SOUTHERN UTE INDIAN TRIBE
AIR QUALITY DIVISION
ANNUAL NETWORK REVIEW
Calendar Year 2025

Prepared For:
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Region VIII
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ACRONYMS AND ABBREVIATIONS

AQI	Air Quality Index
AQD	Air Quality Division
BCF	Billion Cubic Feet
CAA	Clean Air Act
CFR	Code of Federal Regulations
CH_4	Methane
CO	Carbon Monoxide
EPA	Environmental Protection Agency
FEM	Federal Equivalent Methods
FRM	Federal Reference Method
MET	Meteorological
MMS	Mobile Monitoring Station
NAAQS	National Ambient Air Quality Standards
NIST	National Institute of Standards and Technology
NMHC	Non-methane Hydrocarbon
NO_2	Nitrogen Dioxide
NO	Nitric Oxide
NO_x	Oxides of Nitrogen
NPAP	National Performance Audit Program
O_3	Ozone
$PM_{2.5}$	Particulate Matter less than or equal to 2.5 microns
PM_{10}	Particulate Matter less than or equal to 10 microns
PPB	Parts per Billion
PPM	Parts per Million
QAPP	Quality Assurance Project Plan
SLAMS	State and Local Air Monitoring Stations
SO_2	Sulfur Dioxide
SOP	Standard Operating Procedure
SPMS	Special Purpose Monitoring Station
SRM	Standard Reference Method
SUIT	Southern Ute Indian Tribe
ug/m^3	Micrograms per cubic meter
VOC	Volatile Organic Compound

CY2025 Network Review
Air Monitoring Program
Southern Ute Indian Tribe
August 2024

1.0 Introduction

The purpose of this Annual Network Review (ANR) document is to provide information concerning the operation of the ambient air monitoring network by the Southern Ute Indian Tribe's (SUIT) Air Quality Division (AQD) in calendar Year 2025.

In October 2006, US EPA issued final regulations concerning state and local agency ambient air monitoring networks. Under 40 CFR, Part 58, Subpart B, applicable tribes are required to submit an annual monitoring network review to the Environmental Protection Agency (EPA) regional office. This network review is required to provide the framework for establishment and maintenance of an air quality surveillance system. This network plan is required to list any changes that are proposed to take place to the current network during the following year. The annual monitoring network review must be made available for public review for at least 30 days prior to submission to EPA.

1.1 Overview

Located in southwestern Colorado, the SUIT AQD regulates air quality through implementation of Clean Air Act programs to protect public health and the environment on the Southern Ute Indian Reservation (Reservation). Air monitoring data are used (1) to determine compliance with U.S. EPA's National Ambient Air Quality Standards (NAAQS) and (2) for generation of real-time EPA Air Quality Index (AQI) air quality forecasts and public health notifications, (3) identification of localized air quality related health risk concerns, and (4) tracking long-term trends in air quality.

1.2 Personnel

In 2025, all air quality monitoring activities were conducted by the Tribe's Environmental Programs Department – AQD staff. The Air Quality Division Head directs and provides managerial direction to the air quality programs. The Air Quality Program Manager provides managerial and technical direction to the ambient monitoring program and verifies data quality. The day-to-day activities of the ambient monitoring program are implemented by the Air Quality Specialist.

1.3 Overview of Monitored Parameters – Criteria Pollutants

Nitrogen Dioxide
Nitrogen Dioxide (NO_2) is a reddish-brown gas that is a respiratory irritant that causes eye and sinus irritation. It is created primarily during fuel combustion from industrial sources and vehicles. It can react in the atmosphere to form nitrate aerosols that block sunlight and reduce visibility. Of most interest to the AQD, NO_2 is a precursor pollutant in the photochemical reaction between nitrogen oxides and volatile organic compounds (VOCs) and sunlight which is responsible for ground-level ozone formation. Monitoring this pollutant could help the AQD estimate the influence of anthropogenic NO_2 emissions in the formation of ozone on the Reservation.

Ozone
Ground-level ozone (O_3), a constituent of photochemical smog, is not emitted into the atmosphere directly, but rather is formed by the reactions of other pollutants. The primary precursor pollutants involved in this reaction are VOCs and oxides of nitrogen. These precursors form O_3 in the presence of sunlight. O_3 is a strong irritant of the upper respiratory system and causes damage to crops. Ozone is a pollutant of concern on the Reservation, as historically, O_3 concentrations on the Reservation have been relatively near the 2015 ozone NAAQS of 70 parts per billion (ppb)

Fine Particulate Matter
The occurrence of fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$) on the Reservation is a result of exceptional events such as forest fires events and dust storms, and in some occurrences, prescribed forest burns. These particles can travel deep into the lungs. Exposure to particle pollution is linked to a variety of significant health problems ranging from aggravated asthma to premature death in people with heart and lung disease. $PM_{2.5}$ is of particular concern and interest of the AQD, due to the frequent occurrence of high $PM_{2.5}$ concentrations during local and regional forest fire events and dust storms. Because the events that contribute to $PM_{2.5}$ concentrations on the Reservation are primarily exceptional events, outside of the control of the AQD, the monitoring of this pollutant is non-regulatory, and for the purpose of informing the public of unhealthy air quality in real-time, and not for the purpose of evaluating compliance with the NAAQS.

Particulate Matter
The occurrence of particulate matter with a diameter of 10 microns or less (PM_{10}) on the Reservation is, like $PM_{2.5}$, a result of exceptional events such as forest fires events and dust storms, and in some occurrences, prescribed forest burns. Exposure to PM_{10} can induce tissue damage, and lung inflammation. $PM_{10}$is of great concern and interest of the AQD, due to the frequent occurrence of high PM_{10}concentrations during local and regional forest fire events and dust storms. Because the events that contribute to PM_{10}concentrations on the Reservation are primarily exceptional events, outside of the control of the AQD, the monitoring of this pollutant is non-regulatory, and for the purpose of informing the public of unhealthy air quality in real-time, and not for the purpose of evaluating compliance with the NAAQS.

2.0 Monitoring Objectives

The monitoring program has been designed to respond to the needs of the Reservation, while adhering to strict EPA specifications and regulations, including the monitoring objectives of Appendix D of 40 CFR Part 58, Section 2. *General Monitoring Requirements* as required by 40 CFR Part 58.10. Monitoring is conducted to:

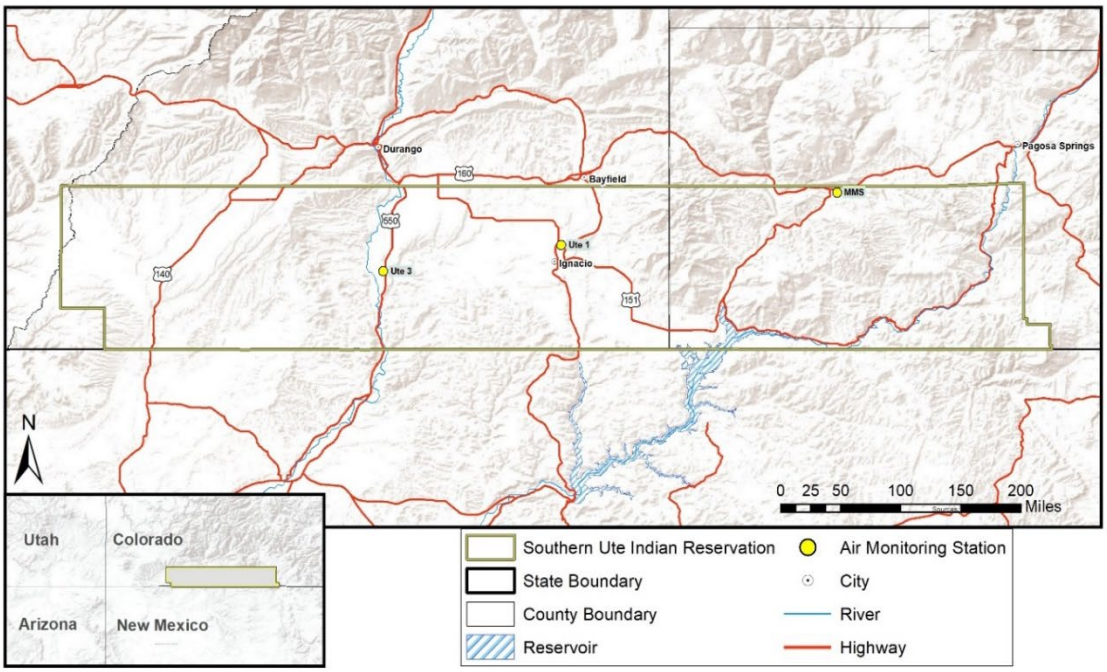
- Continuously collect ambient air pollutant and meteorological data according to the quality assurance requirements of the Code of Federal Regulations, particularly, but not limited, to appendix A in 40 CFR Part 58.
- Submit all quality assurance reviewed data to the EPA Air Quality Systems (AQS) database for use by the federal agencies, the State of Colorado, the Tribe or other outside agencies for air quality studies and air quality planning.
- Demonstrate compliance with the National Ambient Air Quality Standards (NAAQS).
- Help protect the health and welfare of all residents within the exterior boundaries of the Reservation through population of real-time air pollution monitoring data and corresponding EPA Air Quality Index (AQI) health alerts on the Tribe's website.
- Identify localized health concerns and track long-term trends in air quality.

Although the Reservation does not meet the requirement of a Metropolitan Statistical Area with a population greater than 350,000 in 40 CFR Part 58.50 Air Quality Index (AQI) requirements, the AQD participates in AirNow. Data from all three monitoring stations is uploaded and available online, allowing the public to view the AQI for the Reservation.

3.0 Air Monitoring Network

The AQD has established three State and Local Air Monitoring Stations (SLAMS). The Ute 1 station is located in the town of Ignacio, the Ute 3 station is located on the central-western portion of the Reservation near Bondad, and the Mobile Monitoring Station (MMS) is currently located toward the northeastern corner of the Reservation, near Lake Capote. The AQD monitors four of the six NAAQS criteria pollutants, however, the AQD's PM monitoring is non-regulatory. The regulatorily pollutants monitored are: NO_2 and O_3. The non-regulatorily pollutants that are monitored for informing tribal members and the public of air quality health issues are: (PM_{10} and $PM_{2.5}$). **(Table 1.)** Carbon monoxide (CO), and Sulfur Dioxide (SO_2) are not monitored because the AQD has monitored these pollutants in the past and determined that levels are far below the NAAQS and not likely to increase due to any identified anthropogenic (human caused) emissions sources. Carbon monoxide monitoring was discontinued in CY2024 and the justification for discontinuing monitoring of this pollutant was described in the ANR prepared for that year. SO_2 monitoring was discontinued in CY2023, and the justification for discontinuing monitoring of this pollutant was described in the ANR prepared for that year. The Tribe does not monitor Lead as the Reservation currently does not meet the criteria for monitoring this pollutant under the requirements of §4.1 *Lead (Pb) Design Criteria and* § 10(a)(4) of 40 CFR 58. Meteorological (MET) parameters are obtained at all three of the monitoring stations per §§1.2(c) of 40 CFR 58, Appendix D.

Figure 1 - Map of Southern Ute Reservation with Location of Air Monitoring Stations



All three monitoring stations are equipped with an Agilaire 8872 data acquisition system connected to the gaseous analyzers, meteorological (sensors, and other diagnostic sensors. Gas analyzers are challenged regularly during automated calibration events that make use of Teledyne T700 calibrators, T701 Zero Air Generators, and National Institute of Standards and Technology (NIST) traceable calibration gas cylinders with known concentrations of each species. Continuous data for all parameters is recorded locally at each individual station and centrally on a main server located in Ignacio, Colorado. All historical data is stored on the central server and can be retrieved at will. This type of set-up has enabled the AQD to collect data with increased accuracy and precision and has reduced errors and system faults as they are now identified and corrected with minimal downtime.

The NetAssess2025 app, which was developed by the EPA's Office of Air Quality Planning and Standards (NetAsess 2025 Application)is used to determine the demographics and area served for the two SLAMS, the Ute 1 and Ute 3 stations and the one Special Purpose Monitoring Station (SPMS), the MMS. This data is in each station's respective section and Appendix A.

In CY2024 the AQD was awarded the Section 60105 Inflation Reduction Act (IRA) Air Monitoring Grant. The intent of the IRA grant is for the replacement of aging or outdated air monitoring instrumentation, sensors, and equipment. In CY2025, the AQD utilized funding from the IRA grant to purchase new gas analyzers and calibrators for all three of the AQD's stations. The Thermo Scientific 49i O_3 and 42i $NO/NO_2/NOx$ gaseous analyzers were replaced with Teledyne Model T400 O_3 and Model T200 $NO/NO_2/NOx$ gaseous analyzers and the Teledyne T700 Dynamic Dilution Calibrators were replaced with new T700 calibrators. A new Teledyne Model T640 Particulate Mass Monitor was also installed at the Ute 3 station. All new instrumentation was put into operation in May of 2025. The new instruments have remote access capabilities, through Teledyne NumaView software, making off-site maintenance and calibrations accessible. A set of the Thermo 42i and 48i analyzers were saved for any instances when the Teledyne instruments become inoperable or are in need of repair.

Site identification information for each monitoring station is listed below in **Table 1.**

Table 1. Monitoring Station Identification

SUIT Site Designation	EPA-AQS Number	Type	Street Address	Geographic Coordinates	CY2025 Air Pollutants Monitored
Ute 1	08-067-7001	SLAM	1 MI. NE of Ignacio, County RD. 517. Ignacio, CO 81137	37.13678, -107.62863	NO_x, O_3, $PM_{2.5}$, PM_{10}
Ute 3	08-067-7003	SLAM	7571 Hwy. 550. Ignacio, CO 81137	37.10258, -107.870219	NO_x, O_3, $PM_{2.5}$, PM_{10}, Visibility
MMS	08-007-7004	SPM	398 CO-151, Pagosa Springs, CO 81147	37.205717, -107.254234	NO_x, O_3,

3.1. Ute 1 (Ignacio) Monitoring Station

The Ute 1 station is located approximately one mile north of Ignacio, Colorado. The station is situated in the Pine River Valley, the most densely populated area of the Reservation **(Figure 1)**.

Figure 2 - *Northwestern view of the Ute 1 station*

The Ute 1 station meets all siting criteria for an urban SLAMS for measuring typical pollutant concentration in an area of high population density area, as outlined by §§ 1.1.1.(b) & 1.2.(b)(4) of 40 CFR 58, Appendix D.

Ute 1 station serves a population of approximately 9,262 and an area of 283 mi^2 (733km^2) for NO_2 and O_3. Demographics of this area are calculated in EPA's NetAssess 2025 application and are included in Appendix A.

This station is in a secured area within the Southern Ute Indian Tribe Forestry complex.

The Ute 1 station **(Figure 2)** is thought by AQD to be representative of the air quality in and around the Ignacio community and is likely to be affected by local activities such as vehicle traffic, on-going building and road construction, and winter residential wood and coal burning. Residential burning and traffic are the most influential local sources that directly impact the air quality around the Ignacio community. The Ute 1 station serves a valuable purpose of providing real-time air pollutant concentrations and corresponding EPA AQI health advisories to residents of Ignacio on the Tribe's website. The town of Ignacio is frequently impacted by high particulate concentrations from local, regional, and western forest fires and dust storms. Additionally, the region, at times, experiences elevated O_3 values. Ozone and NO_2 data collected at the Ute 1 station is designated as regulatory data and is used for determining compliance with the NAAQS.

40 CFR 58.10(a)(5)(i) outlines the requirement for NO_2 monitoring. For the first four months of CY2025, the AQD utilized a Thermo 42i NO/NO_2/NOx analyzer following EPA Federal Reference Method (FRM) RFNA-1289-074 to monitor NO_2, NOx, and NO. The Thermo 42i NO/NO_2/NOx was replaced with a Teledyne Model T200 NO/NO_2/NOx analyzer in May of CY2025, following EPA FRM NA-1194-099.

40 CFR 58.10(a)(9) outlines the requirement for O_3 monitoring. For the first four months of CY2025, the AQD utilized a Thermo 49i O_3 analyzer following EPA FRM EQOA-0880-047 to monitor regulatory compliance with the O_3 NAAQS. The Thermo 49i O_3 analyzer was replaced with the Teledyne Model T400 Photometric O_3 analyzer in May of CY2025 following EPA FRM EAOA-0992-087.

A Teledyne T640 PM Mass Monitor Federal Equivalent Method (FEM) sampler using EPA FRM EQPM-05116-240 collects continuous non-regulatory measurements of $PM_{2.5}$ and PM_{10} for the purpose of helping inform individual decision making that will lead to reduced PM exposure in the region from wildfire smoke and dust storms. Because occurrences of high PM concentrations on the Reservation are solely a result of exceptional events, the PM sampling data at Ute 1 station is designated as non-regulatory and not used for NAAQS compliance determinations.

The criteria air pollutants measured at the Ute 1 station for the purpose of NAAQS compliance determinations are listed in **Table 2**. All criteria pollutants monitored by the AQD in the most recent complete year of data, CY2024, have remained below the current NAAQS.

Table 2. Ute 1 CY2024 Measured Ambient Concentrations in Comparison to the NAAQS

Instrument Type	Reference Method	Parameter	NAAQS	CY2024 * Concentrations
Thermo 42i	EQOA-0880-047	NO_2	53 ppb (annual)	3.23 ppb
			100 ppb (1-hour)	17.3 ppb

Thermo 49i	EQOA-0880-047	O_3	0.070 ppm (8-hour)	0.067 ppm

*** CY24 data is included in this document because it is the most current full year of data collected at the Ute 1 station. 2025 data is not complete and validated by the date of this review**

The Ute 1 station continues to collect meteorological data for the following parameters: solar radiation, wind speed, wind direction, ambient temperature, humidity, and precipitation. A new meteorological tower was installed in June of CY2025 that utilizes a wench system to lower and raise the tower. The wench system and new tower are more accessible to raise and lower making maintenance, verification, and calibration of meteorological instruments safer and more consistent. All the meteorological instruments, except for the precipitation gauge, are located on the 30-foot tilt-over aluminum met tower. The peripherals of the meteorological instruments are housed in a weather-resistant, surge protected enclosure box affixed to the base of the tower (**Figure 3**).

Figure 3 – Ute 1 ***Meteorological tower and weather resistant, surge protected enclosure box (left). The thirty-foot meteorological tower (right).***

3.1.1 2025 Recommendations for Ute 1

At the Ute 1 station, the AQD recommends continuation of monitoring for NO_2, O_3, PM_{10}, $PM_{2.5}$ and meteorological parameters. Additionally, in CY2024 the Tribe received an EPA air monitoring grant through the Inflation Reduction Grant (IRA) for the purpose of replacing the AQD's aging gas analyzers and calibration equipment. The new equipment was purchased for Ute 1 station and put into operation in CY2025. In CY2026, the AQD recommends using remaining IRA monitoring grant funds to replace aging zero air generators and replacing or adding additional meteorological equipment to the station.

3.2. Ute 3 (Bondad) Monitoring Station

The Ute 3 station is located approximately twenty miles west of Ignacio, near Bondad, Colorado.

Figure 4 – *Northern view of Ute 3 monitoring station*

The Ute 3 station meets all siting criteria for an urban SLAMS for measuring typical pollutant concentration in an area of high population density area, as outlined by §§ 1.1.1.(b) & 1.2.(b)(4) of 40 CFR 58, Appendix D.

The Ute 3 station serves a population of approximately 50,993 and an area of 2,889mi^2 (7,482km^2) for NO_2, and an area of 1,138mi^2 (2,947km^2) with a population of approximately 41,942 for O_3.

Although Ute 3 does not serve Ignacio, Colorado because of the Ute 1 station being located in Ignacio, due to the scarcity of SLAMS in western Colorado. Demographics of this area were calculated in EPA's NetAssess 2025 application and are included in Appendix A.

The Ute 3 station is located on Tribal land within a locked perimeter fence and the area is regularly patrolled by Southern Ute Tribal Rangers.

The Ute 3 station is situated along the eastern rim of the Animas River Valley near Highway 550, a major roadway that connects southwestern Colorado with northwestern New Mexico **(Figure 1.).**

The Ute 3 station **(Figure 2)** is likely to be affected by activities such as highway vehicle traffic, road construction, agricultural activities, and oil and gas production sites.

In May of CY2025 the Ute 3 Thermo 49i O_3 and Thermo 42i $NO/NO_2/NOx$ Thermo Scientific analyzers were replaced with Model T400 Photometric $O_3$and Model T200 $NO/NO_2/NOx$ analyzers. 40 CFR 58.10(a)(5)(i) outlines the requirement for NO_2 monitoring. For the first four months of CY2025 AQD utilized a Thermo 42i $NO/NO_2/NOx$ analyzer following EPA FRM RFNA-1289-074. The Thermo 42i $NO/NO_2/NOx$ analyzer has since been replaced with a Teledyne Model T200 $NO/NO_2/NOx$ analyzer following EPA FRM RFNA-1194-099.

40 CFR 58.10(a)(9) outlines the requirement for O_3 monitoring. For the first four months of CY2025, AQD utilized a Thermo 49i O_3 analyzer following EPA FRM EQOA-0880-047 to monitor for regulatory compliance with the O_3 NAAQS. The Thermo 49i O_3 analyzer has since been replaced with a Teledyne Model T400 Photometric O_3 Analyzer following EPA FRM EAOA-0992-087.

A Teledyne T640 Mass Monitor using EPA FEM EQPM-05116-240 collects continuous non-regulatory measurements of $PM_{2.5}$ and PM_{10} for the purpose of helping inform individual decision making that will lead to reduced PM exposure in the region from wildfire smoke and dust storms.

The criteria air pollutants measured at the Ute 3 station for the purpose of NAAQS compliance determinations are listed in **Table 3**. All criteria pollutants monitored by the AQD in the most recent complete year of data, CY2024, have remained below the current NAAQS.

Table 3. Ute 3 CY2024 Measured Ambient Concentrations in Comparison to the NAAQS

Instrument Type	Reference Method	Parameter	NAAQS	CY 2024 Concentrations *
Thermo 42i	EQOA-0880-047	NO_2	53 ppb (annual)	3.16 ppb
			100 ppb (1-hour)	16.4 ppb
Thermo 49i	EQOA-0880-047	O_3	0.070 ppm (8-hour)	0.067 ppm

*** CY24 data is included in this document because it is the most current full year of data collected at the Ute 3 station. CY2025 data is not complete and validated by the date of this review**

The Ute 3 station continues to collect meteorological data for the following parameters: solar radiation, wind speed, wind direction, ambient temperature, humidity, and precipitation. A new meteorological tower was installed in June of CY2025 that utilizes a wench system to lower the tower. The wench system and new tower are more accessible to raise and lower making maintenance, verification, and calibration of meteorological instruments safer and more consistent. All the meteorological instruments, except for the precipitation gauge, are located on the 30-foot tilt-over aluminum met tower. The peripherals of the meteorological instruments are housed in a weather-resistant, surge protected enclosure box affixed to the base of the tower.

3.2.1 2025 Recommendations for Ute 3

At the Ute 3 station the AQD recommends the continuation of monitoring for NO_2, O_3, PM_{10}, $PM_{2.5}$, visibility and meteorological parameters. Additionally, in CY2024 the Tribe received an EPA air monitoring grant through the Inflation Reduction Grant (IRA) for the purpose of replac-

ing the AQD's aging gas analyzers and calibration equipment. The new equipment was purchased for the Ute 3 station and put into operation in CY2025. In CY2026 The AQD recommends using remaining IRA monitoring grant funds to replace the aging zero air generators and replacing or adding additional meteorological equipment to the station.

3.3. Mobile Monitoring Station (MMS)

Figure 5 - Mobile Monitoring Station

The Mobile Monitoring Station (MMS) is located on the northeastern portion of the Reservation near Lake Capote **(Figure 1).**

The current location of the MMS meets all siting criteria for an urban SLAMS for measuring typical pollutant concentration in an area of high population density area, as outlined by §§ 1.1.1.(b) & 1.2.(b)(4) of 40 CFR 58, Appendix D. While the siting criteria for a SLAMS is met at the current location, the station is operated as a Special Purpose Monitoring Station (SPMS) given its nature of being mobile.

The MMS is located on the least populated area of the Reservation yet serves a population of approximately 76,275 and an area of 15,204 mi^2 (39,378 km^2) for NO_2 and an area of 4,754mi^2 (12,313km^2) with a population of approximately 44,621 for O_3. Due to the scarcity of SLAMS in western Colorado, the EPA's NetAssess2025 app includes Pagosa Springs, Alamosa, some parts of Northern New Mexico, and the Jicarilla Apache Nation Reservation within the areas served. Demographics of this area were calculated in EPA's NetAssess 2025 application and are included in Appendix A

The Lake Capote MMS site **(Figure 5)** is located within a locked perimeter fence and the area is regularly patrolled by Southern Ute Tribal Rangers as well as Tribal staff who live on the Lake Capote recreation area grounds.

The purpose of the MMS has been to assess pre-oil and gas development and ambient air quality conditions in the eastern portion of the Reservation and is likely to be affected by activities such as highway vehicle traffic and road construction. After completing an initial three-year background monitoring campaign from 2017 to 2020, the MMS has remained "stationed" at its current location

at Lake Capote, but it could be moved in the future for special purpose monitoring projects or source surveillance.

In May of CY2025, the Ute 3 49i O_3 and Thermo 42i NO/NO_2/NOx analyzers were replaced with Model T400 Photometric O_3 and Model T200 NO/NO_2/NOx analyzers

40 CFR 58.10(a)(5)(i) outlines the requirement for NO_2/monitoring. For the first four months of CY2025, the AQD utilized a Thermo 42i NO/NO_2/NOx analyzer following EPA FRM RFNA-1289-074 to monitor NO_2, NOx, and NO. The Thermo 42i NO/NO_2/NOx analyzer has since been replaced with a Teledyne Model T200 NO/NO_2/NOx Analyzer following EPA FRM RFNA-1194-099.

40 CFR 58.10(a)(9) outlines the requirement for O_3 monitoring. For the first four months of CY2025, the AQD utilized a Thermo 49i O_3 analyzer following EPA FRM EQOA-0880-047 to monitor regulatory compliance with the O_3 NAAQS. The Thermo 49i O_3 analyzer has since been replaced with a Teledyne Model T400 Photometric O_3 Analyzer following EAOA-0992-087.

The internal cooler for the Thermo 42i NO/NO_2/NOx failed in May of CY2024, halting data collection for NO_2 at MMS. Due to the high cost of the replacement part, the AQD opted to hold off purchasing the part and to replace the analyzer with funding from the IRA monitoring grant award. In May of CY2025 the analyzer was replaced and NO/NO2/NOX data collection resumed. The MMS continues to collect meteorological data for the following parameters: wind speed, wind direction, ambient temperature, and humidity. All the meteorological sensors are located on an aluminum tower affixed to the station roof. The data collected at the MMS is designated as non-regulatory for the purposes of NAAQS compliance determinations; however, the data collected at MMS follows all quality assurance requirements for regulatory quality data collection. Criteria air pollutants currently measured at the MMS are listed in **Table 4**. All measured criteria pollutant values have remained below the current NAAQS.

Table 4. MMS CY2024 Measured Ambient Concentrations in Comparison to the NAAQS.

Instrument Type	Reference Method	Parameter	NAAQS	CY2024 Concentrations
Thermo 42i	EQOA-0880-047	NO_2	53 ppb (annual)	1.9 ppb***
			100 ppb (1-hour)	12.1 ppb***
Thermo 49i	EQOA-0880-047	O_3	0.070 ppm (8-hour)	0.055 ppm**

*** CY2025 data is not complete and validated by the date of this review**

**** AQD suspects the ozone monitor at the MMS was measuring invalid data in 2024 due to an unidentified instrument issue. The monitor passed all third-party external audits and internal calibrations but displayed an unexpected downward ozone concentration trend compared to the other two monitoring sites in 2024.**

When the new Teledyne T400 analyzer was installed, the MMS began to trend with the other monitoring sites once again. Design value may be affected.
***** MMS NO2 data not complete for CY2024. Design values may be affected.**

3.3.1 2025 Recommendations for MMS

At the MMS the AQD recommends the continuation of monitoring for NO_2, O_3, and meteorological parameters. Additionally, in CY2024 the Tribe received an EPA air monitoring grant through the Inflation Reduction Grant (IRA) for the purpose of replacing the AQD's aging gas analyzers and calibration equipment. The new equipment was purchased for MMS and put into operation in CY2025. In CY2026 The AQD recommends using remaining IRA monitoring grant funds to replace aging zero air generators and replacing or adding additional meteorological equipment to the station.

4.0 Quality Assurance

Continuous Monitors

The AQD staff regularly assesses gaseous analyzer automated performance checks including: Zero, Span, and Precision checks. Calibrations are performed as needed or once per quarter to maintain accuracy, precision, and bias goals defined in the AQD's EPA approved Quality Assurance Project Plan (QAPP). During these internal audits and checks, gas analyzers are challenged with NIST-certified gas cylinders containing known concentrations of the applicable pollutant gases, diluted with zero air using mass flow controllers. Every quarter, a third-party contractor performs system audits on all the gaseous analyzers and PM instruments.

The EPA's National Performance Audit Program (NPAP) is one of the major components in the quality assurance of the Nation's air monitoring program. Annually the EPA performs an NPAP audit at one of the ambient air monitoring stations. The most recent was conducted at Ute 1 station on August 19, 2025.

Particulate Monitors

Verification checks of the continuous particulate matter monitors have occurred monthly from AQD staff and semi-annually by a 3rd party contractor and consist of calibrated flow rate checks, as well as temperature, pressure, leak rate and flow rate verification checks.

Meteorological Monitors

Semi-annual calibrations and audit checks are performed by a third-party contractor on the meteorological equipment to determine proper alignment and operation of the sensors. The details and minimum standards for this program are set out in the Code of Federal Regulations (Part 58 Ambient Air Quality Surveillance).

Quality Assurance Project Plan

A complete description of the quality assurance procedures completed for data collection at the AQD's three monitoring stations is contained in the AQD's EPA approved Quality Assurance Project Plan (QAPP) and the results are available from the AQD or through the national EPA AQS database.

EPA Technical System Audits

The U.S. EPA Region VIII performs a Technical Systems audit on the Southern Ute Indian Tribe's Air Monitoring Network every three years. The most recent was in September 2022 and the next is scheduled to occur in September 2025. AQD staff conduct quality control checks at least once per week, and calibrations once every calendar quarter. The details and minimum standards for this program are set out in the Code of Federal Regulations (Part 58 Ambient Air Quality Surveillance).

5.0 Summary

The Southern Ute Reservation is located primarily within La Plata County with approximately 30% of the land located within Archuleta County.

Per AQD data, of the combined 3,289 wells in both counties, approximately 78% (2,565 active production) are located within the Reservation boundaries. Considering the large quantity of oil and gas wells in production within the Reservation boundaries and the operation of AQD's air permitting programs, the AQD plans to continue operating the three air monitoring stations.

6.0 Final Comments

The AQD continuously compares the ambient air quality data collected by the AQD monitoring network to the NAAQS and local and regional air quality trends and uses this information to determine which pollutants should be monitoring on the Reservation. The AQD has determined that all data pertaining to the AQD monitoring network for the 2025 calendar year meets all QA requirements for data submittal to AQS, the AQD 2025 QAPP, and tribal standard operating procedures, and that these findings will carry over into CY2026. Finally, all the data collected by AQD correlates well with other agencies' monitoring stations in southwestern Colorado and northeastern New Mexico that use similar sampling methodologies and have similar oil and gas operations proximal to monitoring locations.

A draft of this document was made available to the public on August 22, 2025, at https://www.southernute-nsn.gov/government/departments/epd/public-comments/. Any comments pertaining to this document should be sent to the following email address: airquality@southernute-nsn.gov.

For any questions on this document, you may contact any of the following AQD staff members:

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