To: The Honorable Brooks Landgraf, Chair  
Members, House Committee on Environmental Regulation  
From: Cyrus Reed, Lone Star Chapter, Sierra Club, cyrus.reed@sierraclub.org  
Re: Written Testimony to Committee  

March 15, 2023

The Lone Star Chapter of the Sierra Club is the state chapter of the Sierra Club, the nation’s largest and oldest conservation organization. In Texas, we have been operating with staff for over 50 years, and have some 25,000 members. We very much appreciate the opportunity to provide written comments to the Committee on upcoming legislative issues as you begin deliberating on specific bills. We are sorry we are unable to be there to present oral testimony but are available throughout the session to visit with members and their staff.

We have divided our written comments into five sections:

- Conservation Groups Petitions to EPA on water and air programs
- TCEQ Sunset Bill (HB 1505): What’s there and what’s missing
- Meeting upcoming EPA air quality standards and regulations
- TERP: Keeping it focused on ozone and PM 2.5
- Taking advantage of federal funding opportunities to help clean our air

The big picture: our air is still too dirty and our water is still too polluted, particularly for certain communities. Many of these are communities living in industrial zones in the Gulf, in Dallas or in West Texas. Currently, four areas in Texas - Houston-Galveston-Brazoria, Dallas-Fort Worth, El Paso and San Antonio - currently do not meet the requirements of the National Air Quality Ambient Standards for ground-level ozone (see Map 1), representing roughly half the state’s population. Furthermore, according to the Texas Commission on Environmental Quality, roughly half of the state has surface waters that do not meet the state’s water quality standards (see Map 2).
Map 1. Non-Attainment Areas for Ozone Pollution in Texas Under the 2015 Ozone Standard

Note: All four areas have been declared non-attainment and bumped up to sufficient levels to require updates to the State Implementation Plan.

Map 2. Impaired Waterways in Texas
Being on the Impaired List simply means the water body has levels of one or more constituents to meet the water quality standards of the state.

**Conservation Groups Petitions to EPA on Water and Air Programs**

Over the last several years, the Sierra Club joined several other organizations in providing two separate written petitions to the EPA that the Texas Commission on Environment Quality was failing to meet the letter and spirit of the law in terms of both the Federal Clean Water Act and the Federal Clean Air Act. In the case of the Federal Clean Air Act, the Sierra Club and 12 other environmental, conservation and environmental justice groups filed a petition on June 28, 2022. Among other allegations, our groups made the case that EPA's involvement is necessary to correct TCEQ's systemic refusal to conduct any environmental justice review in its air permitting program and to ensure TCEQ is complying with Title VI of the Civil Right Act. The petition urges the EPA to initiate a Title VI compliance review and a SIP (State Implementation Plan) Call to review TCEQ's lack of environmental justice review and unlawful barriers to public participation in the Texas air permitting program. The petition identifies three significant barriers to public participation in TCEQ's air permit proceedings that are unlawful under the Clean Air Act: (1) limiting access to judicial review of permits, (2) allowing public information to be withheld from the public, and (3) allowing operators to use unenforceable permits to authorize new construction, modifications, and emissions increases without any meaningful opportunity for public participation.

A copy of the petition on the air issues can be found here - https://earthjustice.org/wp-content/uploads/epa_air_petition_for_sip_call_title_vi_review_final_6.28.22.pdf

In a separate filing, the Sierra Club joined with 20 other groups in alleging that state regulators are not doing enough to protect water quality in Texas, as is federally required. The Sierra Club and other organizations are asking the federal agency to step in and repair Texas' “broken system” of issuing permits to control water pollution, saying the state has made it too easy for industries to contaminate its water.


The US EPA is currently assessing both of our petitions, and is having conversations with the TCEQ and other state officials about improvements needed to maintain delegation authority. Sierra Club is of the opinion that certain changes are needed in statute, as well as in practice, especially in regard to affected persons, judicial review, cumulative impact analysis - especially for major permits - and public participation. While these changes are not currently contemplated in the TCEQ sunset bill filed by Rep. Keith Bell as HB 1505, we believe there may be a need in that or separate legislation this session to avoid the
potential for EPA to begin the process of disapproving the currently delegated programs of the state.

**TCEQ Sunset Bill (HB 1505): What’s there and what’s missing**

The Sierra Club was a participant in the sunset commission process and was generally supportive of the Sunset report and the decisions of the Sunset Commission. The sunset report found TCEQ to be a reluctant regulator and lacking good public participation practices. Indeed, as we pointed out, as an organization the Sierra Club (and other partner organizations like Environment Texas and Environmental Integrity Project) frequently take polluters to court under the Clean Air Act’s citizen enforcement provisions, and have settled a number of large cases which have led to cleanups of major refineries and gas processing facilities. Simply put we have had to step in when TCEQ refused to do their job. Thus, the Sierra Club is supportive of the sunset bill as introduced, although we believe that other issues such as those raised in our petitions must and should be addressed.

Among the important issues we support in the Sunset bill include:

- Better public notice and posting of permit applications online;
- Potential for online, virtual public hearings;
- Improved permitting procedures and hearings, including ability to make comments up to 36 hours after a hearing ends;
- Increasing the maximum administrative fines that can be assessed against environmental law breakers from $25,000 to $40,000;
- Allowing updates to compliance ratings to better reflect reality;
- Better training of commissioners and clarifications on management staff responsibilities.

We do believe there are a number of improvements that are needed in the bill including making it clear that an opportunity for a virtual online meeting is not in lieu of a physical meeting. In addition, we are supportive of looking at additional issues, including:

- Assuring the TCEQ follows federal laws and guidelines on assessing environmental justice analysis and cumulative impact analysis, particularly on large permits and permit amendments;
- Assuring that state definition and interpretation of affected persons for contested case hearings and judicial reviews are equivalent to those under federal law
- Assuring that the burden of proof for permits is not put unduly on protestants and allowing documentation, including witness testimony establishing that a proposed permit does not demonstrate compliance with state or federal requirements
- Adjusting the length of time for contested case hearings from 180 to 270 days
- Directing TCEQ to set priorities on cleaning up its waterways through the TMDL (Total Maximum Daily Load) process and to set salinity gradient standards for water quality.
- Allowing other state agencies - specifically the Texas Parks and Wildlife Department to contest water permits.

It is important to note that besides the sunset bill, this committee will consider a number of bills focused on environmental justice and cumulative impact, proper regulation of concrete batch plants, and language access and public participation.

Meeting upcoming EPA air quality standards and regulations

Since President Biden assumed office, as expected the US Environmental Protection Agency has moved forward on a number of important air and water quality standards proposals. A few of them are already final. A few of the major ones are discussed below. Texas will need to eventually comply with these matters, and assuring that TCEQ has the funding and resources to carry out these requirements will be key, as well as stakeholder engagement to make compliance for industry easier. While the State of Texas is likely to legally fight these regulations, most are on solid legal footing, and have already gone through extensive review and previous challenges. While this brief synopsis only covers a few of those rules and standards, there are numerous other ones involving industrial operations that could have an impact in Texas, including the Chemical Safety Rule, proposed Ethylene Oxide standards, and changes to IMM and SMS rules that could force Texas to get rid of its “Affirmative Defense” provisions for industrial emissions.

Good Neighbor Rule - Finalized

Earlier this week, the US EPA finalized regulations known as CSAPR (the Cross-State Air Pollutant Rule), sometimes referred to as the Good Neighbor Rule. This rule has been expanded from a previous proposal under the Obama Administration to include both electric generation units - mainly coal - as well as other industries that produce nitrogen oxide emissions. Designed to lower the formation of ozone that can impact downwind states ability to meet ozone standards, the rule has an almost immediate effect.

According to analysis conducted by the EPA, the Good Neighbor Rule will:
- By 2026, the proposed rule is projected to annually prevent:
  - 1,300 premature deaths
  - More than 7,100 cases of onset asthma
  - More than 2,100 hospital emergency room visits for breathing problems
  - Almost 1.3 million asthma attacks
- The Good Neighbor Plan will also bring $13 billion in health benefits to people across the country. These benefits are projected to occur each year from 2026 through 2042.
The Plan will also help reduce summertime ozone. EPA estimates that the final Good Neighbor Plan will reduce ozone forming NOX emissions from the 23 significantly contributing upwind states by approximately 70,000 tons during the 2026 ozone season (May 1 – September 30) compared to a business-as-usual scenario.

About 25,000 tons will come from fossil fuel-fired power plants -- reducing their ozone season NOX emissions. The additional 45,000 tons of NOX emissions reductions would come from the other covered industrial sources. These reductions will improve air quality for millions of people across the country.

Under the final rule, Texas is given a budget for identified power plants of 40,134 tons in 2023 and 2024, which must be reduced to 23,009 tons in 2027 and 20,635 in 2029. While no power plant is required to retire, the reductions will require improved operations and in many cases, additional pollution control equipment for some older units. Trading of emission allowances is allowed (with some restrictions) meaning not all power plants have to reduce emissions by the same amount.

In response to concerns from ERCOT and other grid operators about reliability, the EPA did make some tweaks to the final rule, including:

- Compliance flexibility for power plants by deferring “backstop” emission rate requirements for plants that currently do not have state-of-the-art controls until no later than 2030.
• Enhances the availability of allowances during a period of relatively rapid fleet transition by allowing power plant owners and operators to “bank” allowances at a higher level through 2030.

While providing this and additional flexibility to power plants, EPA is implementing further controls on other large emission sources that contribute to ozone formation in downwind states, by implementing NOX Emissions Standards for Nine Large Industries. Beginning in the 2026 ozone season, these standards would collectively achieve an approximately 15% reduction in NOx emissions point source emissions. The reduction in NOx emissions comes from the following types of emissions sources:

- reciprocating internal combustion engines in Pipeline Transportation of Natural Gas;
- kilns in Cement and Cement Product Manufacturing;
- reheat furnaces in Iron and Steel Mills and Ferroalloy Manufacturing;
- furnaces in Glass and Glass Product Manufacturing;
- boilers in Iron and Steel Mills and Ferroalloy Manufacturing, Metal Ore Mining, Basic Chemical Manufacturing, Petroleum and Coal Products Manufacturing, and Pulp, Paper, and Paperboard Mills; and
- combustors and incinerators in Solid Waste Combustors or Incinerators.

Assuming this final rule goes forward after any challenges from congress and/or courts, the TCEQ will be charged with implementing CSAPR for both power plants and other industries, and large industries will need to comply.

A good fact sheet about the final rule can be found here - https://www.epa.gov/system/files/documents/2023-03/Final%20Good%20Neighbor%20Rule%20Fact%20Sheet_0.pdf

Ozone Non-Attainment Areas

Texas currently has four areas that fail to meet the standards of the 2015 Ozone Standard, which is currently set at 70 parts per billion. El Paso, San Antonio, the Dallas-Fort Worth and Houston-Galveston-Brazoria areas all are considered to have moderate levels of ozone pollution, while the last two also are still considered to have a severe ozone pollution problem under the 2008 ozone standard.

While recently the EPA made the decision not to pursue considering parts of West Texas to be a non-attainment contributing zone because of high levels of ozone in eastern New Mexico, we should be careful in claiming that the air quality in Odessa-Midland is good. In fact, a lack of monitoring data in the area - which lacks monitors for ozone - means it is difficult to surmise whether the combination of oil and gas drilling, transportation and other heavy industry might be contributing to high levels of ozone.
The Biden Administration is also expected to reassess the ozone standard soon, meaning the current 2015 standard of 70 PPB could be lowered in the future, meaning Texas's failures to meet the standard will be made more difficult.

It is important to note that Texas has made tremendous progress in lowering levels of ozone in most of our major cities due to cleaner vehicles, industry pollution control and local efforts, and the use of grants through the Texas Emissions Reduction Plan (TERP). Still, many Texans die prematurely and suffer health issues because of local smog and it must continue to be a focus for lawmakers, local officials and the TCEQ.

**Particulate Matter**

A strong body of scientific evidence shows that long- and short-term exposures to fine particles (PM2.5) can harm people's health, leading to heart attacks, asthma attacks, and premature death. PM is emitted directly from sources such as construction sites, unpaved roads, fields, smokestacks or fires, but most particles form in the atmosphere as a result of complex reactions of chemicals such as sulfur dioxide and nitrogen oxides, which are pollutants emitted from power plants, oil and gas fields, industrial facilities and especially older diesel vehicles.

Earlier this year, the Environmental Protection Agency proposed lowering the annual PM 2.5 standard from 12.0 micrograms per cubic meter to a level between 9.0 and 10.0. Importantly, they did not recommend lowering the 24-hour standard, currently set at 35 micrograms per cubic meter, despite scientific evidence that doing so would save thousands of lives.

The EPA is currently taking public input on the proposal until March 28th, and we expect them to propose a 24-hour and annual standard later this year. Texas would then need to assess PM 2.5 levels over the next several years to see if all areas in Texas met the standard, and if not, come up with a compliance plan.

Depending on the final standard that is adopted, Texans living in Austin, San Antonio, Dallas-Fort Worth, Houston, Beaumont-Port Arthur, El Paso, and the Rio Grande Valley could see improvement in air quality and improved health outcomes as a result over the next three to five years.

EPA is mainly seeking more stringent health standards for the annual PM 2.5 limit of 12 mg/m3 over a three-year mean after being revised in 2012 from annual standard of 15 mg/m3 to 12 mg/m3, and the daily standard was tightened from 50 mg/m3 to 35 mg/m3. The PM 2.5 monitor data shows that all 254 Texas counties and urban areas were to meet the 2012 revisions, but many counties are not likely to meet new 2023 standards. According to data provided by the US EPA in the release, and a map that can be found [here](#), Three counties - Harris, Hidalgo, and Webb - would not meet a standard of 10.0 mg/m3.
And the facts don’t lie. Currently, Harris County’s three-year average of 11.1 mg/m³, Hidalgo County at 10.6 mg/m³, and Webb County at 10.4 mg/m³ do not meet a proposed annual PM 2.5 standard of 10.0 mg/m³.

A standard of 9.0 mg/m³ would cause areas of South, North, and Central Texas to also fail: Cameron, Bowie, Travis, Dallas, and Tarrant counties do not meet 9.0 mg/m³ over three-years.

**Methane Rule**

The final rule that EPA has proposed is a comprehensive methane rule, building on a previous NSPS (New Source Performance Standards) adopted under the Obama administration in 2016. This newly proposed rule – and we are still waiting for a final rule - would require both new and existing oil and gas operations, including both the well, associated equipment and some midstream pipelines to implement a series of controls and best practices to lower emissions of methane - literally gas. While gas is a useful and valuable product in our pipelines, stoves and furnaces, if it escapes into the atmosphere it can impact people’s health, impact the environment, and especially, cook our climate. It is estimated that methane is more than 80 times more impactful on climate change than a similar amount of carbon dioxide within the first 20 years it is released into the atmosphere.

Texas plays an outsized role in the methane emissions from the oil and gas sectors and Texas local and state leaders should implement rules, plans and incentives to help operators locate and fix leaks, implement better pollution control equipment, and lower the use of routine flaring and venting.

While the EPA rules are not final, Texas would be smart to prepare for the new rule by studying the resources and oversight that the TCEQ (and Railroad Commission of Texas) will need to help industry comply.

A good source of information for the methane rule can be found here - https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/fact-sheets-e-pas-supplemental-proposal

The good news is that most of the technology and practices are already well understood and cost-effective. This should be a win-win for the environment and the economy - in this case, pollution is wasted gas - a useful product.

We would note that legislation filed by Chairman Landgraf related to increasing funding for TERP for innovative technologies to find and capture wasted gas - and Rep Reynolds -through legislation to require TCEQ to study how to effectively implement future EPA rules - should be part of the conversation at the legislature this year.
**TERP: Keeping it focused on ozone and if needed, PM 2.5**

Texas has a unique program known as the Texas Emissions Reduction Plan (TERP), which for more than 20 years has allowed Texas to slash emission of nitrogen oxide by providing grants to local governments, private fleets and others to clean up and replace older trucks, equipment and engines. While the programs have changed through the years, the most cost-effective programs remain the ERIG (Emissions Reduction Incentive Grants) and DERI (Diesel Emissions Reduction Incentive) plans. Recently, the legislature began to make sure that all fees collected are sent to a separate trust fund that TCEQ manages, to assure the money is actually allocated and spent.

Between 2001-2020, the Diesel Emissions Reduction Incentive Program provided over $1 billion to replace or upgrade 19,955 vehicles and pieces of equipment. These projects will reduce NOX in the nonattainment areas and other affected counties by 183,434 tons.

Other important programs include ERIG, Drayage and Seaport, and New Technology Implementation Programs, and Energy Efficiency through SECO/ESL. TERP Remains an Effective Tool to Clean Up Emissions from many of the sources which cause Texas to have dirty air and not meet EPA rules, and could help Texas with a number of the proposed rules.

While TERP bills will again come to the committee to look at a number of new types of technology - from hydrogen to electric vehicles to carbon capture - Sierra Club will be generally favorable to bills that maintain the focus on reducing emissions related to ozone formation by reducing emissions of nitrogen oxide and volatile organic compounds, especially if they have a co-benefit of also reducing particulate matter, given the expected lowering of the PM 2.5 standard. Specific programs could be developed to target NOx and PM 2.5 concurrently.

We also believe that some programs can be tweaked to better align with the movement toward electric vehicles and electrification of transportation. In general terms, electric vehicles – even with the emissions from power plants needed to charge them - are much cleaner than other types of vehicles. With increased federal funding from the IIJA/IRA, we can also use TERP to more deeply electrify transportation in Texas.

**Taking advantage of federal funding (and state) opportunities to help clean our air**

With the passage of the Bipartisan Infrastructure Law in 2021 and the Inflation Reduction Act in 2022, Texas also has an opportunity to increase funding for programs that will clean our air (and water). In the base budget there are already increased funding for well plugging (in RRC’s budget), but also for superfund cleanups at TCEQ.

In addition, Texas could take advantage of funding under Environmental Justice Grants, Pollution Reduction and Greenhouse Gas Reduction Grants available through the EPA. Another pot of money is the MERP - Methane Emissions Reduction Program - which could help states and industries clean up methane emissions.
Finally, a variety of programs through the Department of Energy could increase money to the Public Utility Commission of Texas and the State Energy Conservation Office. While these are not directly related to environmental regulation, clean energy and energy efficiency funds and programs do help clean the air, and it would make sense for the TCEQ to work with the PUCT and SECO on making sure the benefits of those air pollution reduction are reported to EPA for credit in our State Implementation Plan.

Both Rep. Reynolds and Rep Zweiner have filed bills that would direct SECO to seek federal funding for energy efficiency programs, and report on any energy savings and pollution reduction benefits. Those pieces of legislation may come to this committee and could be an important way to assure that federal funding is reported on and helps us get credit for emissions reduced.