North Central Texas Council Of Governments

October 27, 2011

Docket ID No. EPA–HQ–OAR–2010-0505
Air and Radiation Docket and Information Center
Environmental Protection Agency
MC 2822T
1200 Pennsylvania Avenue NW
Washington, DC 20460

SUBJECT: Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews

Action: Proposed Rule

Dear Administrator Jackson:

The North Texas Clean Air Steering Committee (NTCASC) appreciates the opportunity to comment on the New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants for the Oil and Natural Gas Industry, Docket ID Number EPA–HQ–OAR–2010-0505. Please accept the enclosed comments along with supporting attachments.

The NTCASC was formed and its members are appointed by the North Central Texas Council of Governments Executive Board. Attachment 1 contains a Committee roster. The Committee's purpose is to work in partnership with the Texas Commission on Environmental Quality (TCEQ) and the Environmental Protection Agency (EPA) in the development of State Implementation Plan (SIP) revisions for the Dallas-Fort Worth (DFW) ozone nonattainment area and to support their implementation once approved. In recent years, oil and gas industry activity has escalated due to mining of natural gas in the Barnett Shale in and near the DFW nonattainment area. The Barnett Shale's eastern area resides in the western portion of this nonattainment area, where the region's highest levels of ozone are being recorded. A map of these areas is included as Attachment 2. Attachment 3 highlights the region's most recent ozone design values, by monitor, and color coded based on EPA's Air Quality Index breakpoints. As part of a comprehensive approach to review all emission sources in North Central Texas and evaluate all potential emission reduction strategies, the Committee is very interested in all ozone precursor emissions, including those associated with the oil and gas industry in the Barnett Shale.

The NTCASC has previously taken a position (Attachment 4, dated July 13, 2011) which speaks to these proposed EPA regulations regarding New Source Performance Standards (NSPS) for the oil and gas industry, including the following key elements:

1. Requirements for reduced emission completions, or "green completions", in combination with flaring, for all hydraulically fractured and refractured wells.
2. Requirements for VOC emissions reductions associated with pneumatic devices.
3. Requirements for VOC emissions reductions by 95 percent (95%) at storage tanks.

The Committee would like to note that the attached letter recommends requiring 95 percent control of VOC flash emissions applicable to storage tanks emitting over 15 tons per year (tpy) of VOCs.

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This is a significantly higher threshold than the six (6) tpy applicability threshold proposed by EPA. The NTCASC determined 15 tpy to be appropriate for this region based upon information from the TCEQ that this is the most cost-effective level at which to require reductions. Specific information from the TCEQ on this topic is included in Tables 2 and 3 of Attachment 5. It may be advantageous to apply this regulation at different levels in various parts of the country depending upon individual factors in each region, such as wet versus dry gas. The Committee encourages EPA to work with the TCEQ and other state agencies in affected areas to ensure that the applicability of this requirement is set at the most appropriate threshold.

In addition to the three measures outlined above, the NTCASC requested additional oil and gas industry best practices be formalized in the DFW SIP. Similarly, the NTCASC requests EPA to consider incorporating these practices into the NSPS. These best practices include:

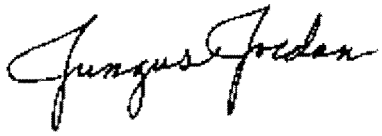
Vapor Recovery Units – Equipment installed on condensate storage tanks that capture rather that vent vapors.

Plunger Lifts – System using gas pressure in buildup in a well to lift a column of accumulated fluid out of the well to allow expected gas production.

Again, the Committee appreciates the opportunity to comment. We look forward to a continued partnership with EPA as we work toward the common goal of cleaner air. Should you have any questions, please contact Chris Klaus, Senior Program Manager, at (817) 695-9286 or cklaus@nctcog.org.

Sincerely,

Mark Burroughs, Chair
North Texas Clean Air Steering Committee
Mayor, City of Denton



Jungus Jordan, Chair
North Texas Clean Air Steering Committee –
Oil and Gas Task Force
Councilmember, City of Fort Worth

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Attachments

cc: North Texas Clean Air Steering Committee
Mike Eastland, Executive Director, North Central Texas Council of Governments
Chris Klaus, Senior Program Manager, North Central Texas Council of Governments

ATTACHMENT 1

NORTH TEXAS CLEAN AIR STEERING COMMITTEE ROSTER

COUNTIES

Maurine Dickey County Commissioner Dallas County	**Ron Marchant** County Commissioner Denton County	**John Matthews** County Commissioner Johnson County
Mark Riley County Judge Parker County	**Keith Self** County Judge Collin County	**Roy Brooks** County Commissioner Tarrant County

CITIES

Mark Burroughs - Chair Mayor City of Denton	**Dr. Robert Cluck** Mayor City of Arlington	**Jungus Jordan – Vice Chair** Councilmember City of Fort Worth
Linda Koop Councilmember City of Dallas	**Amir Omar** Councilmember City of Richardson	**Darren Rozell** Mayor City of Forney

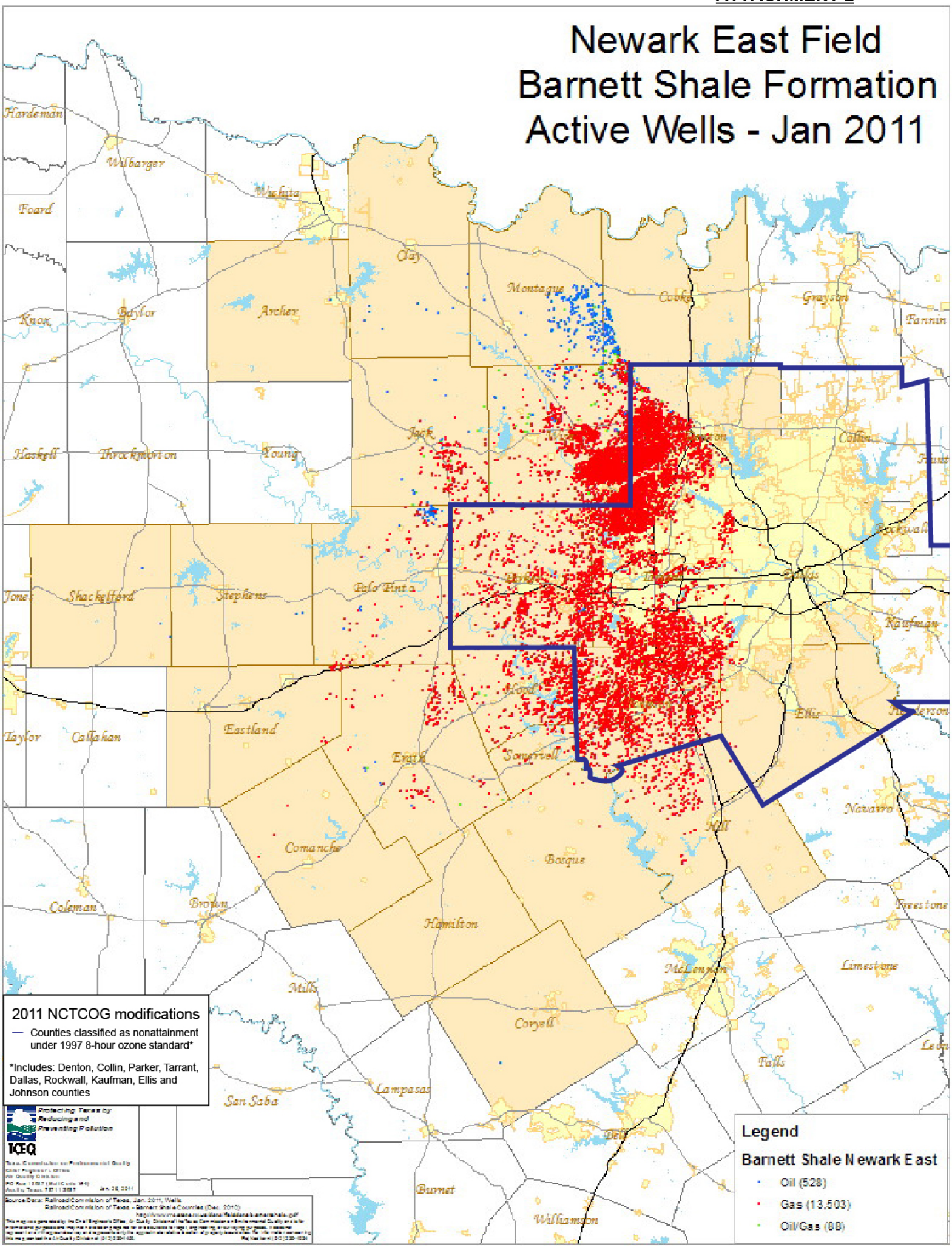
BUSINESS ORGANIZATIONS

Howard Gilberg Dallas Regional Chamber	**Mabrie Jackson** North Texas Commission	**Tim Keleher** Fort Worth Chamber of Commerce
Margaret Keliher Texas Business for Clean Air		

ENVIRONMENTAL INTERESTS

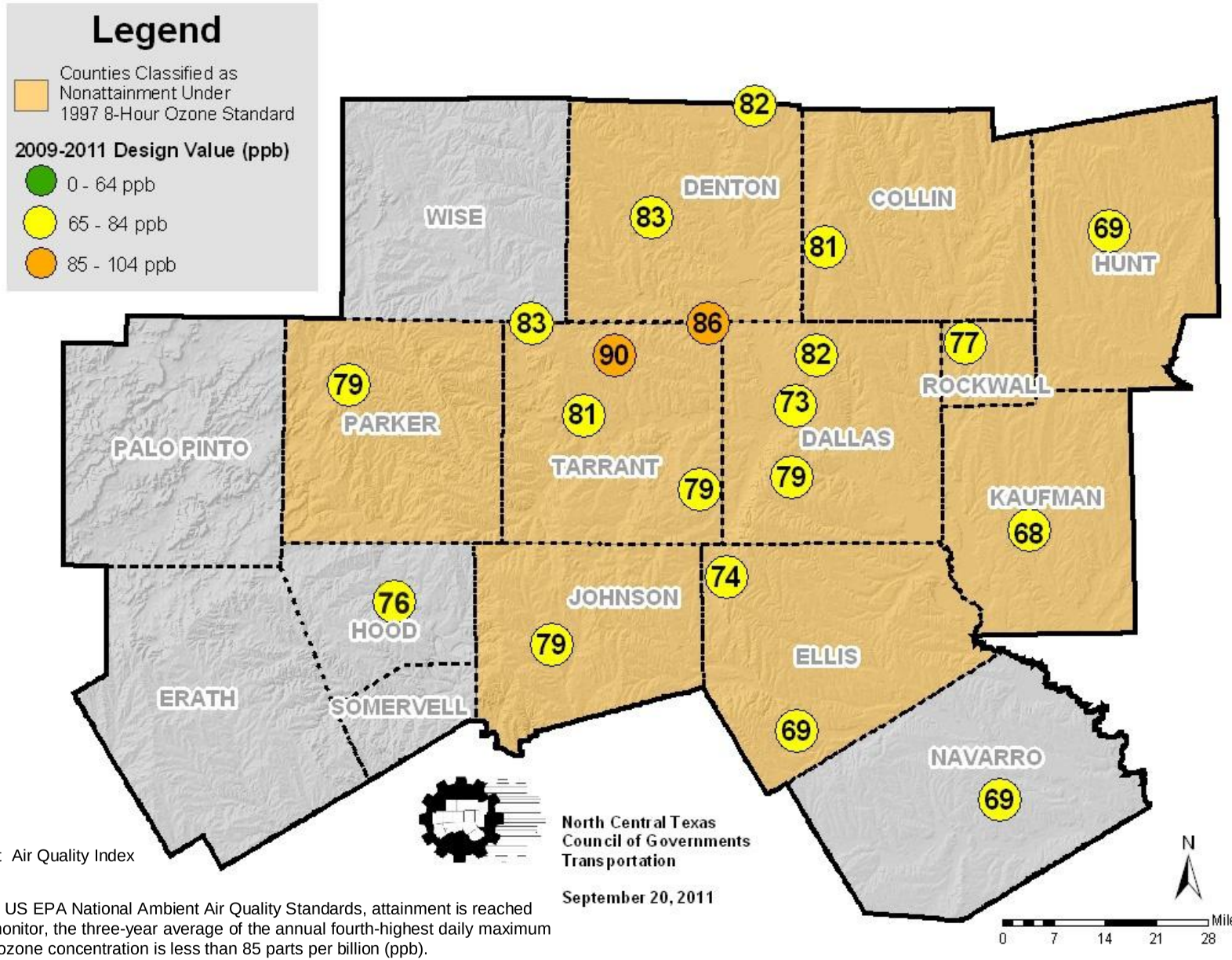
Ramon Alvarez Environmental Defense Fund	**Rita Beving** Sierra Club/Public Citizen	**Jim Schermbeck** Downwinders At Risk

ATTACHMENT 2



8-Hour Ozone Historical Trends

8-Hour Ozone Design Values



Colors represent Air Quality Index breakpoints

According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than 85 parts per billion (ppb).

ATTACHMENT 3

North Central Texas Council of Governments

July 13, 2011

Ms. Jamie Zech
MC 206
Air Quality Division
Chief Engineer's Office
Texas Commission on Environmental Quality
PO Box 13087
Austin, TX 78711-3087

Dear Ms. Zech:

On behalf of the North Texas Clean Air Steering Committee (NTCASC), please accept the following comments relating to *Proposed Dallas-Fort Worth Attainment Demonstration* (2010-022-SIP-NR) *and Reasonable Further Progress* (2010-023-SIP-NR) *State Implementation Plan Revisions for the 1997 Eight-Hour Ozone Standard Nonattainment Area,* including corresponding supplements. The NTCASC was formed and its members are appointed by the North Central Texas Council of Governments Executive Board. The Committee's purpose is to work in partnership with the Texas Commission on Environmental Quality (TCEQ) and the Environmental Protection Agency in the development of ozone State Implementation Plans (SIPs) and to support their implementation once approved. Attachment 1 contains a Committee roster.

Oil and Gas Operations

Over the last six plus years, gas exploration activities in the Barnett Shale area have escalated, with a significant amount of operations now occurring in highly urbanized areas. The Barnett Shale's eastern area happens to reside in the western portion of the Dallas-Fort Worth (DFW) nonattainment, where the region's highest levels of ozone are being recorded (namely at monitors located at Denton Airport, Eagle Mountain Lake, Keller, and Grapevine). These monitors will be critical in determining future attainment of the ozone standard. Due to these facts, the NTCASC formed an Oil and Gas Task Force (roster included as Attachment 2) to become educated about industry practices and, as appropriate, to assist the NTCASC in recommending potential emission reduction measures for the DFW SIP. On May 25, 2011, the Task Force took action recommending oil and gas SIP measures for the NTCASC to consider and forward to TCEQ. Attachment 3 contains the NTCASC letter dated May 27, 2011, summarizing these measures for incorporation into the SIP.

As identified in the above referenced letter, the NTCASC maintains its position that TCEQ should officially formalize in the DFW SIP what has been identified as best practices of the oil and gas industry and which are already being employed by a very large percentage of the industry, including:

Green Completions – Process used to recover gas that would otherwise be vented or flared during the completion phase of a natural gas well.

Vapor Recovery Units – Equipment installed on condensate storage tanks that capture rather than vent vapors.

Plunger Lifts – System using gas pressure buildup in a well to lift a column of accumulated fluid out of the well to allow expected gas production.

Low-Bleed Pneumatic Valves – Devices that regulate gas flow and pressure.

As follow-up to questions raised by Task Force members, TCEQ provided estimated 2012 oil and gas emissions by category in the DFW area (Attachment 4). It should be noted that three of the top five oil and gas categories that are recommended as formalized SIP control measures contribute 94.1 tons per day (tpd) out of a total 114.1 tpd volatile organic compounds (VOC).

Review of the SIP proposals and supplements identified that the Commission is proposing to implement the Houston area condensate and crude oil storage tank rule (30 TAC Chapter 115, Subchapter B, Division 1) in the DFW nonattainment area, requiring 95 percent control of VOC flash emissions applicable to those tanks emitting over 25 tons per year (tpy) of VOCs. The NTCASC welcomes this rule but recommends the Permit By Rule (PBR) threshold be reduced from 25 tpy to 15 tpy. This recommendation is supported by information provided by TCEQ staff (Attachment 5, Table 3) that 8.8 tpd more VOC emission reductions can be obtained at a PBR of 15 tpy while not being cost prohibitive to the industry as most of these vapors would be collected and brought to market for sale.

The request to formalize the above best practices as rules and strengthen the condensate and crude oil storage tank rule in the SIP is made to better ensure that federal RFP requirements regarding VOCs can be achieved and that the reclassification and future reconsideration SIPs can demonstrate attainment. This will also provide a contingency in the 2012 RFP if existing calculations change and an uncoverable shortfall surfaces. In addition, such initiatives would guarantee an equal playing field for all oil and gas companies operating in the DFW area. As a secondary benefit beyond ozone reductions, such initiatives would aid in reduction of emissions (i.e. benzene, formaldehyde) that are being reported at the local level and are known to cause unwarranted and unnecessary health impacts.

Lastly, the NTCASC continues to advocate that the Commission and its staff review existing regulations to be sure that they are adequate to achieve their intended purpose and to meet today's standards.

Use of Motor Vehicle Emission Simulator (MOVES) -Based On-Road Emission Inventories

The NTCASC supports the decision to utilize MOVES-based on-road emission inventories in both the attainment demonstration and reasonable further progress SIP revision, as outlined in the proposed documentation and again in recent supplemental information. As summarized in a Regional Transportation Council letter to TCEQ on February 10, 2011 (Attachment 6), the benefits significantly outweigh associated risks to the region's ability to reach the federal ozone standard. In addition, use of the MOVES model is supported because it replaces the outdated

MOBILE6 model with current available vehicle technology assumptions, behavioral trends, etc., and shows that photochemical modeling for this SIP revision performs at an improved tolerance within EPA's guidelines, allows for better decision making, and represents an improved assessment of emission trends to the public.

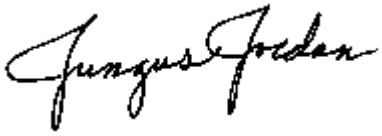
Comment Period Extension

The NTCASC acknowledges TCEQ's recent action to extend the public comment period from July 25, 2011 to August 8, 2011. Recognizing that preparing a reclassification SIP revision has many tight deadlines, the extension is warranted to ensure the public has a minimum 30-day review and comment on supplemental information recently released.

We extend our gratitude to Commission staff that have participated at each meeting of the NTCASC, Oil and Gas Task Force, and the Photochemical Modeling Technical Committee. We appreciate the opportunity to emphasize these requests and to be a partner in the effort to improve air quality in North Texas.

Sincerely,

Mark Burroughs, Chair
North Texas Clean Air Steering Committee
Mayor, City of Denton



Jungus Jordan, Chair
North Texas Clean Air Steering Committee –
Oil and Gas Task Force
Councilmember, City of Fort Worth

CK:ch
Attachments

cc: Elizabeth Ames Jones, Chairman, Railroad Commission
David Porter, Commissioner, Railroad Commission
Barry T. Smitherman, Commissioner, Railroad Commission
Michael Gange, Assistant Director, Environmental Services, City of Fort Worth
North Texas Clean Air Steering Committee
Mike Eastland, Executive Director, North Central Texas Council of Governments

Volatile Organic Compounds (VOC) Storage Rule Information for DFW

Table 1. DFW 9 County Ozone Nonattainment Area Equipment Count, Crude Oil and Condensate Production

County	Total Oil Storage Tanks	Total Condensate Storage Tanks	Total Sites with Oil and/or Condensate Tanks	Total Produced Water Storage Tanks	Total Slop Storage Tanks	Percent of Oil and Condensate Production
Collin	0	0	0	0	0	0
Dallas	0	5	5	24	0	0
Denton	29	710	632	2879	10	48
Ellis	0	1	1	91	6	0
Johnson	17	209	158	3889	22	6
Kaufman	0	0	0	0	0	0
Parker	19	598	491	1119	40	40
Rockwall	0	0	0	0	0	0
Tarrant	3	132	83	2926	10	6
Totals	68	1655	1370	10928	88	100

Note: Equipment data are from Phase 1 of the TCEQ Barnett Shale special inventory in 2010, and production data are from the Texas Railroad Commission in 2008.

Table 2. Sites Potentially Affected if Houston Area VOC Storage Tank Rules Were Applied in the DFW Area at Different Emission Thresholds

	Number of Sites with Condensate Tanks						Floating Roof Tanks (>25,000 gal)
County	**Total Sites[1]**	**Sites affected at 25 tpy**	**Sites affected at 20 tpy**	**Sites affected at 15 tpy**	**Sites affected at 10 tpy**	**Sites affected at 5 tpy**	
Collin	0	**0**	0	0	0	0	0
Dallas	5	**2**	3	3	4	5	26 (3 sites)
Denton	632	**271**	391	422	542	572	0
Ellis	1	**0**	1	1	1	1	0
Johnson	158	**68**	98	105	135	143	0
Kaufman	0	**0**	0	0	0	0	0
Parker	491	**211**	304	327	421	444	7 (1 site)
Rockwall	0	**0**	0	0	0	0	0
Tarrant	83	**36**	51	55	71	75	72 (11 sites)
Total	1370	**588**	848	913	1174	1240	105 (15 sites)

1. Total sites include sites with crude oil and/or condensate tanks.

Note: Potentially affected sites with condensate tanks estimated using emissions from HARC51C study. The number of potentially affected floating roof tanks and sites from TCEQ Emissions Inventory, 2009 data.

Table 3. DFW 9-County Ozone Nonattainment Area Condensate and Crude Oil Storage Tanks

115.112(d) Rule Applicability **Tank battery VOC emissions** **(tons per year (tpy))**	**25**	**20**	**15**	**10**	**5**
VOC reduction in 2012 (tons per day)	14.4	16.2	23.2	29.3	29.6
% sites with crude oil or condensate tanks affected	40.6	53.1	59.4	75.0	81.3
% sites with condensate tanks affected	42.9	61.9	66.7	85.7	90.5
% condensate production	65.9	70.0	85.8	99.4	99.7

Note: Emission estimates based on a 2006 study (HARC51C) of 32 sites with tanks in the Barnett Shale, east and southeast Texas. Results will vary with composition of natural gas and crude oil produced in different areas. Reductions are beyond an assumed 25% VOC reduction from voluntarily installed control devices. Assumes no VOC reductions associated with produced water tanks. The 2012 emission reduction is based on a 95% assumed control efficiency.

Technological Feasibility of Control Devices

Flares have no lower bound of technological feasibility. However, makeup fuel may be required at low or intermittent flows.

Vapor recovery units (VRUs) have a technological feasibility lower bound of approximately one thousand cubic feet of vent gas flow per day (Mcf/d) from a crude oil or condensate tank battery. If a natural gas pipeline with operating pressure less than 50 pounds per square inch gauge is not readily available, higher priced multi-stage compression options are required. Based on study data, including measured and speciated vent gas volumes, an oil tank battery emitting 10 tons of VOC per year (tpy), or a condensate tank battery emitting 15 tpy will be at the vapor recovery unit technology lower limit of approximately 1 Mcf/d of vent gas.

Emission Implications of Control Device Choice

Flares will emit nitrogen oxides (NOx). Vapor recovery units will emit zero or minimal NOx. Proportionally more NOx will be emitted per ton of VOC reduced as the applicability requirement for VOC emission control is lowered.