am. Corn Growers Ass’n v. EPA*, 291 F.3d 1, 9–13 (D.C. Cir. 2002) (rejecting industry challenge to the Regional Haze Rule’s goal of eliminating all human-caused visibility impairment at Class I areas by 2064).

According to Texas’s proposed SIP, Big Bend would not achieve natural visibility conditions until 2155—91 years after the 2064 goal and 142 years from today. Texas SIP at 10-

1. The proposed SIP would not achieve natural visibility at Guadalupe Mountains until 2081—17 years after the 2064 goal and 68 years from today. *Id.* If a SIP’s reasonable progress goals will not achieve natural visibility by 2064, the state must demonstrate that (1) the 2064 goal is unreasonable, and (2) the state’s extended reasonable progress goal is reasonable. 40 C.F.R. § 51.308(d)(1)(ii). TCEQ did not adequately explain why the 2064 natural visibility goal is unreasonable at Texas’s Class I areas, or how its extended reasonable progress goals could possibly be reasonable, as required by the Regional Haze Rule.²²

In addition, Texas’s extended RPGs are flawed because they use a novel methodology to calculate natural visibility impairment that departs from EPA’s guidance and significantly underestimates the time it will take to achieve “natural” visibility levels in Big Bend and Guadalupe Mountains. By departing from EPA’s methodology for calculating natural visibility conditions, the proposed SIP overestimates the true level of natural visibility impairment. As a result, the 2155 and 2081 reasonable progress goals—which represent the ultimate goals of the proposed SIP—do not reflect the return to true natural visibility conditions that the Clean Air Act requires. *See* 64 Fed. Reg. 35,714, 35,729 (July 1, 1999) (explaining that the “[e]stimates of natural visibility conditions” form the basis for “the ultimate goal of the program”). Instead, true natural visibility would not be achieved until much later than even these extended dates, if at all. The National Park Service has repeatedly objected to TCEQ’s methodology for calculating natural visibility conditions because TCEQ did not fully and clearly explain the methods and consequences of its alternative methodology.²³ The Park Service estimates that if the SIP had used true natural visibility conditions, rather than the artificially-elevated “natural” visibility levels, the SIP would not achieve natural visibility until approximately 2244 at Big Bend and 2187 at Guadalupe Mountains.²⁴ A regional haze SIP that attempts to transform the Regional Haze Rule’s 50-year compliance window into a 170-year to 230-year compliance window is patently unreasonable and legally indefensible.

As the glide paths in Figures 1 and 2 illustrate, Texas’s plan is a far less-stringent regional haze plan than the Regional Haze Rule requires because it (1) sets an artificially-elevated natural visibility goal, and (2) delays achieving that natural visibility goal for decades beyond 2064. Consequently, TCEQ’s progress report is mistaken when it concludes that the proposed SIP is adequate to meet the Act’s reasonable progress requirements.

²² *See also* NPS Comments on 5-Year Progress Report at 4 (Aug. 20, 2013) (Ex. 16) (“Texas has not demonstrated that implementation of existing Texas and federal rules are the only emission reductions that are reasonable to implement by 2018 to satisfy the requirements of the regional haze rule.”).

²³ *See, e.g.*, NPS Comments on 5-Year Progress Report at 10 (Ex. 16); NPS Comments on Texas SIP at 2–4 (Jan. 11, 2008) (Ex. 17).

²⁴ NPS Comments on 5-Year Progress Report at 10 (Ex. 16).

Figure 1 – Comparison of TCEQ’s Regional Haze SIP and the Uniform Rate of Progress to True Natural Visibility Conditions at Big Bend

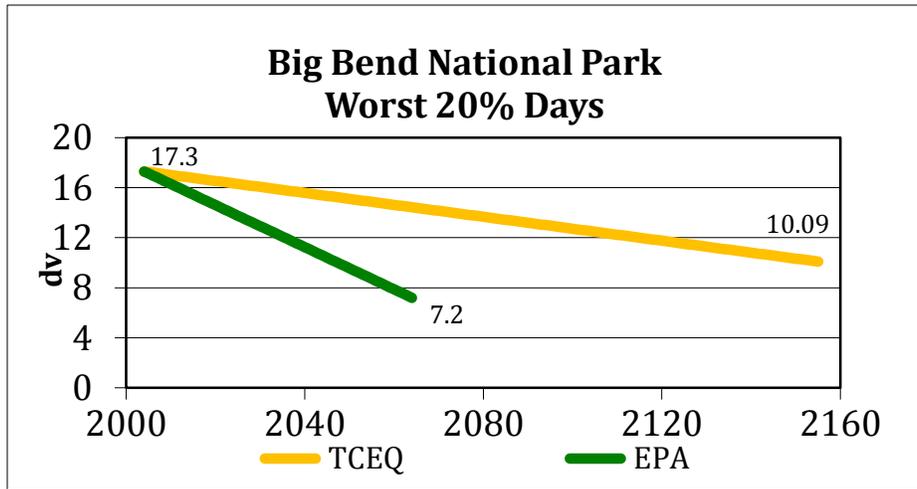
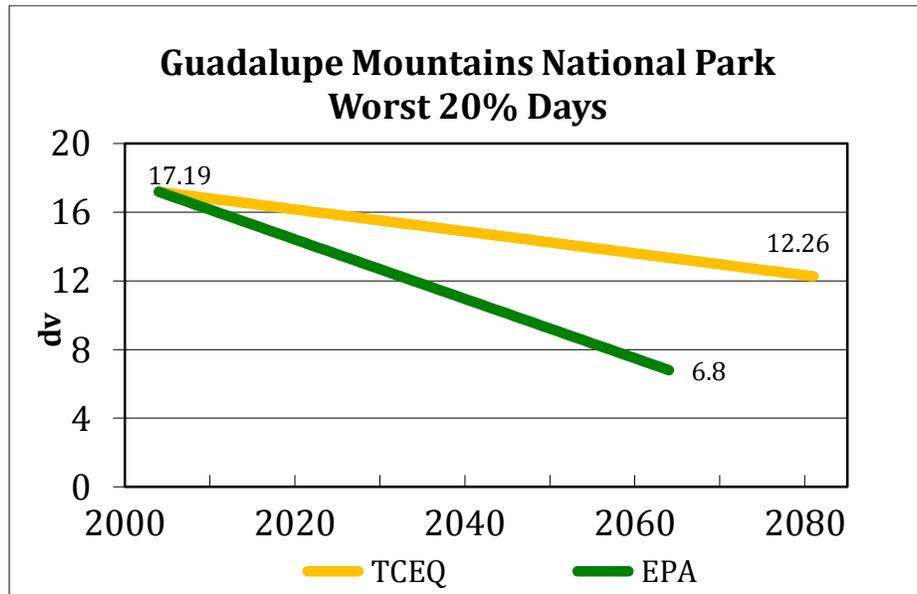


Figure 2 – Comparison of TCEQ’s Regional Haze SIP and the Uniform Rate of Progress to True Natural Visibility Conditions at Guadalupe Mountains



B. The Progress Report Demonstrates That The Proposed SIP Does Not Make Adequate Progress Toward Its Reasonable Progress Goals.

Not only do the proposed regional haze SIP’s extended reasonable progress goals violate the Clean Air Act, but TCEQ’s progress report shows that the SIP is already failing to achieve many of these relaxed and extended reasonable progress goals at Big Bend, Guadalupe

Mountains, and Class I areas in other states. Accordingly, the progress report's conclusion that the SIP is making adequate progress toward its reasonable progress goals is unsupported and contrary to the report's findings.

1. The Progress Report Demonstrates That Visibility At Big Bend Has Degraded On The Least Impaired Days.

TCEQ's progress report shows that visibility at Big Bend has degraded on the least impaired days. The reasonable progress goal for each Class I area "must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period." 40 C.F.R. § 51.308(d)(1) (emphasis added). The 5-year progress report demonstrates that the proposed Texas SIP violates this requirement because visibility conditions at Big Bend have degraded by 0.1 dv on the least impaired days from the 2000-2004 baseline period to the 2005-2009 period. See Progress Report at 3-4, 5-3.

TCEQ appears to downplay this violation of the Regional Haze Rule by asserting that there is "no statistically significant difference in visibility impairment between the two time periods," based on TCEQ's statistical "T-test." Id. at 3-4. However, the progress report makes clear that IMPROVE monitoring has documented this visibility degradation at Big Bend on the least impaired days. TCEQ cannot discount this critical monitoring data showing visibility degradation by simply claiming that the degradation is not statistically significant.²⁵

In addition, TCEQ attempts to dismiss the IMPROVE monitoring data by claiming that the degradation in visibility "may be an anomaly resulting from year-to-year variation or it may be the result of undocumented changes in international [emissions], [and] [a]nother possibility is that year-to-year variation in dust storms . . . and transport of dust from dry lake beds in Mexico could have produced the slight increase in visibility impairment." Id. at 3-8 (emphases added). However, while these various hypotheticals may contribute to visibility degradation at Big Bend, the proposed SIP's failure to require a single source to install pollution controls could also very well be the cause of this visibility degradation. Moreover, TCEQ's hypotheticals fail to reflect the fact that the documented visibility degradation at Big Bend is based on the 5-year average of annual visibility impairment from 2005-2009, which is designed to alleviate concerns about unusual annual fluctuations. See 64 Fed. Reg. at 35,726 ("[T]racking of visibility trends based on 5-year averages" alleviates concerns about "significant unusual fluctuations in annual average values . . . due to unusual meteorological conditions in any particular year."). In any event, TCEQ's speculation on the causes of the visibility degradation is ultimately irrelevant. The

²⁵ National Parks Conservation Association and Sierra Club agree with TCEQ's acknowledgement elsewhere in the progress report that the IMPROVE monitors at Big Bend, Guadalupe Mountains, and nearby Class I areas are "centrally important" to the regional haze program. Progress Report at 6-1. In addition, the conservation organizations commend TCEQ's vow to "work closely" with the federal agencies and nearby states to maintain funding for the IMPROVE sites. Id.

Regional Haze Rule requires states to ensure that no visibility degradation occurs on the least impaired days, and Texas’s proposed SIP fails to do so.

2. The Progress Report Demonstrates That Visibility At Wichita Mountains Has Degraded On The Least Impaired Days.

The 5-year progress report also notes that visibility at Wichita Mountains in Oklahoma has degraded by 0.1 dv on the least impaired days. Progress Report at 5-4, 5-6. TCEQ again attempts to downplay this fact by claiming that the degradation is statically insignificant based on its “T-test.” *Id.* at 5-4. But just as TCEQ cannot so easily dismiss the IMPROVE monitoring data at Big Bend, it can not use its “T-test” to discount the IMPROVE data showing visibility degradation at Wichita Mountains. Consequently, the visibility degradation at Wichita Mountains on the least impaired days is just one more reason why TCEQ’s 5-year progress report does not contain an adequate assessment of whether the Class I areas impacted by Texas sources are on track to meet their reasonable progress goals. *See* 40 C.F.R. § 51.308(g)(6).

3. The Progress Report Demonstrates That Four Out-of-State Class I Areas Are Off The Glide Path To Their 2018 Reasonable Progress Goals For The Most Impaired Days.

TCEQ’s 5-year progress report must contain an assessment of whether each Class I area impacted by Texas sources is on track to meet its 2018 RPGs for the most impaired days. 40 C.F.R. § 51.308(g)(6). TCEQ’s progress report admits that four out-of-state Class I areas are not on track to meet their 2018 reasonable progress goals for the most impaired days. *See* Progress Report at 5-4 to 5-5 (discussing Caney Creek and Upper Buffalo Wilderness Areas in Arkansas, and Hercules Glades and Mingo Wilderness Areas in Missouri). The progress report states—without any analysis—that “it is unlikely that emissions from Texas are significantly responsible for the areas being [off the glide path]” because of “substantial reductions” in Texas’s NO_x and SO₂ emissions. *Id.* at 5-4. The progress report goes on to ultimately conclude that the proposed regional haze SIP makes adequate progress toward achieving the existing RPGs at all impacted Class I areas in other states. *Id.* at 7-1.

TCEQ’s conclusion that the proposed SIP makes adequate progress toward meeting the existing RPGs is arbitrary and unsupported in light of the fact that four out-of-state Class I areas are off the glide path to their 2018 RPGs. The primary purpose of the 5-year progress report is to evaluate whether impacted Class I areas are on track to meet their RPGs and to implement any necessary mid-course corrections before the 10-year SIP revision. *See, e.g.,* EPA, General Principles for the 5-Year Regional Haze Progress Reports, at 3. TCEQ cannot evade its duty to provide a meaningful 5-year review by cavalierly dismissing the fact that multiple Class I areas are not on track to meet their RPGs.

a. Texas Power Plants Are The Predominant Cause of Visibility Impairment At Multiple Class I Areas.

TCEQ’s dismissive approach to the 5-year review is particularly troubling with regard to Wichita Mountains, Caney Creek, and Upper Buffalo, where Texas power plants are the

predominant contributor to regional haze and responsible for more haze pollution than Oklahoma and Arkansas point sources. See Texas SIP at 11-15 to 11-16, 11-21 to 11-23. As Table 1 below demonstrates, Texas power plants emit far greater quantities of SO₂ and NO_x pollution than Oklahoma and Arkansas power plants. For example, Texas power plants emitted more than 25% more NO_x pollution than all the power plants in Oklahoma and Arkansas combined, and they emitted more than double the amount of SO₂ pollution than both those states combined. Accordingly, as the National Park Service explained in its comments, given the large quantities of NO_x and SO₂ pollution from Texas’s power plants, “[i]t is difficult to believe that these cumulative emissions do not impair visibility in Class I areas in [Texas] and nearby states.”²⁶

Table 1 - Sulfur Dioxide and Nitrogen Oxides Emissions from Texas, Oklahoma, and Arkansas Power Plants²⁷

State	SO ₂ (tons)	NO _x (tons)
TX	426,487	147,077
AR	73,623	38,338
OK	92,351	77,983

In addition, individually, three of the top eleven power plants in the nation for SO₂ pollution are located in Texas. Table 2 below shows the SO₂ annual emissions in tons per year for the five largest sources in Texas, Oklahoma, and Arkansas. The five power plants in Texas with the highest SO₂ emissions emit approximately 50% more SO₂ pollution than the combined emissions from the five worst SO₂-polluting plants in both Arkansas and Oklahoma. In fact, the two largest sources in Texas, the Martin Lake and Big Brown plants, by themselves emit almost as much as the ten plants in Arkansas and Oklahoma shown in Table 2.

²⁶ NPS Comments on 5-Year Progress Report at 3 (Ex. 16). In addition, EPA’s guidance states that because SO₂ and NO_x reductions from power plants are “generally critical elements of each state’s regional haze strategy,” the progress report should discuss emissions trends for the state’s power plants using CAMD data. EPA, General Principles for the 5-Year Regional Haze Progress Reports, at 8. TCEQ’s progress report failed to do this.

²⁷ EPA Clean Air Markets Database, 2011 annual data, available at <http://ampd.epa.gov/ampd/>.

Table 2 - Sulfur Dioxide Emissions from the Worst SO₂-Polluting Power Plants in Texas, Oklahoma, and Arkansas²⁸

Rank	Arkansas Facility	SO₂ (tons)	Oklahoma Facility	SO₂ (tons)	Texas Facility	SO₂ (tons)
1	White Bluff	31,684	Muskogee	26,932	Martin Lake	68,931
2	Independence	30,398	Sooner	19,094	Big Brown	64,198
3	Flint Creek	8,619	GRDA	19,023	Monticello	54,435
4	Plum Point	2,831	Northeastern	17,947	W A Parish	49,570
5	Carl Bailey	36	Hugo	9,279	Welsh	25,622
Top 5 Total		73,568		92,275		262,756

Moreover, Texas power plants have equivalent or larger emissions per distance (Q/d) ratios to Wichita Mountains and Caney Creek than Oklahoma and Arkansas power plants. Regulators and federal land managers use Q/d ratios as benchmarks of the potential visibility impact of different sources on a Class I area. The larger the Q/d ratio, the greater the potential visibility degradation. A Q/d value of 10 or greater generally indicates that a source causes or contributes to visibility impairment and dispersion modeling is warranted. See, e.g., 76 Fed. Reg. 58,570, 58,624 & n.83 (Sept. 21, 2011) (describing how the BART Guidelines and the Federal Land Managers’ proposed FLAG guidance amendments set a Q/d threshold value of 10). As Table 3 shows, for Wichita Mountains, the Q/d ratios for SO₂ pollution from several Texas power plants far exceed the Q/d ratios for Oklahoma’s power plants that will reduce their SO₂ pollution as part of EPA’s regional haze FIP for Oklahoma.

²⁸ EPA Clean Air Markets Database, 2011 annual data, available at <http://ampd.epa.gov/ampd/>.

Table 3 - Q/d Ratios for Texas and Oklahoma Sources for Impacts to Wichita Mountains

Plant	Distance to Wichita Mountains (miles)	2011 SO₂ Emissions (tons)	Emissions/Distance (Q/d) in tons/mile
<u>Texas Sources</u>			
EFH/Luminant Big Brown	290	64,198	221
EFH/Luminant Monticello	300	54,435	181
Xcel Tolk	250	19,830	79
Xcel Harrington	200	15,106	76
AEP Oklaunion	65	3,755	58
<u>Oklahoma Sources</u>			
OGE Muskogee	230	26,932	117
OGE Sooner	170	19,094	112
PSO Northeastern	230	17,947	78

Texas sources have even greater Q/d ratios at Caney Creek, as shown in Table 4.

Table 4 - Q/d Ratios for Texas Sources for Impacts to the Caney Creek Wildlife Area

Plant	Distance to Caney Creek NWA (miles)	2011 SO₂ Emissions (tons)	Emissions/Distance (Q/d) in tons/mile
EFH/Luminant Monticello	130	54,435	419
EFH/Luminant Martin Lake	180	68,931	383
EFH/Luminant Big Brown	280	64,198	229
AEP Welsh	130	25,622	197

As discussed below, additional analysis conducted by EPA and outside modelers also shows that Texas power plants cause significant visibility impairment at Wichita Mountains and Caney Creek. See infra at 23–26.

b. The Proposed SIP’s Failure To Control Texas Power Plants Is Inequitable.

Despite Texas power plants’ disproportionate impact on Class I areas in Oklahoma and Arkansas, Texas’s proposed SIP does not require a single plant to install any controls to reduce haze-causing air pollution. This is inequitable because Oklahoma and Arkansas power plants will have to install modern pollution controls under their state’s regional haze plans. See, e.g., Oklahoma, 723 F.3d at 1210–24 (upholding EPA’s BART determinations for Muskogee and

Sooner Generating Stations in Oklahoma); 77 Fed. Reg. 14,604, 14,607 (Mar. 12, 2012) (disapproving inadequate state BART determinations for multiple Arkansas power plants). Because four out-of-state Class I areas are already off the glide path to their 2018 RPGs and Texas power plants are a disproportionately large contributor to existing visibility impairment, TCEQ should not have concluded that the proposed regional haze SIP is making adequate progress toward achieving those RPGs.

II. The Texas Regional Haze Plan Must Be Revised To Require Appropriate Pollution Controls And To Achieve Reasonable Progress Toward The 2064 Natural Visibility Goal.

Because Texas's proposed regional haze SIP does not make adequate progress toward meeting the regional haze program's reasonable progress requirements, the plan must be revised. 40 C.F.R. § 51.308(h)(4); EPA, General Principles for the 5-Year Regional Haze Progress Reports, at 3. Texas's proposed SIP does not require a single source to install any pollution controls to reduce regional haze, even though such controls are the primary mechanism for returning national parks and wilderness areas to natural visibility conditions. See, e.g., 64 Fed. Reg. at 35,726 ("The mechanism for achieving improvements in visibility will be the implementation of enforceable emissions reduction measures that have been adopted as part of the [regional haze] SIP."). Accordingly, the Texas regional haze plan must be revised to require appropriate BART controls and reasonable progress controls that ensure that Big Bend, Guadalupe Mountains, and the other impacted Class I areas are on the glide path to achieving natural visibility by 2064.²⁹

A. The Texas Regional Haze Plan Must Include Source-By-Source BART Determinations And Require Appropriate BART Controls At All Sources Subject To BART.

At least 22 electric generating units (EGUs) at 10 power plants in Texas are BART-eligible. See generally Texas SIP at 9-1 to 9-5. In the proposed SIP, TCEQ failed to conduct a single BART analysis or impose emissions controls on any of these EGUs. Instead, TCEQ relied on the Clean Air Interstate Rule (CAIR), or a replacement rule, as "equivalent to BART" and exempted all EGUs from a BART analysis for SO₂ and NO_x. Id. at 9-1. EPA has already disapproved the proposed SIP's reliance on CAIR because the D.C. Circuit has held that CAIR is unlawful. See 77 Fed. Reg. 33,642, 33,653 (June 7, 2012). No replacement rule for CAIR is currently valid or in effect. Nonetheless, reliance on CAIR or a replacement rule is a critical element of the proposed SIP, as "[t]he majority of the emissions reductions underlying the predicted visibility improvements are from the CAIR program or its eventual replacement." Texas SIP at 10-9.

²⁹ See also NPS Comments on 5-Year Progress Report at 1 (Ex. 16) ("[T]he [progress report] does not demonstrate that Texas is implementing all the reasonable control measures necessary to reduce Texas's proportional contribution to visibility impairment at Class I areas in Texas and impacted by Texas.").

The proposed SIP's substitution of CAIR or its eventual replacement for source-by-source BART determinations is unlawful because: (1) EPA has already disapproved the proposed SIP's reliance on CAIR, and (2) using a regional trading scheme to meet BART requirements flouts the plain requirements of the Clean Air Act and Regional Haze Rule requiring that BART be applied on a source-by-source basis. Therefore, Texas's regional haze plan must include legally-compliant BART determinations to address NO_x, SO₂, and PM emissions for all BART-eligible sources. Such determinations would have been required even if CAIR had been held to be lawful or if there was an operating rule in its place. It is beyond question that source-by-source BART determinations are required in the absence of any lawful interstate pollution rule governing these pollutants. Because BART is a mandatory requirement, all EGUs subject to BART must undergo a proper five-step BART analysis and determination.

1. EPA Has Disapproved The Proposed Regional Haze SIP's Reliance On CAIR .

CAIR was promulgated to satisfy the requirements in Section 110(a)(2)(D)(i)(I) of the Clean Air Act regarding interstate transport of air pollution. See 42 U.S.C. § 7410(a)(2)(D)(i)(I). The emissions trading programs required under CAIR were designed to reduce emissions of air pollutants that affect the ability of downwind states to attain and maintain compliance with the 1997 fine particulate and ozone National Ambient Air Quality Standards (NAAQS). See 70 Fed. Reg. 25,162 (May 12, 2005).

In 2008, the D.C. Circuit Court of Appeals held that CAIR violated the Clean Air Act and remanded the rule to EPA, without *vacatur*, allowing CAIR to remain in effect until it could be replaced by a rule consistent with the court's opinion. See *North Carolina v. EPA*, 550 F.3d 1176 (D.C. Cir. 2008), modifying 531 F.3d 896 (D.C. Cir. 2008). The court allowed the rule to remain in effect "temporarily," pending development of a replacement rule. Id. at 1178. In choosing to remand CAIR without *vacatur*, the court made it clear that it did "not intend to grant an indefinite stay of the effectiveness of [its] decision" to remand the rule, given "CAIR's fundamental flaws, which EPA must still remedy." Id.

In response, EPA promulgated the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. 76 Fed. Reg. 48,208 (Aug. 8, 2011). However, the D.C. Circuit vacated CSAPR in *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7 (D.C. Cir. Aug. 21, 2012).³⁰ Following the approach taken in *North Carolina*, in *EME Homer City* the court directed EPA to "continue to administer CAIR pending its development of a valid replacement." 696 F.3d at 38. The court reiterated that although it ordered CAIR to remain in effect temporarily, CAIR is legally flawed and must be replaced "expeditiously." Id. at 37–38 & n.35. Thus, CAIR temporarily remains in place for the sole purpose of ensuring that some environmental benefits continue under Section 110(a)(2)(D)(i)(I) while EPA develops a valid replacement.

³⁰ The Supreme Court granted EPA's petition for writ of certiorari seeking review of the D.C. Circuit court's opinion on June 24, 2013. *EPA v. EME Homer City Generation L.P.*, 133 S.Ct. 2857 (2013).

In June 2012, before the EME Homer City decision, EPA issued a final limited disapproval for the part of the Texas proposed SIP that relied on CAIR to satisfy the regional haze program's BART requirements for Texas power plants. 77 Fed. Reg. at 33,653.³¹ EPA stated in that rulemaking process that "as CAIR has been remanded and only remains in place temporarily, we cannot fully approve these regional haze SIP revisions that have relied on the now-temporary reductions from CAIR." 77 Fed. Reg. at 33,645. EPA recognized that CAIR was currently in effect, but concluded that "this does not affect the substance of the D.C. Circuit's ruling in 2008 remanding CAIR to the EPA." Id. Nothing in EME Homer City changes this rationale. See EME Homer City, 696 F.3d at 37–38 & n.35 (reiterating that CAIR is flawed and must be replaced). Accordingly, Texas's regional haze plan cannot rely on CAIR to exempt Texas EGUs from the BART analyses and BART controls required by the Clean Air Act.

At the time TCEQ submitted the proposed SIP, TCEQ recognized that CAIR was unlawful. However, instead of conducting source-specific BART analyses, TCEQ stated that it "expects that a replacement program will be in place that makes comparable reductions in pollutants causing regional haze prior to 2018." Texas SIP at ES-2; id. at 10-2 (reasonable progress goals "assume that either CAIR will remain in place or will be replaced by a comparable program to reduce visibility impairing pollution from EGUs in Texas and in the eastern United States"); id. at 9-1 (TCEQ "will take appropriate action if CAIR is not replaced with a system that the US EPA considers to be equivalent to BART"). There is no valid or enforceable replacement rule in place, however. While CSAPR was intended to replace CAIR, CSAPR has also been invalidated and it currently has no legal effect on states or covered sources. The proposed SIP's reliance on an invalidated program violates the Clean Air Act's requirement that all elements of a SIP must be enforceable. See 42 U.S.C. § 7410(a)(2)(A), (a)(2)(C) (requiring SIPs to include "enforceable emission limitations" and "to provide for the enforcement of" all adopted measures in the plan); 40 C.F.R. § 51.308(d)(3) (requiring a regional haze plan's long-term strategy to include "enforceable emissions limitations" and other control measures). Because there is no valid or enforceable replacement rule in place, the proposed SIP's reliance on such a rule is unsupported.

Moreover, there is no way to ensure that a replacement rule will achieve "comparable reductions in pollutants causing regional haze." See Texas SIP at ES-2. CAIR and CSAPR utilize emissions trading to achieve area-wide reductions. EPA may well develop a replacement that, in using a different structure or incentives, provides emissions reductions in different localized areas even if it achieves similar reductions in the aggregate. For example, certain states, such as Connecticut and Massachusetts, were covered under CAIR but not CSAPR, while other states, such as Minnesota, Nebraska, Kansas, and Oklahoma, were covered under CSAPR

³¹ In the same rulemaking, EPA issued limited disapprovals for 13 other states' proposed regional haze SIPs that similarly relied on CAIR to satisfy BART. 77 Fed. Reg. at 33,653. These actions are consistent with other recent regional haze rulemakings, where EPA similarly took the position that it could not fully approve state plan revisions that relied on temporary reductions from CAIR. See, e.g., 77 Fed. Reg. 35,287, 35,287–88 (June 13, 2012) (Virginia); 77 Fed. Reg. 16,937, 16,938 (Mar. 23, 2012) (West Virginia).

but not CAIR. Thus, TCEQ cannot assume that emissions reductions that would occur under CAIR in Class I areas will necessarily be maintained in any replacement rule.

Notably, even when CSAPR was in effect, EPA declined to endorse reliance on this rule as a substitute for BART in Texas. In the rulemaking disapproving Texas and other states' proposed reliance on CAIR, EPA also issued final FIPs to replace reliance on CAIR with reliance on CSAPR for 12 states—but not Texas. 77 Fed. Reg. at 33,654. EPA reasoned: “We are not finalizing a FIP, as proposed, for Texas in order to allow more time for the EPA to assess the current Texas SIP submittal. Additional time is required due to the variety and number of BART-eligible sources and the complexity of the SIP.” *Id.* (emphasis added). Indeed, as described above, the vast number of BART-eligible sources, the huge amount of pollution emitted by these sources, and the impacts to nearby Class I areas make Texas unique and necessitate a source-by-source BART analysis. *See supra* at 12–16.

In short, EPA has already issued a final rule finding that the proposed SIP's reliance on CAIR is unacceptable, the D.C. Circuit has concluded that both CAIR and CSAPR are illegal, and EPA has specifically declined to approve reliance on CSAPR even if CSAPR was legal. The Texas regional haze plan cannot rely on CAIR or CSAPR to exempt Texas's power plants from legally-compliant BART determinations.

2. The Clean Air Act And Regional Haze Rule Require Source-by-Source BART Reviews Regardless Of The Status Of CAIR Or CSAPR.

Even if EPA had not already issued a limited disapproval of the proposed SIP's reliance on CAIR, and even if the Supreme Court reinstates CSAPR, Texas cannot rely on CAIR, CSAPR, or a hypothetical replacement rule as an alternative to BART. Under the Clean Air Act, BART is a mandatory measure that must be implemented to achieve reasonable progress toward restoring Class I areas to natural visibility conditions. Section 169A(b)(2)(A) expressly requires states to adopt SIPs that “contain such emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national [visibility] goal . . . including” BART controls on sources subject to BART. 42 U.S.C. § 7491(b)(2)(A). Notably, the Act requires BART for BART-eligible sources that emit any pollutant that may cause or contribute to any visibility impairment in any Class I area. *Id.*

The only permissible exemption from BART is expressly set forth in Section 169A(c). *Id.* § 7491(c). Under Section 169A(c), three conditions must be satisfied before a BART-eligible EGU may be exempted from BART: (1) EPA must determine, by rule promulgated with sufficient notice and opportunity for public comment, that the EGU does not either “by itself or in combination with other sources” cause or contribute to significant visibility impairment in a Class I area; (2) if the power plant has a design capacity of 750 megawatts or more, the owner or operator of the plant must demonstrate that it is located far enough away from Class I areas so that it does not “by itself or in combination with other sources” emit pollution that may “reasonably be anticipated to cause or contribute to significant” visibility impairment at a Class I area; and (3) the affected Federal Land Managers must concur with the BART exemption. *Id.*

Neither CAIR nor CSAPR meet the statutory criteria for a BART exemption. EPA has not shown that under CAIR or CSAPR, the BART-eligible EGUs in Texas will not cause or contribute to visibility impairment at Big Bend, Guadalupe Mountains, or Class I areas in other states. In fact, modeling shows just the opposite—that Texas’s BART-eligible EGUs will continue to cause significant visibility impairment at multiple Class I areas under both CAIR and CSAPR. See infra at 23–26. While EPA promulgated a “better than BART” rule for CAIR in 2006, the D.C. Circuit has since ruled that that CAIR is unlawful. North Carolina, 550 F.3d at 1177. Similarly, while EPA promulgated a “better than BART” rule for CSAPR in 2011, the D.C. Circuit has also found CSAPR to be unlawful. EME Homer City, 696 F.3d at 38.³² Thus, the “better than BART” rules finalized by EPA are no longer valid or applicable in Texas. Moreover, there is no evidence that the Federal Land Managers at Big Bend, Guadalupe Mountains, and other Class I areas have concurred with Texas’s proposed BART exemption for Texas’s BART-eligible EGUs. Instead, the National Park Service has criticized the Texas SIP’s reliance on CAIR.³³ As a result, there is no statutory authority for Texas to exempt BART-eligible EGUs in Texas from BART by relying on CAIR or CSAPR.

Moreover, under the Regional Haze Rule, states may only implement an emissions trading program as a BART-alternative if the BART-alternative “will achieve greater reasonable progress than would have resulted from the installation and operation of BART at all sources subject to BART in the State and covered by the alternative program.” 40 C.F.R. § 51.308(e)(2)(i) (emphasis added); see also id. § 51.308(e)(3) (defining “greater reasonable progress”). TCEQ has failed to analyze, let alone demonstrate, whether CAIR or CSAPR would achieve greater reasonable progress for BART-eligible EGUs in Texas. In the proposed regional haze SIP, TCEQ did not conduct any actual EGU-specific BART determinations to serve as the basis for concluding that CAIR or CSAPR would be “better than BART.” TCEQ’s 5-year progress report briefly recites the aggregate emissions reductions allocated for Texas EGUs under CAIR, but it does not describe whether or how these reductions are equivalent to BART for a single EGU, let alone all of Texas’s many BART-eligible EGUs. Progress Report at 2-6, Table 2-6. There is also no basis to assume that a BART substitute would result in superior visibility improvement in each and every Class I area that may be impacted by BART-eligible sources in Texas. The only way to ensure that CAIR or CSAPR would be better than BART would be to complete the required source-by-source analyses required by the Regional Haze Rule. See 40 C.F.R. § 51.308(e)(2), (e)(3).

³² In addition, as noted above, EPA declined to apply the CSAPR “better than BART” rule to the Texas proposed SIP. Moreover, National Parks Conservation Association and Sierra Club challenged the CSAPR “better than BART” rule in the D.C. Circuit. Nat’l Parks Conservation Ass’n v. EPA, No. 12-1343 (D.C. Cir.). That challenge, and those consolidated with it, are stayed pending resolution of the cases challenging CSAPR, which are currently pending before the Supreme Court. Thus, even if CSAPR is reinstated, the CSAPR “better than BART” rule will still be subject to legal challenges.

³³ NPS Comments on 5-Year Progress Report at 3–4 (Ex. 16) (“It is difficult to believe that [Texas EGUs’] cumulative emissions do not impair visibility in Class I areas in TX and nearby states and that additional reductions beyond those required by CAIR are not reasonable compared to costs borne by EGU[s] in other states.”).

TCEQ's reliance on CAIR or its eventual replacement also violates the Regional Haze Rule's requirement that a BART alternative must provide emissions reductions surplus to those resulting from programs implemented to meet other requirements of the Clean Air Act. See 40 C.F.R. § 51.308(e)(2)(iv). EPA implemented CAIR to meet the requirements of §110 of the Clean Air Act. As a result, CAIR cannot satisfy this requirement and CAIR reductions cannot be used as the basis for exempting sources from BART or for declining to apply BART to such sources.

3. Texas Sources Will Emit More Than Two Times As Much SO₂ Emissions Under CAIR Than Under BART.

Had TCEQ undertaken the source-by-source analysis required by the Clean Air Act and the Regional Haze Rule, TCEQ could not reach a credible conclusion that CAIR is better than BART in Texas.

For example, the available evidence demonstrates that CAIR will achieve less reasonable progress than BART because it will allow for greater sulfate emissions statewide. As discussed above, EPA and the National Park Service have determined that sulfate emissions are the primary cause of regional haze at Big Bend. See supra at 4. Moreover, the State of Texas has determined that SO₂ emissions are the “predominant” contributor to visibility impairment from Texas EGUs. Texas SIP at App. 7-2, iii.

However, according to EPA data, Texas sources will emit more than two times as much SO₂ pollution under CAIR than under a modeled BART scenario. According to the 5-year progress report, the annual emissions cap for EGUs under CAIR in Phase I (2009-2014) would be 320,946 tons. Progress Report at 2-6, Table 2-6. EPA developed a “Nationwide BART” scenario as part of its rulemaking for the CSAPR better-than-BART rule; according to that scenario, 2014 annual SO₂ emissions in Texas would be 139,300 tons if Texas sources installed BART.³⁴ This represents a 130% increase in SO₂ emissions under CAIR relative to the Nationwide BART scenario.³⁵ This figure would like be even larger if compared to actual BART determinations. The “Nationwide BART” scenario is based on presumptive BART limits in the BART Guidelines, and as EPA has recognized multiple times, the presumptive BART limits are often outdated and are merely the starting point for a BART determination. See, e.g., 77 Fed. Reg. 51,620, 51,633 (Aug. 24, 2012) (Four Corners power plant BART determination); 76 Fed. Reg. 64,186, 64,203 (Oct. 17, 2011) (proposed action on Arkansas regional haze SIP).

³⁴ EPA, Technical Support Document for Demonstration of the Transport Rule as a BART Alternative 10, Table 2-4 (2011) (Ex. 18).

³⁵ “Greater reasonable progress” would also be unattainable under CSAPR. According to EPA data, SO₂ emissions in Texas would be 91% greater under CSAPR than EPA's “Nationwide BART” scenario. See EPA, Technical Support Document for Demonstration of the Transport Rule as a BART Alternative 10, Table 2-4 (Ex. 18) (under “[CSAPR] + BART-elsewhere” scenario, 2014 annual SO₂ emissions would be 266,600 tons, while under “nationwide BART” scenario, 2014 annual SO₂ emissions in Texas would be 139,300 tons).

For this and other reasons, TCEQ’s conclusion that CAIR or a replacement rule will achieve greater reasonable progress than BART is unsupported and the Texas regional haze plan must be revised.

B. The Texas Regional Haze Plan Must Require Reasonable Progress Reductions To Ensure All Impacted Class I Areas Are On The Glide Path To Achieving Natural Visibility By 2064.

In addition to BART controls, reasonable progress emission reductions will be a critical component of a legally-defensible regional haze plan for Texas because of the large number of Texas sources that collectively cause significant visibility impairment at multiple Class I areas. As discussed above, the Regional Haze Rule’s overarching mandate is that states must incrementally make reasonable progress toward the ultimate goal of eliminating human-caused visibility impairment at every Class I area by 2064. *See supra* at 8. Because the Regional Haze Rule’s BART provisions only apply to a subset of the state’s dirtiest and most outdated sources—and because Texas has refused to impose any BART controls on those sources—achieving the 2064 natural visibility goal will necessarily require reducing emissions from non-BART sources and any BART sources that were exempted from BART. Consequently, the Regional Haze Rule’s reasonable progress and long-term strategy provisions provide TCEQ authority to impose whatever emissions reductions are required from any sources to ensure that the regional haze plan achieves reasonable progress toward the 2064 goal. *See* 40 C.F.R. § 51.308(d)(1)(i)(A), (d)(3)(v)(C).³⁶

TCEQ’s proposed regional haze SIP failed to require any reasonable progress controls, even though the SIP would miss the 2064 natural visibility goal at Big Bend and Guadalupe Mountains by a wide margin. As EPA has recognized, it is unreasonable for a state to not require any reasonable progress controls when significant additional reductions are necessary and reasonably available to achieve reasonable progress. *See* 77 Fed. Reg. 75,704, 75,728–30 (Dec. 21, 2012) (proposed action on Arizona regional haze SIP). Consequently, the Texas regional haze plan should be revised to ensure that all necessary reasonable progress controls are required to put Big Bend, Guadalupe Mountains, and the other impacted Class I areas back on the glide path to natural visibility by 2064.

1. CAIR Does Not Exempt Texas’s Power Plants From Reasonable Progress Controls.

Even if TCEQ mistakenly concludes that CAIR, CSAPR, or any future replacement for those programs is better than BART, that does not exempt Texas power plants from reasonable progress controls if they continue to cause or contribute to visibility impairment under CAIR, CSAPR, or any replacement. In *Utility Air Regulatory Group v. EPA*, 471 F.3d 1333 (D.C. Cir. 2006), the D.C. Circuit upheld EPA’s “better than BART” determination for CAIR. However,

³⁶ As just one example of a state exercising its reasonable progress authority to require reasonable progress controls, the State of Colorado imposed reasonable progress controls at several power plants and a cement plant to ensure its regional haze SIP made reasonable progress toward the 2064 goal. 77 Fed. Reg. 18,052, 18,078–88 (Mar. 26, 2012).

the court in no way limited the states' or EPA's authority to require updated pollution controls whenever reasonable progress is not achieved at a Class I area. The court stated:

[U]nless there is some reasonable excuse, [a regional haze plan's reasonable] progress must be sufficient to attain natural visibility conditions at every single Class I area by 2064. Indeed, EPA emphasized in its briefs that because "the regulatory scheme as a whole (and all the regulations promulgated pursuant to it) must be designed to achieve the goal of [reasonable progress] at every Class I area," states must, if CAIR is substituted for BART and is not likely to achieve that goal, take "other measures as necessary to achieve reasonable progress goals including at *each* Class I area."

Id. at 1340 (internal citations omitted); see also 70 Fed. Reg. at 39,138 n.73 ("The reasonable progress test in the regional haze rule remains as a separate test from [CAIR's] better than BART" determination.). The court recognized that BART and "better than BART" alternatives are merely means to achieve the overarching reasonable progress requirements of the Clean Air Act. If BART or a "better than BART" alternative alone will not make reasonable progress toward achieving natural visibility conditions at a Class I area by 2064, a state or EPA must require other emission limits—which may include BART-level controls at coal-fired power plants—in a regional haze plan to ensure that reasonable progress is achieved.

Reasonable progress controls at power plants are particularly important under emission trading programs such as CAIR and CSAPR because power plants are not required to install controls to clean up their pollution. While power plants may opt to reduce emissions to meet their source allocations, they can also purchase emission allowances from other power plants to comply with the rule. See, e.g., 76 Fed. Reg. at 48,271–72 (describing CSAPR's trading program). This can lead to visibility hot spots when a power plant near a Class I area purchases emission allowances from a distant power plant rather than reduces emissions. EPA has long recognized that the flexibility provided by trading programs such as CAIR and CSAPR can lead to significant visibility impairment, or visibility hot spots, at one or more Class I areas if a source or a small group of sources that causes visibility impairment at the Class I area purchases emission allowances rather than reduces emissions. 70 Fed. Reg. at 39,137 (discussing visibility hot spots under the CAIR trading program); see also 40 C.F.R. § 51.308(e)(4) (providing for "geographic enhancements" under CAIR).

Available data indicates that Texas's power plants will continue to cause visibility hot spots at multiple Class I areas even if they reduce their emissions to the allocations allowed under CAIR and CSAPR. For example, in July 2013, EPA informed TCEQ that it has conducted an independent analysis showing that 38 Texas point sources are responsible for a disproportionately high level of the existing visibility impairment at Big Bend, Guadalupe Mountains, Wichita Mountains, and Caney Creek. Many of these 38 sources are power plants that are subject to CAIR and CSAPR (if it was in effect) and nonetheless remain poorly controlled for SO₂ and NO_x. EPA's analysis showed that even when CAIR reductions are accounted for, these power plants continue to significantly impair visibility at the Class I areas. At many of these power plants, readily-available controls and upgrades—such as wet flue gas desulfurization, selective catalytic reduction, and various scrubber upgrades—are available that

would significantly improve visibility. TCEQ should evaluate the available pollution controls and the corresponding cumulative visibility benefits for each of these disproportionately-polluting sources and require appropriate reasonable progress controls.

In addition, modeling conducted by Dr. Tammy Thompson at the Massachusetts Institute of Technology demonstrates that even if BART-eligible EGUs at Big Brown, Martin Lake, Monticello, and Welsh power plants reduced emissions to meet the CSAPR allocations, they will still cause visibility impairment at Big Bend, Guadalupe Mountains, Caney Creek, and Wichita Mountains.³⁷ Dr. Thompson’s modeling compared visibility impacts under CSAPR to a scenario where emissions from the BART-eligible EGUs at Big Brown, Martin Lake, Monticello, Welsh, and 3 other non-EGU BART-eligible sources were zeroed out.³⁸ The results, presented in Tables 5 and 6, demonstrate that under CSAPR, these BART-eligible EGUs will cause or contribute to visibility impairment at four Class I areas on at least a total of 101 days annually.

Table 5 – Visibility Impacts of BART-Eligible EGUs at Big Brown, Martin Lake, Monticello, Welsh, and Three Other Non-EGU BART-Eligible Sources³⁹

	Number of Days With Impacts Greater than 0.5 dv
Caney Creek	59
Wichita Mountains	26
Big Bend	7
Guadalupe Mountains	9

³⁷ Dr. Tammy M. Thompson, Air Quality Modeling Analysis of the Impacts of Emissions from Seven Texas-Located Point Source Facilities on Visibility at Four Class I Areas in Texas, Arkansas, and Oklahoma (Mar. 21, 2012) (Ex. 19) (hereinafter, the “Thompson Report”).

³⁸ The three non-EGU BART-eligible sources included in Dr. Thompson’s modeling were TXI Operations Midlothian Cement plant, Eastman Chemical Co., and Texarkana Paper Mill.

³⁹ Thompson Report at 12 (Ex. 19).

Table 6 – Top Three Maximum Daily Visibility Impacts of BART-Eligible EGUs at Big Brown, Martin Lake, Monticello, Welsh, and Three Other Non-EGU BART-Eligible Sources⁴⁰

	Rank	Date	Visibility Impact (dv)
Caney Creek	1	Aug. 10, 2005	2.97
	2	Apr. 21, 2005	2.55
	3	Nov. 8, 2005	2.27
Wichita Mountains	1	May 29, 2005	1.36
	2	June 2, 2005	1.11
	3	May 31, 2005	1.11
Big Bend	1	Oct. 15, 2005	1.32
	2	Oct. 14, 2005	1.00
	3	Sept. 24, 2005	0.89
Guadalupe Mountains	1	Oct. 14, 2005	1.10
	2	Oct. 15, 2005	1.04
	3	Sept. 24, 2005	1.02

It is important to note that the visibility impacts highlighted above are conservative for several reasons. First, the modeling is based on the initial SO₂ and NO_x budgets for EGUs under CSAPR (for consistency with EPA’s modeling protocol), rather than subsequent revisions to CSAPR that increased the SO₂ and NO_x budgets for Texas EGUs. See 77 Fed. Reg. 10,324, 10,327–28 (Feb. 21, 2012) (increasing initial CSAPR allocations for Texas by 50,517 tons per year for SO₂ and 1,375 tons per year for NO_x). Thus, the SO₂ and NO_x emissions—and the visibility impacts—of Texas EGUs would be greater under CSAPR than the modeling suggests. Second, BART-eligible EGUs in Texas will be able to purchase emissions allowances from distant EGUs in Texas and other states under CSAPR, rather than reducing actual emissions to the SO₂ and NO_x allocation levels. As a result, the modeling represents a best-case scenario that assumes that Texas’s BART-eligible EGUs will reduce their emissions to the level of the SO₂ and NO_x budgets under CSAPR. Even under this best-case scenario, these BART-eligible power plants in Texas will cause or contribute to visibility impairment at Big Bend, Guadalupe Mountains, Wichita Mountains, and Caney Creek. The reality will likely be worse for these

⁴⁰ Thompson Report at 16–17 (Ex. 19). Maximum daily visibility impact values demonstrate the potential for visibility hot spots under CSAPR if EGUs are exempted from the Regional Haze Rule’s BART requirements. It should be noted that CAMx models were used to produce these results, and the CAMx model can underestimate visibility impacts where the CALPUFF model is known to overestimate visibility impacts. The BART Guidelines require the use of the 98th percentile of modeled visibility values for CALPUFF in order to minimize the likelihood that the modeling results will represent anomalies. Because CAMx is constructed differently, it is more accurate to represent results reflecting the worst impairment days in terms of maximum daily impact.

national parks and wilderness areas, as it is unlikely that these power plants will reduce their SO₂ and NO_x emissions to the level assumed by the modeling.⁴¹

In addition, at Table 7 shows, the Q/d ratio for every BART-eligible EGU in Texas under CSAPR indicates that every BART-eligible EGU in the state will likely cause visibility impairment under CSAPR. As discussed above, a Q/d value of 10 generally indicates that a source causes or contributes to visibility impairment, and the Q/d ratios for these sources far exceed this threshold. See supra at 14.

Table 7 – Q/d Analysis for Revised CSAPR SO₂ and NO_x Allowances

	Nearest Class I Area	Approximate Q/d Value
Big Brown Units 1 and 2	Caney Creek	64.53
Coletto Creek Unit 1	Big Bend	21.24
Harrington Units 1–3	Wichita Mountains	71.96
JT Deely Units 1 and 2	Big Bend	35.91
Martin Lake Units 1–3	Caney Creek	190.79
Monticello Units 1–3	Caney Creek	224.46
Sam Seymour Units 1 and 2	Caney Creek	37.18
Sandow Unit 4	Wichita Mountains	22.26
WA Parish Units 5–7	Caney Creek	56.24
Welsh Units 1 and 2	Caney Creek	106.01

The visibility impairment at Class I areas caused by emissions from the BART-eligible EGUs in Texas could be reduced through the installation and operation of appropriate reasonable progress controls, as none of these EGUs have installed modern BART controls for both SO₂ and NO_x. When a BART-alternative results in a visibility hot spot at a Class I area, it is incumbent upon the state to require BART controls or reasonable progress controls to remedy the visibility impairment. See 40 C.F.R. § 51.308(d)(3)(ii) (haze plans must include “all measures necessary” to obtain the state’s share of emission reductions necessary to achieve RPGs). Accordingly,

⁴¹ In addition, Dr. Thompson’s modeling results reflect removing the emissions of the subject sources from an existing dirty background, rather than modeling their emissions against a natural background. Because of the non-linear nature of deciviews, these results are inherently lower than they would be if modeled against a clean background, as recommended by the BART Guidelines. See 70 Fed. Reg. at 39,124, 39,162. For this reason, these results should not be directly compared to the standard 0.5 dv “significance” threshold. Rather, the results provide clear evidence that these sources collectively cause a large percentage of the visibility impairment at the impacted Class I areas.

given the disproportionately large visibility impacts of Texas's power plants, TCEQ cannot conclude that CAIR or CSAPR are sufficient to achieve reasonable progress.

2. The Texas Regional Haze Plan Must Include A Revised Reasonable Progress Analysis That Requires Readily-Available And Proven Reasonable Progress Controls At Non-EGU Sources.

In addition to requiring reasonable progress controls at Texas power plants, the Texas regional haze plan must be revised because the proposed SIP's reasonable progress analysis contains several critical flaws. First, TCEQ used a cost-benefit analysis that arbitrarily limited the range of reasonable progress controls considered by the SIP. See Texas SIP at 10-1 to 10-8. TCEQ presented a false choice of either one suite of controls costing \$324 million in the aggregate, or no controls at all. Id. The SIP, however, should have considered various control scenarios. EPA, Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program at 4-2 (2007). Second, TCEQ did not consider any controls costing more than \$2,700/ton, based on CAIR's cost thresholds. Texas SIP at 10-4 to 10-7. CAIR's "highly cost-effective controls" were unique and specific to the context of CAIR, which was a multi-state regional control strategy to address the interstate transport of ozone and PM_{2.5}. TCEQ provides no basis or reasoning for extending the CAIR rationale to a regional haze SIP to exclude any consideration of additional controls costing more than \$2,700/ton. In contrast, Oklahoma's regional haze SIP employed a cost threshold of \$5,000/ton. Oklahoma Regional Haze SIP at 107-08 (Feb. 2, 2010). Third, the proposed SIP's analysis is skewed because it underestimated the benefits of additional controls by failing to consider cumulative visibility benefits. The SIP's cost-benefit analysis was based on a determination that the visibility benefits of additional controls would be imperceptible at any one Class I area, but the SIP gave no consideration to the cumulative visibility benefits across all Class I areas. See Texas SIP at 10-6. As EPA has recognized, states should consider the cumulative visibility benefits of pollution controls across all impacted Class I areas to provide a reasoned analysis of visibility benefits. See, e.g., 77 Fed. Reg. 42,834, 42,841 (July 20, 2012) (proposed action on Arizona regional haze SIP). In short, the proposed SIP skewed the analysis of reasonable progress controls when it arbitrarily limited the range of reasonable progress controls and underestimated the cumulative visibility benefits of controls.

There are likely many opportunities to achieve readily-available and proven NO_x, SO₂, and PM reductions through reasonable progress controls on Texas sources. As one example, TCEQ should evaluate reasonable progress controls for oil and gas production. Texas is the nation's leading producer of natural gas, providing 25% of the United States' total production.⁴² Moreover, with advances in hydraulic fracturing, oil production in Texas has grown exponentially in recent years.⁴³ Oil and gas production emits large quantities of NO_x pollution,

⁴² Bentek Energy, Texas Observer, <http://www.bentekenergy.com/Texas.aspx> (last visited Oct. 1, 2013) (Ex. 20).

⁴³ See, e.g., Bentek: Eagle Ford Crude Oil Production Expected to Grow, Bloomberg, Apr. 18, 2011, available at <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aiMmM78jnv2Q> (Ex. 21). Given this recent growth in oil and gas production in Texas, TCEQ's progress report should have analyzed the change over the past five years in oil and gas emissions. 40 C.F.R. § 51.308(g)(4), (g)(5).

largely from compressor and drilling engines.⁴⁴ Multiple pollution controls are readily-available and already in place at some locations to significantly reduce these NOx emissions. For example, NOx pollution from oil and gas production in Texas could be substantially reduced by requiring electric motors instead of combustion engines and extending TCEQ's 2009 Engine Rule to all Texas counties.⁴⁵ These are just the types of reasonable progress controls that TCEQ should include in the regional haze SIP to ensure that it secures all emissions reductions necessary to achieve reasonable progress toward the 2064 natural visibility goal.⁴⁶ In addition, other sources—such as refineries, cement kilns, and chemical processing facilities—likely provide similar opportunities to significantly reduce haze-causing air pollution through readily-available reasonable progress controls.

CONCLUSION

TCEQ's proposed regional haze SIP fails to make reasonable progress toward eliminating human-caused visibility impairment at Big Bend, Guadalupe Mountains, and several other Class I areas in nearby states by 2064. Consequently, TCEQ's 5-year progress report concluding that the proposed SIP makes adequate progress toward the regional haze program's reasonable progress requirements is incorrect and contrary to the progress report's findings. The Texas regional haze plan should be revised to require appropriate BART controls at Texas's many outdated and heavily-polluting power plants and other sources. In addition, the plan should require reasonable progress controls sufficient to ensure that the SIP helps put Big Bend, Guadalupe Mountains, and the out-of-state Class I areas back on the glide path to achieving natural visibility by 2064.

A strong regional haze plan for Texas that complies with the visibility protection regulations is critically important to improve visibility at the many national parks and wilderness areas in Texas and nearby states. Moreover, a strong regional haze plan will protect public health and benefit tourism and local economies by ensuring that people from around the world will continue to travel to Texas to explore and enjoy the region's many treasured landscapes.

Sincerely,



Michael Hiatt
McCrystie Adams
Earthjustice

⁴⁴ Al Armendariz, Emissions from Natural Gas Production in the Barnett Shale Area and Opportunities for Cost-Effective Improvements 24 (2009) (Ex. 22).

⁴⁵ Id. at 28–31.

⁴⁶ EPA issued updated New Source Performance Standards (NSPS) and National Emission Standards for Hazard Air Pollutants (NESHAPs) for oil and gas sources in 2012. See 77 Fed. Reg. 49,490 (Aug. 16, 2012). However, these standards do not target NOx pollution, which is the primary visibility-impairing pollutant emitted by oil and gas production. See id. at 49,513–14.

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Stephanie Kodish, Nathan Miller – *National Parks Conservation Association*
Elena Saxonhouse – *Sierra Club*

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Exhibit 2	National Park Service, <u>Guadalupe Mountains National Park Draft General Management Plan (2008) (Excerpts)</u>
Exhibit 3	National Park Service, <u>Understanding Haze in Big Bend Nat'l Park</u>
Exhibit 4	EPA, Health – Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter
Exhibit 5	EPA, Fact Sheet - Final Amendments to the RHR and BART Guidelines
Exhibit 6	Ceres, <u>New Jobs – Cleaner Air: Employment Effects Under Planned Changes to the EPA's Air Pollution Rules (2011)</u>
Exhibit 7	Daniel J. Stynes, Mich. State Univ., <u>Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010 (2011)</u>
Exhibit 8	National Park Service, National Park System – Summary: 1990 to 2008
Exhibit 9	Jared Hardner & Bruce McKenney, Hardner & Gullison, <u>The U.S. National Park System, An Economic Asset at Risk (2006)</u>
Exhibit 10	Headwater Economics, Nat'l Park Serv. Units: Economic Impacts of Visitation & Expenditures
Exhibit 11	Abt Associates Inc., <u>Out of Sight: The Science and Economics of Visibility Impairment (2000)</u>
Exhibit 12	EPA, Effects of Acid Rain
Exhibit 13	William D. Bowman et al., <u>Nitrogen critical loads for alpine vegetation and soils in Rocky Mountain National Park, 103 Journal of Env'tl. Mgmt. 165–71 (2012)</u>
Exhibit 14	National Park Service, Nitrogen Deposition: Issues and Effects in Rocky Mountain National Park (2005)
Exhibit 15	EPA, Ground-level Ozone – Ecosystem Effects
Exhibit 16	National Park Service Comments on TCEQ's 5-Year Progress Report (Aug. 20, 2013)
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Exhibit 18	EPA, <u>Technical Support Document for Demonstration of the Transport Rule as a BART Alternative (2011)</u>
Exhibit 19	Dr. Tammy M. Thompson, <u>Air Quality Modeling Analysis of the Impacts of Emissions from Seven Texas-Located Point Source Facilities on Visibility at Four Class I Areas in Texas, Arkansas, and Oklahoma (Mar. 21, 2012)</u>
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