

# Minor Source Program on the Southern Ute Indian Reservation: Options and Factors to Consider



Southern Ute Indian Tribe/State of Colorado  
Environmental Commission Meeting

December 5, 2018



# Presentation outline

1. Review of minor source programs
2. Three options for Commission and Tribe's regulation of minor sources
  - a) Summary
  - b) Air quality considerations
  - c) Cost
  - d) Feedback
3. Tribe's recommendation

# What is a minor source?

A source with the *Potential to Emit* (PTE) regulated pollutants below the major source thresholds and above the minor source thresholds.

Pollutant	Minor NSR (PTE) [tons/year]	Major Source (PTE) [tons/year]
Carbon Monoxide	$\geq 10$	$\leq 250$
Nitrogen Oxide	$\geq 10$	$\leq 250$
Sulfur Dioxide	$\geq 10$	$\leq 250$
Volatile Organic Matter	$\geq 5$	$\leq 250$
Total Particulate Matter	$\geq 10$	$\leq 250$
Hazardous Air Pollutants	N/A	N/A



# What are the different types of minor sources?

- *True Minor Source*: A source that emits, or has the PTE pollutants in amounts that are less than the major source thresholds but greater than the minor source thresholds.
- *Synthetic Minor Source*: A source that has the PTE pollutants in amounts at or above the major source thresholds, but has established enforceable restrictions to reduce emissions below the major source thresholds.

# How many minor sources are on the Reservation?

Source Type	Facility Type	Amount
True Minor Sources	natural gas and oil production well sites, central delivery points, water injection facilities, gravel pits	306
Synthetic Minor Sources	natural gas compression facilities, natural gas treatment plants	6
Small Oil and Gas Sources - PTE below the minor source thresholds	gas and oil production well sites, municipal solid waste disposal facility, gas compression facilities, water injection sites	≈2600



# What is the purpose of a minor source program?

To protect *public health* and the *environment*.

Specifically, to ensure that:

- Air quality is not significantly degraded where the air is currently clean (areas attaining the National Ambient Air Quality Standards (NAAQS))
- Air quality is improved in areas that are not attaining the NAAQS

# How are minor sources regulated on the Reservation?

- EPA currently regulates minor sources in areas of Indian Country that are classified as “attainment areas” under the “Tribal Minor New Source Review” (TMNSR) program at 40 CFR Part 49

<https://www.epa.gov/tribal-air/tribal-minor-new-source-review>

- The TMNSR Program was first implemented for oil and gas sources in 2014.



# Basic information on the Federal Tribal Minor Source Program

TMNSR program contains two components:

1. TMNSR Permit Program

- Site-specific permits and synthetic minor permits
- General permits available for 6 source categories

2. Federal Implementation Plan (FIP) for Oil and Natural Gas True Minor Sources (first implemented in 2016)

- Provides coverage to new or modified true minor oil and natural gas sources through a registration program
- Requires sources to comply with 8 specific federal rules when certain pieces of equipment are installed at new or modified oil and gas sites

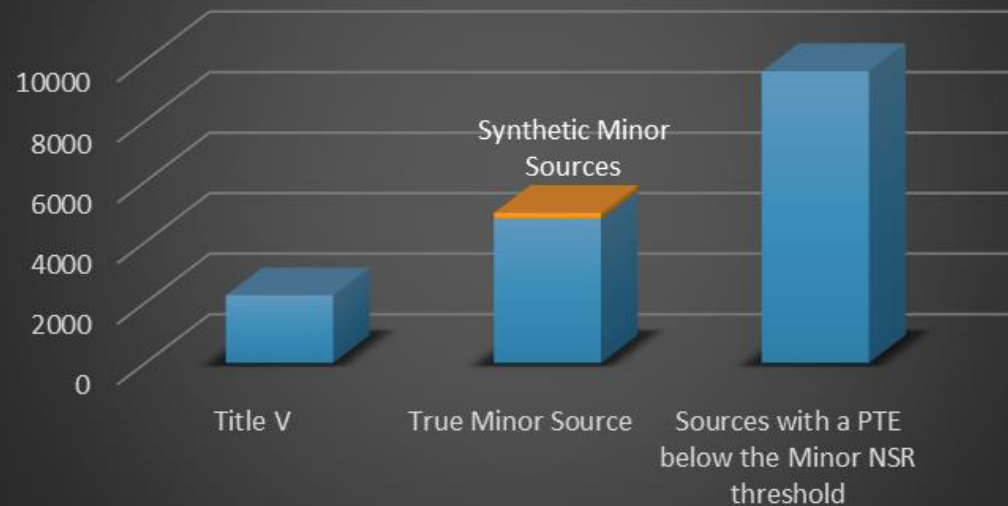


# Why should the Commission consider a minor source program for the Reservation?

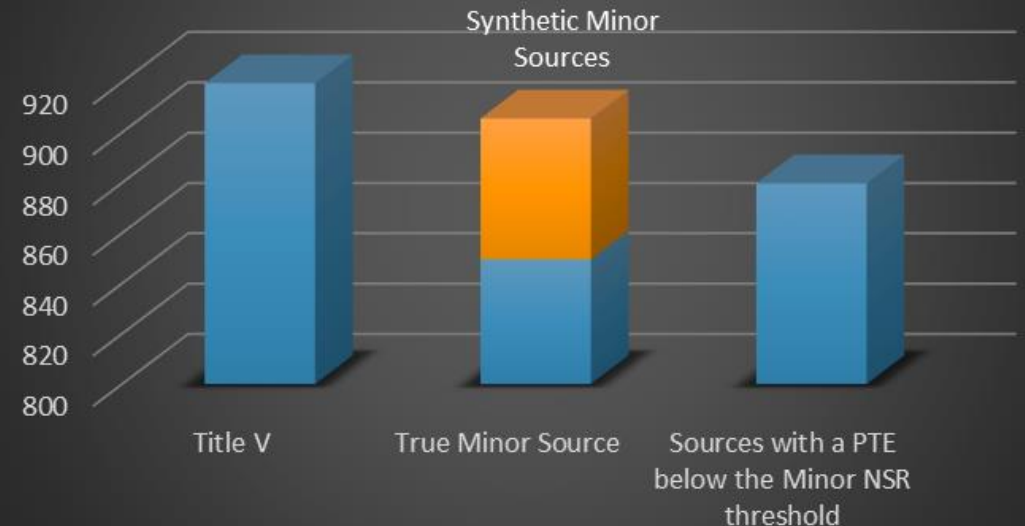
- For 2017, the Reservation had an ozone design value of 69 parts per billion (ppb) one ppb below the 2015 NAAQS ozone standard of 70 ppb.
- Minor sources are a large contributor of ozone precursors on the Reservation (NO<sub>x</sub> and VOC) in relation to the total oil and gas emissions on the Reservation

# What are the emission contributions from minor oil and gas sources on the Reservation?

**NOx Emissions at Oil and Gas Sources by Source Category - 2017 [Tons per Year]**

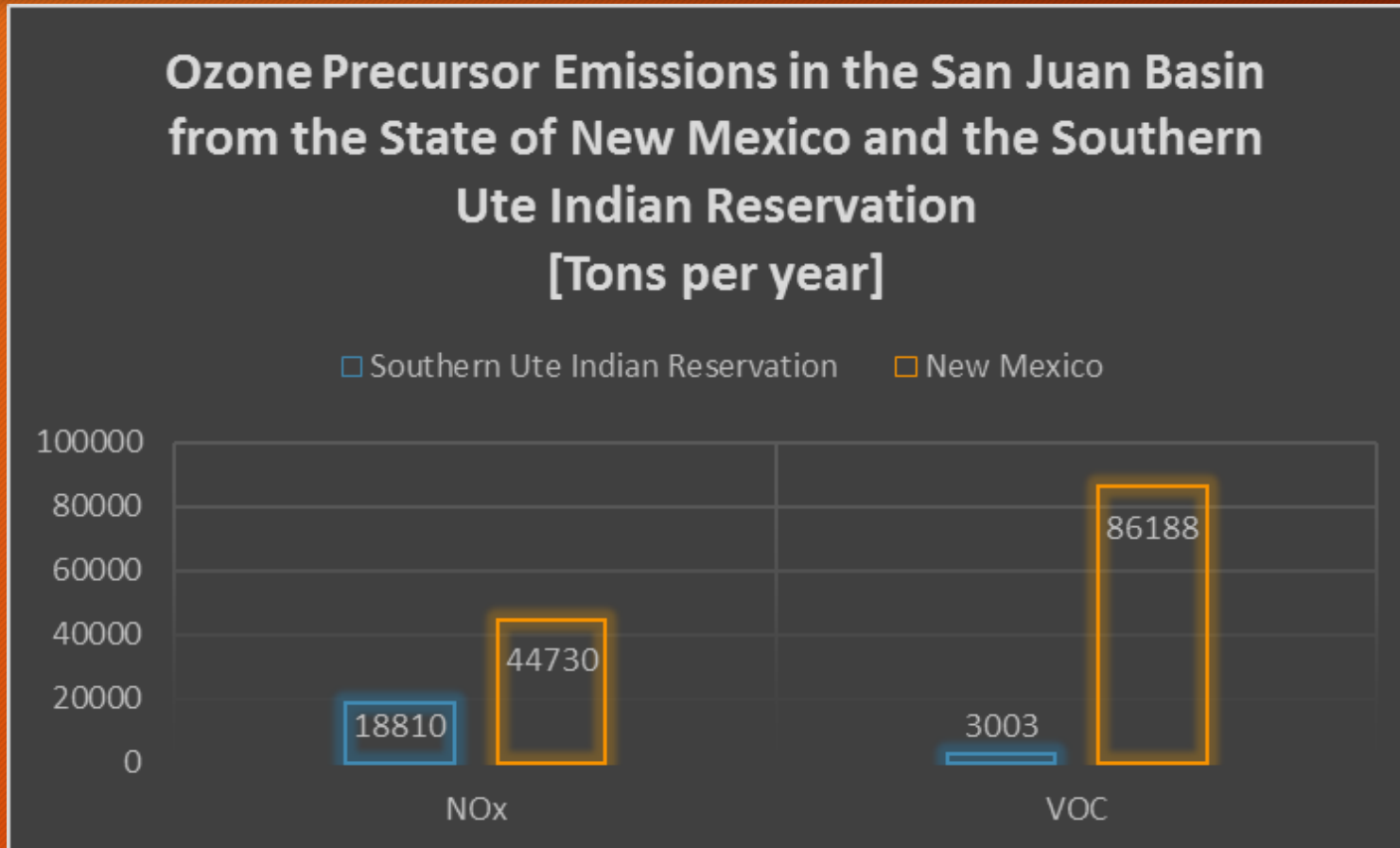


**VOC Emissions at Oil and Gas Sources by Source Category - 2017 [Tons per Year]**





# How do ozone precursor emissions on the Reservation compare with New Mexico



*2015 Southern Ute Indian Reservation Emissions Inventory and WRAP O&G Emissions Inventory Project: Greater San Juan and Permian Basin*

# What are the Commission and Tribe's options for regulating minor sources?

1. Continued EPA implementation of federal TMNSR permit program and FIP
2. Seeking administrative delegation of all or part of the federal TMNSR program and FIP
3. Developing and submitting a Tribal Implementation Plan (TIP) to administer a Reservation-specific minor source program



# Criteria for evaluating options

1. Air Quality Considerations
2. Costs to the Commission, Tribe and regulated industry
  - Time
  - Resources
  - Fees
3. Feedback provided by Stakeholders, the State of Colorado, EPA, and the Tribe

## Summary of option #1 - continued EPA implementation of federal minor source programs

- EPA remains the permitting, compliance and enforcement authority for minor sources

(Tribe's role: commenting on proposed minor source permits, accompanying EPA on inspections, commenting on compliance actions, enforcing minor source permit terms as applicable requirements under Tribe's Title V permits)



# Option #1 - air quality considerations

- The federal minor source programs are meeting the current air quality needs of the Reservation (Reservation is in attainment for all national air standards)
- AQP would like to see an increased compliance presence by EPA on the Reservation
  - EPA inspects only the largest six of approximately 306 minor sources, once every five years

# Option #1 - costs to the Tribe and regulated industry

# Of Additional Employees	Estimated Annual Cost to the Tribe	Funding Source	Cost to Regulated Industry
0	\$0	NA	\$0



# Option #1 - feedback from stakeholders

- Stakeholders stated that the current TMNSR programs, including the FIP, as administered by EPA, are adequately meeting their needs
- Stakeholders had no concerns regarding the continued implementation of the current TMNSR program

# Option #1 - feedback from Colorado, EPA, and Tribal Council

- This is the least preferred option of Colorado
- The EPA has no issues with continuing to implement the federal program on the Reservation
- Tribal Council does not prefer this option, due to low compliance presence by EPA, and the potential confusion to regulated industry of having two air permitting agencies on the Reservation (the Tribe and EPA)



## Summary of option #2 - Tribe seeks administrative delegation of the federal minor source programs

- At the Environmental Commission's request, the Tribe applies for *administrative delegation* of all or part of EPA's TMNSR permit program and FIP
- Upon delegation, the AQP could:
  - Issue TMNSR permits
  - Review FIP registrations for completeness
  - Conduct inspections
- Enforcement authority cannot be delegated

## Option #2 - air quality considerations

- The federal minor source programs are meeting the current air quality needs of the Reservation (Reservation is in attainment for all national air standards)
- Increased compliance presence by AQP, through more frequent inspections, could have potential benefits to air quality



## Option #2 - cost to the Tribe and regulated industry

# Of Additional Employees	Estimated Annual Cost to Tribe	Funding Source	Cost to Regulated Industry
1-2	\$210,500	EPA Grants	\$0

# Option #2 - feedback from stakeholders

Stakeholders unanimously recommended the Commission and Tribe consider Option #2 for the following reasons:

1. No additional costs at a time when natural gas prices are low
2. Requires less time and resources from Commission, Tribe, and industry than development of a Reservation-specific program
3. Provides the Tribe additional time to assess the resources needed to develop and implement a Reservation-specific program
4. Allows Tribe to gain technical minor source permitting experience



# Option #2 - feedback from EPA, Colorado and Tribal Council

- Colorado prefers the Tribe pursue option #3 to get ahead of any potential ozone non-attainment designations - but understands the financial, resource, and time benefits of pursuing option #2
- EPA is supportive of the Tribe seeking administrative delegation of the federal programs
- Tribal Council recommends option #2 because:
  - The Tribe assumes a greater role in the regulation of minor sources
  - Eliminates confusion to regulated industry of having two air permitting agencies on the Reservation - establishes the Tribe as the single permitting agency
  - Increased compliance presence through increased compliance inspections by the Tribe

## Summary of option #3 - development of a Reservation-specific minor source program

The Environmental Commission requests that the Tribe develop a Reservation-specific program to replace all or portions of the federal minor source programs.

Upon Commission and EPA approval, the Tribe could:

- Issue permits
- Conduct compliance inspections
- Enforce against non-compliance



# Option #3 - air quality considerations

- Reservation-specific program can target the air quality needs of the Reservation
  - A Reservation-specific program could include mechanisms for quickly obtaining true minor source and synthetic minor source permits that are protective of air quality
  - Could better posture the Tribe in expedient development of a maintenance plan to reduce ozone precursor emissions if the Reservation were designated non-attainment
  - Reservation is a small contributor of emissions in the greater San Juan Basin
  - If New Mexico does not implement controls for sources operating in New Mexico, it could be unlikely that a control program imposed by the AQP would result in significant reductions in ozone concentrations on the Reservation



# Option #3 - cost to the Tribe and regulated industry

# Of Additional Employees	Estimated Annual Cost	Funding Source	The Tribe would be able to cover the annual program cost after five years based on the following fees to regulated industry
At Least 2	\$328,500	Fees, and additional sources	\$3,700/yr for each new true minor source \$8,000/yr for each new synthetic minor source

# Option #3 - feedback from stakeholders

- Stakeholders were not in favor of this option due to:
  - Increased permitting fees
  - The potential to regulate existing sources
  - The possibility of AQP developing unreasonable permitting thresholds
  - Thought that it was premature to develop air programs for a potential non-attainment designation of the ozone standard

# Option #3 - feedback from EPA, Colorado and Tribal Council

- The State of Colorado favors option 3 (development of a Reservation-specific program mirroring the federal program) as a proactive step in preparation for a possible non-attainment designation for ozone.
- The State of Colorado acknowledged the additional funding and staffing challenges associated with option #3
- EPA thought it unlikely the Reservation would be designated as non-attainment for ozone when reevaluated in 2020.
- EPA clarified, if the Reservation were designated non-attainment, the Commission and Tribe would have 36 months to develop a Reservation-specific minor source program.



# What does the Tribe recommend?

The Tribe recommends Option #2 for the following reasons:

1. The federal program is effective on the Reservation
  - Reservation is in attainment for all national standards
  - EPA is processing permits in an acceptable timeframe
2. The Commission and Tribe can assume a greater role in regulating minor sources on the Reservation without incurring the costs, time and resources required to develop a Reservation-specific program
  - Will build the AQP's technical permitting skills and capacity
  - Air quality benefits through increased compliance inspections by the Tribe
  - Reduces confusion in obtaining an air permit on the Reservation since all permitting would go through the Tribe

# What does the Tribe recommend? (cont.)

The Tribe recommends Option #2 for the following reasons:

3. Little or no cost to the Tribe - funding for administration of program is likely available through EPA grants
4. Option #2 is favored by stakeholders
  - No cost to regulated industry on the Reservation
5. Brings the Commission and Tribe closer to IGA goal of having a single air quality program for the Reservation



# Why not option #1 or #3?

- Cost
- Effect on air quality
- Time



# Questions?

- If you have any questions please contact either of the AQP staff listed here:

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