

ENVIRONMENTAL PROTECTION AGENCY - REGION 10

Guidance for Conducting: **TRIBAL AIR QUALITY ASSESSMENTS**

Why a Tribe May Wish to Conduct an Air Quality Assessment:

The objective of conducting a tribal air quality assessment is to determine whether air quality risks from criteria pollutants or air toxics exist that could have adverse effects on community health and the environment in Indian country. After the assessment is complete, air quality monitoring may be an appropriate step in a process to identify and control sources contributing to poor air quality.

EPA has developed a National Ambient Air Monitoring Strategy (posted at EPA's website <http://www.epa.gov/ttn/amtic/monstratdoc.html>) which redefines the objectives of the national monitoring network. The objectives of the national monitoring network are to: 1) increase the use of continuous Particulate Matter (PM) monitors to provide near real-time Air Quality Index (AQI) information to the public, 2) reduce monitoring for low priority pollutants (NO₂, SO₂, CO), 3) consolidate individual pollutant monitoring sites into consolidated (multi-pollutant) monitoring sites, and 4) where appropriate, conduct monitoring for air toxics (volatile organics, semi-volatile organics, and metals) to establish baseline concentrations and identify air toxics trends. EPA support for monitoring, whether on- or off-reservation, is contingent upon it being consistent with these objectives and that it, where possible, provide real-time Air Quality Index (AQI) information to the reservation community, EPA, and the public-at-large.

What an Assessment of Air Quality Includes:

An air quality assessment provides information from which a determination on the need for monitoring can be made. The information collected through an air quality assessment ~~would~~ gives information essential to determining the need for new or additional air monitoring within the boundaries of a reservation or other tribal lands within tribal jurisdiction. Such an air quality assessment should typically include the following elements, to the extent possible:

- **Background:** Describe the major characteristics of the reservation or other tribal land including geographical features, boundaries, area, types of vegetation, population distribution, and land use. Include a map showing these features.
- **Airshed Description:** Describe the airshed(s) in which the reservation or tribal land is located. This should include the topography, seasonal weather patterns, population distribution, source distribution, and any other factors affecting air quality in each airshed.

- Identify Air Pollution Sources: Identify all major (Title V) point sources within the airshed and applicable emission inventories; locate major air pollution sources on a map. If information is available, identify and estimate emissions of area sources, residential sources (wood stoves, fireplaces), agricultural burning sources, and mobile sources. Identify major sources of air pollution that are located outside of the reservation or tribal jurisdiction and describe how these sources may be impacting air quality on the reservation.
- Data Summary: Summarize any past air monitoring data collected on the reservation or on tribal land using EPA approved methods, as well as any data collected by a state or local air agency relevant to the reservation.
- Degradation of Visibility: Describe degradation of visibility due to regional haze as measured by a visibility camera or visual observations.
- Recommendation: Identify and summarize potential air pollutants that may be impacting the tribal community or reservation. As appropriate, propose additional data collection or monitoring needed and how it would assist in air quality management plans.

When Monitoring Appears Warranted:

Once a determination is made that air quality monitoring may be appropriate on the reservation or tribal land, the following elements should be addressed in a grant funding proposal:

- Identify the pollutant(s) which should be monitored and the proposed monitoring method (filter based or continuous monitors) and the frequency of monitoring.
- Identify potential monitoring location(s) and justify the purpose of each monitoring site.
- Provide assurance that each monitoring site will comply with EPA's siting requirements found in 40 CFR 58 Appendix E.
- Commit to have EPA approve the Quality Assurance Project Plan (QAPP) before data collection or monitoring begins.
- Ensure that the tribal air monitoring specialist will be adequately trained in the operation and maintenance of the monitor, data management, chain-of-custody procedures, and quality assurance requirements.
- Assure that the quality- assured data will be entered into EPA's national air quality database system (AQS) or otherwise provided to EPA electronically.
- Plan for periodic analysis of the data and how it contributes to understanding and managing air quality on the reservation or tribal land, including the anticipated need for future monitoring of the same or different types

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