

Software Release Notes
2010 NO₂ and SO₂ NAAQS revisions to AQS (Phase 1)
October 15, 2010

AQS will be unavailable October 15 – 18, 2010 due to system software changes.

1. The software changes will implement Phase 1 of the 2010 NO₂ and SO₂ NAAQS revisions to AQS.
 - a. For NO₂, these regulation changes were published in 40 CFR Part 50.11 (75 FR 6531) and Appendix S (75 FR 6532) on February 9, 2010.
 - b. For SO₂, these regulation changes were published in 40 CFR Part 50.17, (75 FR 35592) and Appendix T (75 FR 35595) on June 22, 2010.
2. Monitor-level summaries will be computed.
 - a. Only the monitor-level summaries required by the regulations will be implemented in Phase 1.
 - b. Site-level summarization (to compute the 3-year design values) will be implemented by Phase 2 of this project (expected completion 4th quarter 2010.)
3. Standard units for NO₂ and SO₂ will change.
 - a. The standard units for NO₂ and SO₂ will change from Parts per Million (ppm, unit code 007) to Parts per Billion (ppb, unit code 008).
 - b. For NO₂
Only parameter code 42602 (Nitrogen Dioxide) is affected.
(Other parameter codes - 42600 (Reactive Oxides of Nitrogen) and 42603 (Oxides of Nitrogen) - will be addressed by Phase 2.)
 - c. For SO₂
Only parameter code 42401 (Sulfur Dioxide) with duration 1 (1-hour) and H (5-minutes) is affected.
(Parameter code, 42406 (SO₂ Max 5-minute Avg) will be addressed by Phase 2).
4. Measurement values in standard units (the "standard value") will be stored with one digit after the decimal; any additional digits will be truncated.
5. Summaries will be recomputed.
 - a. All NO₂ and SO₂ summaries (daily, quarterly, annual, and 3-hour and 24-hour block averages for SO₂) are being recomputed in units of ppb.
6. AMP450 Quick Look Report changes:
 - a. AMP450 Quick Look has been updated to reflect the new 1-hour standards and new units for both NO₂ and SO₂.
 - i. NO₂ report format now includes the 98th percentile.
 - ii. SO₂ report format now includes the 99th percentile.
 - iii. Data for NO₂ and SO₂ are presented in ppb.
 - iv. Maxima and Percentiles are displayed with 1 digit after the decimal.
 - v. Annual Means are displayed with 2 digits after the decimal.
 - b. Quick Look workfile formats are changing.
 - i. NO₂ includes 98th percentile
 - ii. SO₂ includes 99th percentile
 - iii. The data is formatted as a delimited file (rather than as a fixed-format file) and the delimiter (either a '|' or a ',') can be selected by the user.
 - iv. When multiple pollutants are selected, the NO₂ and SO₂ records will be separated into a different workfile, so that delimited (NO₂, SO₂) and fixed-format records (other pollutants) are not mixed.