

February 19, 2008

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Texas Commission on Environmental Quality  
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Dear Ms. Earnest,

Enclosed are my personal comments regarding the Texas Commission on Environmental Quality's (TCEQ) proposed Revisions to the State Implementation Plan (SIP) Concerning Regional Haze (RH).

1) **Page ES-1, Executive Summary**, TCEQ demonstrates that it is not making "reasonable progress" in this SIP because it makes no progress when it delays action for five years. Certainly, this is not "reasonable". There is no excuse for this. Apparently TCEQ is not interested in protecting two of Texas' most cherished natural treasures, Big Bend National Park (BBNP) and Guadalupe Mountains National Park (GMNP). Some reductions can be made now without knowing all absolute information. TCEQ continues its policy of minimalist and incremental "progress" although in this case there is "zero progress" in air emission reductions.

Apparently, TCEQ is not interested in protecting the National Wilderness System and the National Park System. The National Wilderness System and the National Park System are "national systems". When harm is done to one part of these systems it sets a precedent and harms the whole systems. Not only is designated national park and wilderness in GMNP and designated national park and potential wilderness in BBNP at risk but also wildernesses and national parks in other states (Class I areas) including Arkansas (Caney Creek and Upper Buffalo Wilderness Areas); Missouri (Hercules-Glades and Mingo Wilderness Areas); Oklahoma (Wichita Mountains Wilderness Area); Louisiana (Breton Wilderness Area); New Mexico (Salt Creek and White Mountains Wilderness Areas and Carlsbad Caverns National Park); and potentially other wildernesses in Colorado.

TCEQ has the responsibility to discuss in detail the potential impact that Texas air emission sources have on visibility in these out-of-state wildernesses and national parks and what it is going to do to eliminate RH from these areas. Using a 20% impact cut-off, which is at least 4 times higher than any other level seen

by the National Park Service and U.S. Forest Service in other state's SIPs, will not restore visibility to these areas although this is Texas' responsibility under the federal Clean Air Act. There is no explanation or justification for this 20% impact cut-off legally, administratively, politically, technically, or in any other way and no explanation how it is compatible with attaining the RH goals in 2018 and 2064 and the federal Clean Air Act.

Texas is thumbing its nose at other states which it impacts with RH and which it has the responsibility to resolve. Texas is not a good neighbor and should be ashamed. What happened to being friendly, neighborly, and having Texas hospitality?

2) **Page ES-1, Executive Summary**, TCEQ states that the Clean Air Interstate Rule (CAIR) "is expected to reduce regional haze impact." As TCEQ well knows the reductions due to the CAIR are modest and little RH improvements will occur. TCEQ has just proposed a CAIR that makes no improvements for particulate matter and ozone because it does not have to. In addition, since TCEQ had to reduce nitrogen oxides (NOx) emissions due to the massive ozone non-attainment that has occurred all over Texas (including in-state transport of ozone and precursors) this is the reason why there are NOx reductions and not because TCEQ has made reductions for RH. TCEQ needs to be honest and tell the entire story.

TCEQ does the same thing it did in the CAIR SIP, take credit for reductions of air emissions that were not made for the purposes of RH, in the RH SIP and then does nothing. TCEQ delays the inevitable while pretending to be a strong air pollution control agency. The public does not deserve such arrogance. Waiting until 2081 for RH attainment for GMNP and 2155 for BBNP not only misses the attainment date by 17 years and 91 years respectively, but also means that TCEQ submits another failed SIP that does not demonstrate attainment. **This means for me, personally, that never in my lifetime or probably in my family's lifetime will we be able to enjoy the beautiful skies and visibility in BBNP and GMNP as we should. How shameful and hollow. I want a new state air pollution agency. I want an agency that will not shirk from doing what is required.**

The **January 11, 2008** letter from the U.S. Department of the Interior to TCEQ states "We are troubled by TCEQ's response to an apparent large uncertainty associated with implementation of the CAIR and ongoing Prevention of Significant Deterioration (PSD)/New Source Review (NSR) permitting program efforts."

Environmental Defense (ED) and Sierra Club have petitioned the U.S. Environmental Protection Agency (EPA) regarding TCEQ's failure to implement a proper PSD permitting program. The TCEQ's failed PSD permitting program includes:

- 1) Failure to use the federal best available control technology (BACT) definition that is in the federal Clean Air Act and in the approved Texas SIP.
- 2) Use of a three tiered BACT guidance process that circumvents the technology forcing provisions of the federal Clean Air Act and the will of the U.S. Congress.
- 3) Failure to take into account, when determining BACT, all available production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques.
- 4) Failure to take into account cumulative air quality impacts from new sources when issuing PSD permits.
- 5) Failure to consult with federal land managers on all proposed PSD permits that may affect Class I areas.
- 6) Failure to require pre-application monitoring for applicants as required by law.
- 7) Failure to enforce the terms and conditions of PSD construction permits (for example, eliminating heat input which is directly associated with air emissions generation).

ED and Sierra Club have requested that until these deficiencies in the PSD permitting program are resolved that EPA prohibit construction of new sources in Texas and or impose sanctions. I have enclosed, as a part of these written comments, a copy of the ED and Sierra Club petition that documents the failed TCEQ PSD permitting program. The PSD permitting program is broken which means that reductions of air emissions that cause RH and visibility problems for Class I areas do not occur and are not assured. A poorly implemented PSD permitting program undermines the ability of Texas to reach 2018 and 2064 attainment targets and deadlines and sentences wildernesses and national parks to poor air quality and diminished scenic vistas.

TCEQ is doing exactly what it did with the Houston-Galveston-Brazoria (HGB) 8-Hour Ozone SIP. The TCEQ failed to implement its programs, in a good faith effort, as the law requires. TCEQ does not exercise political will in implementation of the RH SIP. In other words, TCEQ is delaying and not doing all it can to achieve attainment. This does not serve the public well and degrades our beautiful National Wilderness and National Park Systems.

3) **Page ES-2, Executive Summary**, TCEQ continues its policy of no air emission reductions and minimalist and incremental progress by stating that no best available retrofit technology is required in this SIP. TCEQ admits there are in-state problems but “punts the ball” for five years and blames Mexico and Central America for the RH problem. Although I agree that emissions from

Mexico and Central America may add to the visibility problem in BBNP and GMNP these countries do not cause all the visibility problems and it is up to TCEQ to reduce the emissions it can in Texas. After all 48% of the visibility impairment in BBNP and 80% of the visibility impairment in GMNP, according to TCEQ, is caused by in-state sources of air pollution that TCEQ does control.

I am not talking about “compensatory over-control” but just doing your job. TCEQ fails miserably and abdicates this responsibility by coping-out and not doing what is required and necessary to protect Texas’ natural treasures. Delay as long as possible is the TCEQ mission and often TCEQ succeeds at this well. **The problem is that the public that funds TCEQ and is responsible for its existence is ill served by this method of non-air pollution control. The public and its “commons”, BBNP and GMNP, are harmed. Once again TCEQ brings shame to the State of Texas.**

4) **Page I, A. General,** TCEQ never states what it believes “maintaining adequate visibility” is but from its actions it is evident that poor air quality in BBNP and GMNP is okay for TCEQ.

5) **Page 1.2 General Background, Table 1-1, Secondary Organic Carbon, Major Sources,** TCEQ lists evergreen trees. Other trees, like oak trees, also emit volatile organic compounds (VOC).

**Table 1-1** does not document that in many areas where there is bare soil or little vegetation that these conditions are due to human impacts. A good example of is where overgrazing occurred in the area that is now BBNP before it became a park. This overgrazing created a desert shrub-land from a desert grassland, with more bare space and loose soil subject to wind erosion. Not all of the windblown dust that TCEQ calls natural is actually due to natural events. Many areas in West Texas, where windstorms blow and wind erosion occurs, that have significant dust levels, are due in great part to human actions over many years.

The TCEQ must take this into account and estimate the amount of area that has been modified by humans in this way and incorporate this into modeling so only natural airborne particulate matter and not human caused airborne particulate matter is estimated.

6) **Page 1-6, Big Bend National Park,** the fact that BBNP is a Biosphere Reserve under the UNESCO Man and Biosphere Program further accents the need for TCEQ to do all it can to reduce RH now. Unfortunately this honored title apparently has had no effect on TCEQ’s scruples to clean-up BBNP sooner rather than later.

7) **Page 1-6, Guadalupe Mountains National Park,** TCEQ states that “The park contains the only congressionally designated wilderness in Texas”. This is not true. There are five congressionally designated wilderness areas in East Texas,

one in Sam Houston National Forest (Little Lake Creek Wilderness Area); one in Davy Crockett National Forest (Big Slough Wilderness Area); two in Angelina National Forest (Upland Island and Turkey Hill Wilderness Areas); and one in Sabine National Forest (Indian Mounds Wilderness Area). These five wilderness areas are Class II areas.

8) **Page 2-1, Introduction**, TCEQ states “This plan addresses the core requirements of 40 CFR 51.308(d) and Best Available Retrofit Technology (BART) components of 40 CFR 50.308(e)”. This may be true but is an unfinished statement. The RH SIP does not address attainment or even progress toward attainment because it does nothing. TCEQ simply lists the SIPs and regulations/rules it has approved for other air pollution problems and says that this is sufficient so it can do nothing for five more years.

First, the EPA waits 22 years before proposing a RH rule; second, EPA puts off the compliance deadline for 65 years to 2064; third, TCEQ says it does not have to do anything for another five ears or begin progress toward compliance; and fourth, TCEQ admits that no matter what it does that TCEQ’s actions will not meet the 2064 compliance deadline and for BBNP will be 91 years late (2155) and for GMNP will be 17 years late (2081).

This is a bankrupt program which allows the United State’s, Texas’s, and other states’ treasured national parks and wildernesses to exist in a cloud of air pollution. **The public which loves and visits these national parks and wildernesses will just have to suffer. To sum up, thanks to EPA and TCEQ, the public has to wait 104 years for GMNP and 178 years for BBNP to reach attainment of visibility standards (from when the U.S. Congress passed the 1977 visibility requirement in the Clean Air Act). This is not glacially slow, this is criminally slow.**

9) **Page 4-1, 4.2 Consultation on Class I Areas in Texas**, when did TCEQ contact me for consultation calls on July 11<sup>th</sup>, 18<sup>th</sup>, and 31<sup>st</sup> of 2007? I should have been included as a stakeholder. On September 8, 2006 I submitted comments on the Best Available Retrofit Technology rules and discussed my concerns with several TCEQ staff members at that time. This is another example of TCEQ conveniently forgetting to include interested members of the public from its rule-making process.

10) **Page 4-2, 4.3 Consultations on Class I Areas in Other States**, I am very disturbed that Texas has yet to participate in consultations with Colorado, New Mexico, and Louisiana. In addition, TCEQ does not state plainly how much Texas’ air emissions are affecting the Class I areas in Oklahoma, Arkansas, Missouri, Colorado, New Mexico, and Louisiana. The public needs this information in a clear and obvious manner so it can review, comment on, and understand the magnitude of Texas’ portion of these states’ visibility degradation.

It is not clear how TCEQ can declare that it does not have to reduce RH via this SIP for five more years when it has not conducted all required consultations with states affected by Texas' emissions. It is not clear how TCEQ can present this SIP to the public without this information and then suggest that it has done what it needs to do for the next five years. I object!

11) **Page 6-1, 6.2 Monitoring at Class I Areas in Texas and 6.4 Reporting Visibility Monitoring Data to the Administrator**, the TCEQ states it will participate in the monitoring network, CENRAP, and VIEWS web system as long as EPA or other states fund these programs. This statement shows a lack of commitment by TCEQ to protect Class I areas in and outside Texas and take responsibility for its actions. TCEQ has permitted air emissions in Texas that degrade visibility both inside and outside Texas. But Texas is not willing to fund a website, monitoring, and collaboration with others whose Class I areas are diminished by Texas's air emissions.

12) **Pages 7-1 – 7-3, Chapter 7, Emissions Inventory**, TCEQ does not state how accurate the emissions inventory (EI) is for RH. In the past TCEQ has failed to provide accurate EIs for ozone SIPs. Why is this EI any better?

13) **Pages 9-1 – 8-19, Chapter 8, Modeling Assessment**, TCEQ does not provide any information about the accuracy of the modeling done by it, CENRAP, or EPA. In the past, for ozone attainment SIPs, TCEQ stated that the modeling conducted was sufficient, adequate, and documented attainment. However, TCEQ was wrong each time it said the modeling was sufficient. How is this modeling effort any different? How will TCEQ prevent its efforts from being wrong again? Why is this modeling effort any different?

The modeling area is much larger for RH, in general, than that used for non-attainment demonstrations and the quality of EIs are not known as well as for ozone non-attainment. Many state's EIs are being used and this is the first time RH has been modeled to demonstrate progress toward attainment. Due to these factors the modeling effort is probably not sufficient or accurate.

The CAMx model used as one of the models in this effort is the one TCEQ has used for ozone attainment and which has failed, using real monitoring data, to credibly demonstrate ozone attainment. Its predictions of attainment have been wrong. This suggests severe credibility problems for the RH modeling. The EI used by TCEQ for Texas is the same inaccurate EI that was used in the failed ozone attainment modeling efforts.

Examples of the inaccuracy of EIs are found in the **August 31, 2007 "Final Rapid Science Synthesis Report: Findings from the Second Texas Air Quality Study"**, where TCEQ states "Measurements of ethane emission fluxes from petrochemical facilities ... indicate that the 2004 TCEQ point source database underestimates these 2006 emissions by one to two orders of

magnitude (that is 10 to 100 times, **page 51**); “However, in spite of this progress, the latest available emission inventories still underestimate ethane emissions by approximately an order of magnitude” (10 times, **page 55**); “Underreporting of CO emissions at several EGU noted in 2000 ... have been reconciled by large increases (by factors of 5 to 50) in the inventory values between 2000 and 2006, as a result of newly implemented CEMS monitoring of CO at these plants” (**page 57**); and “On-road mobile emission inventories developed from MOBILE6 have significant shortcomings. MOBILE6 consistently overestimates CO emissions by about a factor of 2. It accurately estimated NOx emissions in the years near 2000 but it indicates decreases in NOx emissions since then, while ambient data suggest NOx emissions have actually increased. Consequently in 2006, NOx to VOC emission ratios in urban areas are likely underestimated by current inventories” (**Page 59**).

14) **Page 8-10, 8.4.12 Emission Input Preparation**, there are inaccuracies built into the modeling. For instance, TCEQ states that “The Mexican 1999 inventory was held constant for 2019. No one believes that Mexican emissions have not grown in the past 9 years (1999 to 2008) and no one believes Mexican emissions will not grow in the future (1999 to 2018), a total of 19 years. Yet this is what the modeling assumes. This is not scientifically defensible.

EPA, TCEQ, and other states, along with the government of Mexico, for the past 9 years should have put together a credible EI for now and for 2018. Instead we have a 1999 EI whose accuracy we know nothing about and which was used unchanged throughout a 19 year period. This is not acceptable science and casts grave doubt on TCEQ’s decision to abandon RH control for a further five years.

15) **Page 8-11, 8.4.13, Meteorological Data Input Preparation**, TCEQ again documents that the modeling effort is not sufficient to justify no controls for the next five years. TCEQ states “All three runs had similar surface wind model performance in the western United States that was outside the model performance benchmarks”. In other words, the modeling effort did not meet quality assurance requirements. This is particularly of concern since winds are what carry RH throughout Texas, other states, other countries, and across various borders or boundaries. This problem calls the modeling results that TCEQ uses to justify doing nothing into question.

16) **Page 8-16, 8.4.17, 2018 Modeling and Visibility Projections**, TCEQ states that certain sources were “assumed to remain constant between 2002 and 2018 base case simulations”. This assumption is incorrect.

There is no way biogenic VOC remains the same because the number and extent of trees (acres) and other vegetation varies. An example of this is the continued sprawl urban development in the Houston area that has reduced

naturally forested areas a great deal and continues this deforestation on a daily basis.

I am concerned about the constancy of “wind-blown dust associated with non-agricultural sources”. In particular, much of rural Central and West Texas is farmed or ranched which generates dust that is agricultural and human generated but which TCEQ may consider non-agricultural and natural.

Certainly, offshore emissions due to offshore marine and oil/gas production activities do not remain constant. In fact the greater activity in the Gulf of Mexico due to the higher price of oil and the greater ship traffic call this assumption into question.

Emissions from wildfires also vary greatly depending on droughts, winds, and other factors. Emissions from Mexico, as mentioned above are certainly not constant due to increase economic activity.

Finally, global transport cannot be considered constant since there has been a documented increase in air pollution, for instance, from China and depending on the economic activity that occurs, Mexico and Central America would also vary. In addition, as one example, Sam Houston National Forest is conducting more prescribed burning (as are the other three national forests in Texas) than in the past to provide better habitat for the federally endangered Red-cockaded Woodpecker. So within Texas there may be more burning of vegetation. These incorrect assumptions place into doubt the results that the modeling produced.

**17) Pages 8-17 and 8-18, 8.4.17, 2018 Modeling and Visibility Projections,** I have further concerns about the modeling. TCEQ admits that visibility falls 5% short at Breton and 40% short at Wichita Mountains. In addition, I believe that the “High contributions of ... natural sources (e.g., windblown dust)” are in reality mostly human caused because grazing and farming can cause long-term changes to surface area exposure which creates more potential dust generating surfaces. What will TCEQ do to reduce Texas’s emissions so that wildernesses and national parks outside of Texas reach acceptable visibility levels as soon as possible?

**18) Page 8-19, 8.4.18, Additional Supporting Analysis,** because “extinction due to soil ... is projected to get worse” TCEQ must take into account the negative impacts of grazing and farming on wind-blown soil. What is needed are requirements for best management practices for grazing, farming, and agricultural practices that expose soil to the wind and an implementation plan with enforcement to ensure that plan is followed and goals achieved.

TCEQ states that “International transport contributed significantly to visibility impairment” but does not provide the information about how accurate its’

estimate of emissions from Mexico and Central America are. TCEQ must show the public the accuracy of its assumptions and how it derives its information.

19) **Pages 9-1 – 9-13, Chapter 9, Best Available Retrofit Technology**, Chapter 9 is a cop-out. TCEQ uses every excuse to reduce to zero the number of facilities that must install BART. TCEQ is a disgrace to the citizens of Texas because it will not commit to new RH only reductions so that citizens can enjoy a healthier life and have wildernesses and national parks that they are proud of.

20) **Page 9-1, 9.1 BART Eligible Sources in Texas**, it is sad that TCEQ, instead of doing what is necessary to reduce RH as soon as possible, does what is politically expedient and avoids control of BART eligible sources. The distances used for BART eligible sources are too short (50 kilometers – 31 miles and 100 kilometers – 62 miles) since TCEQ and other agencies have shown that lignite fired coal plant and oil and chemical plant emissions can travel hundreds of miles away and affect BBNP and GMNP.

In the **August 31, 2007 “Final Rapid Science Synthesis Report: Findings from the Second Texas Air Quality Study”** TCEQ states on **pages 43 and 95** “A dramatic example of nocturnal transport has been documented for 8 September 2006, when high daytime concentrations of ozone that had accumulated over Houston during the previous day traveled to Dallas overnight, contributing to enhanced concentrations in Dallas the next day ... Ozone can be transported into the Dallas area from the Houston area”. So in fact air pollution, in this case, traveled over 400 kilometers (250 miles).

This problem of not looking at sources that are farther than 50-100 kilometers away from Class I areas is why TCEQ must establish areas of influence (AOI). These AOI subdivide geographic areas and emphasize sources that have the highest possibility of providing reductions that will benefit visibility and thus reduce RH impairment. **The way TCEQ handles BART is a disservice to the public.**

21) **Page 9-5 and page 9-10, 9.2 Determination of Sources Subject to BART and 9.3 Determination of BART for Sources Subject to BART**, it is sad that TCEQ chooses exempting BART sources instead of making BART determinations for all sources. What TCEQ does is exempt all sources so none have to install BART. This is a distortion of the process and shows that TCEQ has no desire to attain RH standards by the 2064 compliance date.

What TCEQ does not acknowledge is that sources in Harris County are so vast and so extensive and so close together that they act like one large point source and create a large area plume that moves across Texas and into other states. By looking at each source individually TCEQ ignores that along the Houston Ship Channel there really is one large point source plume that can affect RH. What makes emission reductions from programs like CAIR unlikely is that many

sources want to purchase emission credits and do not want to add on air pollution controls to reduce RH. These actions undermine TCEQ's statement that existing program reductions are sufficient so nothing more needs to be done for the next five years.

22) **Page 9-11, 9.4 Post-BART Emissions Reductions, Table 9-6**, I am concerned that TCEQ, for several sources, on **Table 9-6**, does not have the air pollution emissions for NO<sub>x</sub> Reduced from baseline 2002; SO<sub>2</sub> Reduced from Baseline 2002; and PM Reduced from Baseline 2002. How can this be if TCEQ states that these emissions will be reduced?

It is not clear if any reductions occur in this case. Any company that cannot produce information for TCEQ about its emission reductions should not be listed on **Table 9-6**. In addition, TCEQ does not state whether the reduction in permitted emissions resulted in real emission reductions or if the number that was in the permit was one that was not reached operationally and therefore resulted in no emission reductions when the permitted emission limit was lowered. The public needs this information to review, comment on, and understand the extent of TCEQ's proposal.

23) **Page 10-1, 10.2 Reasonable Progress Goals for Texas Class I Areas**, TCEQ documents that it will not meet the 2064 compliance deadline for RH for GMNP and BBNP. But TCEQ does not just miss the deadline it does so in a ridiculous fashion, claiming attainment for GMNP 17 years after the compliance date of 2064 (2081) and 91 years after the compliance date for BBNP. This is neither believable nor supportable. Where is TCEQ's commitment to the public, wildernesses, national parks, and clean air?

TCEQ also admits that any reductions in emissions so RH will be lessened "reflect emission reduction programs already in place and additional SO<sub>2</sub> reductions from refineries as a result of EPA refinery consent decrees". So in fact TCEQ does nothing in this SIP to further RH emission reductions. It simply relies on other program reductions implemented in the past or that EPA and others will implement now and in the future. These so-called reductions are inadequate and insufficient for ozone attainment since the EIs are deficient (by an order of magnitude as mentioned above).

TCEQ acts like it is a stringent air quality agency by stating that its rules and SIPs, which it lists, are stronger than those that other states have. This characterization is misleading because it does not acknowledge that other states do not have the ozone non-attainment problems that Texas does; the huge number of RH sources that Texas has; and that the EPA programs that TCEQ points to as being weaker were set-up for different purposes and therefore would not be stronger than the programs TCEQ has implemented for a massive ozone problem where TCEQ has failed to reach attainment deadlines on many occasions.

24) **Page 10-2, 10.2 Reasonable Progress Goals for Texas Class I Areas**, I am concerned that TCEQ does not know the extent of emissions from upstream oil/gas production. This information should have been gathered by 1999 for the HGB Ozone One-Hour Non-Attainment Area SIP. The huge number of small to medium size point sources should be controlled to reduce RH, hazardous air pollutants, and transported ozone and precursors.

25) **Page 10-3, 10.2 Reasonable Progress Goals for Texas Class I Areas, Table 10-3**, is very troubling. TCEQ documents that it will make virtually no progress (only 0.2 deciviews) in 10 years (2018). This is an example of TCEQ's incrementalism and minimalism in emission reductions. This same strategy has failed to achieve attainment for ozone in the HGB, Dallas-Fort Worth, and Beaumont-Port Arthur ozone non-attainment areas. TCEQ advocates a strategy that does not work. TCEQ's strategy of incrementalism and minimalism causes environmental harm to people, Texas' two national parks, and many wildernesses and or national parks in other states.

26) **Page 10-4, 10.2 Reasonable Progress Goals for Texas Class I Areas**, TCEQ needs to focus on not "moderate cost controls for sources" but controls that will be effective and will result in attainment of the 2064 RH compliance deadline. This is no time to be counting pennies when dollars need to be spent. **Who is TCEQ protecting: industry or the public?**

27) **Page 10-4, 10.2 Reasonable Progress Goals for Texas Class I Areas, Table 10-5**, TCEQ shows a less than adequate reduction since deciview improvement for BBNP and GMNP is only 0.05. TCEQ admits that this could really mean no improvement at all when it states "An improvement of 0.05 deciview is well within the uncertainty of the modeling techniques and is much lower than perceptible".

Spending \$300 million sounds like a lot of money but is not "an aggressive set of additional controls". This amount of money could be spent on several sources for adequate air pollution control. People's lives and pristine wildernesses and national parks are not cheap; their degradation is not cheap; and their restoration will not be cheap.

28) **Page 10-6, 10.4 International Sources of Visibility Impairment, Table 10-7**, apparently TCEQ's philosophy is that if international sources of pollution are causing RH problems that it has to do nothing for the next five years. I disagree. It seems obvious to me that TCEQ has double counted emissions in **Table 10-7** since boundary conditions and Mexico can have overlap. In addition, TCEQ does not know how accurate the 52% and 25% of visibility impairment from international sources is. TCEQ must focus on what it can do as quickly and comprehensively as possible. TCEQ must reduce emissions from Texas sources that cause visibility impairment so the public can see what the real effects of

international sources are. It is much easier getting Mexico and Central America to reduce their emissions if we have done all we can to reduce our RH.

29) **Pages 10-6 and 10-7, 10.5 Reductions Required to Meet the Uniform Rate of Progress and Table 10-7**, TCEQ is using the same failed argument (over control) that is found in its ozone non-attainment strategy for the HGB area. This excuse has led to delay for over 30 years and has put people's health at risk. There has never been any danger of over control in the Houston area and there is no danger of over control for RH.

TCEQ states "Given the significant impact from international emissions, the uncertainty in the impact of CAIR and the poor cost-effectiveness of additional, reasonable point source controls, the TCEQ has determined that additional controls for regional haze are not appropriate at this time." Where is the "can do" Spirit of Texas? Why all the "we can't do it" whining? Why does TCEQ give-up before it begins? We need to do our share and then turn to other states and countries and see that they do their share. I have not asked TCEQ to require "compensatory over control". **I do expect you to do your job. Doing nothing for the next five years is not doing your job.**

While TCEQ points to Central America as a large source of RH emissions via boundary conditions shown in **Table 10-7** the entire story is not told. Since CENRAP modeling did not differentiate between boundaries TCEQ must admit that some of the air pollution coming from boundary conditions may be due to Texas' and other states' emissions that are re-circulated.

30) **Page 11-1, 11.1 Introduction**, TCEQ states "the Regional Haze SIP revision incorporates planning for the next ten years". Planning does not get emission reductions. Planning does not result in the attainment of the RH compliance deadline. Only by requiring emission reductions do we get emission reductions. I want the TCEQ to require emission reductions now. Planning to do nothing is not planning.

31) **Page 11-1, 11.1 Introduction**, TCEQ must determine how much of the coarse mass and fine soil "comes primarily from natural dust storms and dust blowing from the Chihuahuan Desert" since much of this dust may be due to historical overgrazing or farming and therefore is human caused and not something we can do nothing about. Ecosystem restoration and reform of grazing and farming practices may be needed to reduce this human caused dust.

32) **Page 11-1, 11.1 Introduction**, TCEQ states "The modeling indicates that primary organic carbon at Big Bend comes overwhelmingly from boundary conditions, which include the areas of the Yucatan and Central America with extensive agricultural burning and sometimes wildfire emissions each April and May." Has TCEQ correlated the actual burning and other sources with carbon concentrations? Where specifically are the problems? Since CENRAP modeling

did not differentiate between boundaries TCEQ must admit that some of the air pollution coming from boundary conditions may be due to Texas' and other states' emissions that are re-circulated.

33) **Page 11-3, 11.1.1 Reasonably Attributable Visibility Impairment**, TCEQ states "The FLMs for Big Bend and Guadalupe Mountains National Parks have not identified any reasonably attributable visibility impairment from Texas or other United States sources. The FLMs for the Class I areas in other states have not identified any reasonably attributable visibility impairment caused by Texas sources. For these reasons, the TCEQ does not have any measures in place or plans to address reasonably attributable visibility impairment."

TCEQ is less than accurate with this statement. TCEQ should read the FLMs letters that have been sent to it and revise this paragraph. Since the states of Louisiana, Colorado, and New Mexico have not consulted with Texas it is way too early to assume that Texas should do nothing. Those states are at a different place in the RH planning process so they have not contacted Texas for consultation. Why has TCEQ failed to mention this in the SIP?

In addition, other states, like Missouri and Oklahoma have stated that Texas emissions do affect their Class I areas but that the reductions that Texas is making due to other programs should reduce Texas' impacts. But reducing Texas' impacts is different than saying that the impacts that remain in these areas are acceptable. The other states have not said this.

With the uncertainty that the modeling provides it seems prudent that Texas make reductions to ensure that later it is not shown that it delayed when reductions should have been made and therefore delayed RH attainment. There is no doubt that reductions must be made since on **page 10-6**, TCEQ implies that at least 48% for BBNP and 75% for GMNP of the visibility impairment comes from Texas or other states, not foreign sources.

34) **Page 11-3, 11.2 Consultation**, TCEQ should not suggest that no emission reductions are needed when it has not consulted with three states who could determine that Texas' emissions are negatively impacting their Class I areas and that emission reductions in Texas are needed. Texas has set a 20% cut-off for emission impacts which is an unacceptably high level of impact to allow. The data do show Texas affects other states. Texas must do its share for emission reductions but is shirking its duty.

In addition, **Figures 11-4 through 11-7** demonstrate that Texas' emissions come from sources all across Texas, both from the east and the west. The SIP should state that Texas has sources from all across the state that are contributing to RH in wildernesses and national parks in other states.

35) **Page 11-8, 11.3 Request for Federal Efforts to Reduce International Transport**, TCEQ should ensure that the two categories of sources, Mexico, and boundary, are not double counting emissions.

36) **Page 11-8, Figure 11-10**, the Gulf of Mexico contributions are significant in 2018 for the worst 20% of visibility days. Offshore emissions should not be held constant through the planning period. A real estimate of what these air emissions will be from Gulf of Mexico sources must be provided and not simply a present day estimate.

37) **Page 11-9, 11.4 Minimizing Visibility Improvement form Texas Emissions**, TCEQ misleads the public. TCEQ says it “implemented rules that limit and minimize emissions causing both local and regional visibility impairment” but does not state in the same paragraph that this RH SIP does not do so and in fact delays reductions for at least five years and perhaps for ten years. Many of the these regulations, rules, and SIPs that TCEQ takes credit for have been in place for years and are not new efforts to reduce pollution and certainly are not efforts to reduce RH.

38) **Page 11-10, 11.4.4 Programs to Manage Smoke Impacts on Class I Areas**, TCEQ should also list a smoke management plan for the National Forests and Grasslands in Texas (Davy Crockett, Sam Houston, Sabine, Angelina National Forests and Caddo and LBJ National Grasslands). Larger portions of the national forests in Texas are prescribed burned each year than was true in the past due to increased emphasis on improving RCW habitat.

39) **Page 11-13, 11.6.3 CAIR Reductions for NOx and SO2, Table 11-1**, the CAIR reductions projected for NOx are only 28.5% and for SO2 are 61.1%. Texas needs much greater reductions than these to increase visibility and reduce ozone precursors.

40) **Page 11-15, 11.6.5 Comparison of the NOx Emission Limits for EGUs with CAIR Limits, Table 11-2**, TCEQ does not tell the entire story. The reason emission limits are lower for EGUs in the HGB ozone non-attainment area than for CAIR is because Houston is so out of attainment for ozone. The Houston area is one of the worst ozone non-attainment areas in the United States. These reductions are required for attainment for ozone and were not required for RH. TCEQ backed off from 90% NOx reductions to 80% reductions due to a lawsuit filed by industry. It is steady pressure from citizens and EPA to do more and the failure by TCEQ to do enough that resulted in more stringent standards. It was not because TCEQ wanted to have stringent standards and it was certainly not done for the reduction of RH.

41) **Page 11-16, 11.6.6 Sulfur Dioxide Reductions under the EPA Refinery Consent Decrees, Table 11-3**, TCEQ takes credit for SO2 reductions that it did not require. These SO2 reductions occurred only because EPA was forced to

get them via enforcement. TCEQ has not enforced air pollution standards adequately and again takes credit for others' hard work which had nothing to do with reducing RH.

This RH SIP should be withdrawn and revised to incorporate reductions in RH emissions over the next five years. If this is not done then EPA should start the sanctions clock and in 18 months, if an acceptable SIP with RH reductions is not complete, EPA should apply highway sanctions and require 2:1 offsets for RH emissions until an acceptable SIP is submitted and approved.

I appreciate this opportunity to comment. Thank you.

Sincerely,

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