

CASTNET Ozone and Trace-level Gas Monitoring Program Frequently Asked Questions

Background Information

1. How does EPA use CASTNET ozone data?

Consistent with 40 CFR Part 58 Appendix D Ch 1.1, ambient air quality monitoring data measured by a system that has been designated as a Federal Reference Method (FRM) or Federal Equivalent Method (FEM) and meet the quality assurance requirements are used for comparison against their respective NAAQS. In addition to determining compliance with the NAAQS, EPA uses CASTNET ozone data for assessment of emission reduction programs, spatial and temporal trends, review and evaluation of the NAAQS, and impacts from stratospheric ozone intrusions, wildfires, and ozone transport events.

2. Can a State, Local, Tribal, or Federal (S/L/T/F) air agency use CASTNET ozone or trace-level gas monitoring data to meet the minimum monitoring requirements for their area (Table D-2 of Appendix D to Part 58)?

Yes, because CASTNET ozone and trace-level gas analyzers meet the regulatory requirements for comparison against the NAAQS, these data may be used in place of a SLAMS monitor. Air agencies interested in using CASTNET ozone or trace-level gas analyzers to meet their agency's minimum monitoring requirements should contact Timothy Sharac (sharac.timothy@epa.gov) so that any proposed changes to these analyzers are communicated to the respective air agency. Proposed changes to any CASTNET ozone and trace-level gas monitoring sites are included in the [annual network plan](#).

3. Where can I access the CASTNET ozone and trace-level gas monitoring data?

Final hourly ozone and trace-level gas monitoring data may be accessed through EPA's [Air Quality System \(AQS\)](#) database, the [CASTNET data download page](#). Final data will have a QA code of 3 using the CASTNET data download tool. QA codes and flags are defined in the [CASTNET QAPP](#).

Near-real time ozone data may be accessed through EPA's [AirNow Tech](#) page using 'OAP', 'NPS' or 'BLW' as the agency ID for EPA, NPS and BLM sites, respectively. "Level 1" data are posted to the CASTNET Data Download page approximately 24 hours after collection. Level 1 data are preliminary and are subject to change after data review.

4. How will I know if a CASTNET monitor violates the NAAQS?

You may choose to sign up to receive an automatic email when an ozone analyzer measures a daily maximum 8-hour average at or above the current ozone NAAQS. Activating and deactivating auto email communications is simple. Please send an email with the sites you wish to receive updates for to Timothy Sharac (sharac.timothy@epa.gov)

5. Can a State, Local, Tribal, or Federal agency (S/L/T/F) conduct a Performance Evaluation and/or Technical Systems Audit at a CASTNET site?

You may contact Timothy Sharac to schedule an audit at any of the CASTNET sites within your jurisdictional boundaries. Please contact Timothy prior to performing any audit so data may be flagged appropriately and access to the site can be provided. For more details on performing third-party audits on CASTNET ozone or trace-gas analyzers, review the [CASTNET third party audit guidance document](#).

6. Who operates the CASTNET sites?

Site operators include independent landowners, park rangers, university students, environmental professionals, academic faculty, and many others. Day-to-day operation of CASTNET field and data operations are managed by a contractor. The contractor reviews the hourly ozone data and QC checks daily. They may troubleshoot problems remotely or contact the site operator to make adjustments if a problem is identified.

Exceptional Events

7. How should a S/L/T/F agency handle a potential exceptional event recorded at a CASTNET site?

As stated in the 2016 Exceptional Events Rule (81 FR 68216, 10/3/2016), it is the responsibility of the S/L/T/F monitoring agency to identify exceptional events. CAPD will rely on the monitoring agency within the state to identify and report exceptional events. If a S/L/T/F agency wishes to denote monitoring data as potentially being impacted by an exceptional event please email Timothy Sharac with the site ID, date range, type of possible exceptional event, and a comment describing the exceptional event. CAPD will then ensure the data are properly flagged in AQS. If a S/L/T/F agency determines that an exceptional event occurred, they should submit the exceptional event report to the EPA Regional Office for concurrence.

8. Who submits Exceptional Event Demonstrations for CASTNET data on Tribal Land?

As noted in the preamble to the 2016 Exceptional Events Rule (81 FR 68216, 10/3/2016), ‘as the single actor responsible for administering air quality planning and management activities within its jurisdictional boundaries, the state, exclusive of tribal lands, is ultimately responsible for submitting exceptional events demonstrations for exceedances that occur at all regulatory monitoring sites within the boundary of the state.’ If a NAAQS exceedance occurs at a CASTNET tribal monitoring site, there are two options:

- a. The tribal partner may submit an exceptional events demonstration. The Region and EPA’s CASTNET team may assist the tribe in drafting the package, but ultimately the tribe will submit the package to the EPA Region.
- b. The state agency may submit an exceptional events demonstration, with an addendum from the tribe concurring that they support the assessment provided by the state.

EPA’s CASTNET team will work with the tribe, the EPA Region and the state to assist with preparing an exceptional event demonstration if requested. An example of this collaboration can be found here: <https://www.epa.gov/air-quality-analysis/public-notice-exceptional-events-uinta-basin-utah>

9. If a state plans to submit an exceptional event demonstration, do they need concurrence from a federal agency if the federal agency owns/operates the monitor?

According to EPA guidance¹, “Air agencies may submit demonstrations for any regulatory monitor within its jurisdictional bounds, including those operated by federal land managers, other federal agencies, and delegated local agencies.” If a state believes that an exceptional event impacted monitors that are

¹ “2016 Revisions to the Exceptional Events Rule: Update to Frequently Asked Questions,” Question E.6, pg. 30, February 2020. https://www.epa.gov/sites/default/files/2019-07/documents/updated_faqs_for_exceptional_events_final_2019_july_23.pdf

operated by other entities (i.e., a federal agency), then the state should contact the federal agency operating the monitor to request exclusion of the data.

10. Legally, if a state wishes to submit a demonstration for an area that includes tribal land and will include data from a federal monitor operated on tribal land, does EPA require concurrence from the tribe?

Yes, according to the Exceptional Events preamble, states and tribes are ultimately responsible for administering air quality management programs within their borders.² Therefore, a state would need concurrence from the tribe even if the data are collected from a federal monitor.

11. If a tribe requests that CAPD flag data that has been potentially impacted by an exceptional event, should the tribe then work with the state agency to submit a demonstration?

Tribal air quality agencies operating ambient air quality monitors that produce regulatory data can submit exceptional events.² The tribe can, but is not required to, work with a state to submit a demonstration. As noted in our previous response, the state can submit an exceptional event demonstration with an addendum from the tribe concurring that they support the assessment provided by the state.

For more information on flagging data for use in exceptional events submissions, please read *Prior to Developing a Demonstration – Initial Notification and Data Flagging*.³

**Questions on submitting an exceptional events demonstration should be directed to the EPA
Exceptional Events Contact:**

Denise Scott
U.S. EPA, Office of Air Quality Planning and Standards
Email: scott.denise@epa.gov
(919) 541-4280

² “Treatment of Data Influenced by Exceptional Events,” 81 FR 68223, October 3, 2016.

³ “2016 Revisions to the Exceptional Events Rule: Update to Frequently Asked Questions” available at: https://www.epa.gov/sites/default/files/2019-07/documents/updated_faqs_for_exceptional_events_final_2019_july_23.pdf