

US-EPA

AQS

QA Re-engineering

New QA Transactions

Version 1.13

NADG

3/12/2014

This document contains the new delimited transactions to support the redesigned QA component of AQS.

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Change History

Version	Date	Author	Description
1.0	12/4/2012	B.Frietsche	Initial version
1.1	12/4/2012	B.Frietsche	Added version number
1.2	12/11/2012	B.Frietsche	removed equal signs from formatting rules re-ordered fields on Lab PT to consistent order
1.3	12/11/2012	B.Frietsche	Fixed transaction type formatting rule for transaction NM
1.4	12/19/2012	B.Frietsche	added flow verification and semi-annual flow rate audit for PM coarse, and split NPAP into NPAP-TTP and NPAP-BOA
1.41	12/19/2012	B.Frietsche	fixed version and date in doc
1.42	2/11/2013	N. Mangus	Added primary monitor period transaction (MO). Fixed one typo in MN transaction.
1.6	6/5/2013	R. Coats	a) Recombined NPAP TTP and BOA into single transaction with NPAP_TYPE field. b) PM Coarse flow transactions: Use only 1 unit code for both PM 2.5 and PM 10, and add “Monitor” to monitor flow rates. c) Removed PQAO form only sections d) Removed AA-PGVP transaction Verification Lab field (it is the performing agency) e) Added New Transaction Types: AD – Site Sampler AE – Sampler Channel MP – Monitor Channel
1.7	6/20/2013	R. Coats	Added Speciation flow transactions and field definitions
1.8	7/11/2013	R. Coats	For PMc transactions, made unit and method code order consistent with other transactions.
1.9	7/15/2013	N. Mangus	Formatting changes only.
1.10	8/08/2012	R. Coats	Added Monitor NAAQS Exclusion transaction.
1.11	8/13/2013	R. Coats	NAAQS_Exclusion: Removed Pollutant_Standard_ID
1.12	8/16/2013	R. Coats	Typo corrections (MN and Ozone SRP)
1.13	3/12/2014	R. Coats	PEP Assessment: Method is for PEP monitor

Notation:

PMc is used to represent PM_{10-2.5}

BOA = Back of Analyzer

TTP = Through the Probe

New Site / Monitor Transactions

MM Monitor Method

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'MM'	This is a Monitor Method transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
4	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor. If the previous field on the transaction contains "TT", then the Tribal Code of the site.	Always
5	Site number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county and/or tribe.	Always
6	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS	Always
7	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
8	Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology (i.e. method of collection and analysis) implemented by monitor	Always
9	Begin Date	Date in 'YYYYMMDD' format	Beginning of date range where the monitor implements the specified method	Always
10	End Date	Date in 'YYYYMMDD' format	End of date range where the monitor implements the specified method	Never

MN Monitor Network Affiliation

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'MN'	This is a Monitor Network Affiliation transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
4	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor. If the previous field on the transaction contains "TT", then the Tribal Code of the site.	Always
5	Site number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county and/or tribe.	Always
6	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS	Always
7	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
8	Network Name	Must exist in AQS MONITORING_NETWORKS table.	Monitoring network associated with monitor (e.g. NCORE, PAMS, NATTS)	Always
9	Begin Date	Date in 'YYYYMMDD' format	Beginning of date range where the monitor is affiliated with the specified network.	Always
10	End Date	Date in 'YYYYMMDD' format	End of date range where the monitor affiliated with the specified network.	Never

MO Primary Monitor Period

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'MO'	This is a Primary Monitor Period transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
4	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor. If the previous field on the transaction contains "TT", then the Tribal Code of the site.	Always
5	Site number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county and/or tribe.	Always
6	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS	Always
7	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
8	Begin Date	Date in 'YYYYMMDD' format	Beginning of date range where the monitor is the primary for the parameter at the site.	Always
9	End Date	Date in 'YYYYMMDD' format	End of date range where the monitor the primary for the parameter at the site.	Never

MX Monitor NAAQS Exclusion

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'MX'	This is a Monitor NAAQS Exclusion transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
4	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor. If the previous field on the transaction contains "TT", then the Tribal Code of the site.	Always
5	Site number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county and/or tribe.	Always
6	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS	Always
7	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
8	Begin Date	Date in 'YYYYMMDD' format	Beginning of date range where the monitor is the primary for the parameter at the site.	Always
9	End Date	Date in 'YYYYMMDD' format	End of date range where the monitor the primary for the parameter at the site.	Never
10	Comment	String, up to 2000 characters	Justification for NAAQS exclusion	Insert

AD Site Sampler

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'AD'	This is a Site-Sampler transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
4	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the site. If the previous field on the transaction contains "TT", then the Tribal Code of the site.	Always
5	Site number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county and/or tribe.	Always
6	Sampler ID	Text String (limited to 20 Characters)	The user assigned unique name or id for the sampler at the site (e.g. Speciation-1).	Always
7	Sampler Owner	Must exist in AQS Agencies table	Agency code of the agency that owns the sampler.	Insert
8	Manufacturer	Text String (limited to 80 characters)	Equipment manufacturer.	Optional
9	Model Number	Text String (limited to 40 characters)	Manufacturer's model number.	Optional
10	Serial Number	Text String (limited to 40 characters)	Manufacturer's serial number.	Optional
11	Channel Count	Positive Number	Number of distinct concurrent samples that can be taken by the sampler.	Insert
12	Begin Date	Date in 'YYYYMMDD' format	Beginning of date range where the sampler is in use at the site.	Always
13	End Date	Date in 'YYYYMMDD' format	End of date range where the sampler is in use at the site.	Never

AE Sampler Channel

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'AE'	This is a Sampler-Channel transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
4	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the site. If the previous field on the transaction contains "TT", then the Tribal Code of the site.	Always
5	Site number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county and/or tribe.	Always
6	Sampler ID	Must exist for Site in database	The user's unique name or id for the sampler at the site.	Always
7	Channel Number	Positive Number; must be <= the channel count for the sampler	Number assigned to channel on sampler	Always
8	Filter Type	Must exist in AQS FILTER_TYPES table.	Type of filter loaded into this channel in sampler (e.g. Quartz)	Optional
9	Target Flow Rate	Positive number	Nominal flow rate for channel	Optional
10	Flow Units	Must exist in AQS Units table with unit type of "FLOW"	Units code of target flow rate	Required if Target Flow Rate not null
11	Begin Date	Date in 'YYYYMMDD' format	Beginning of date range where the channel has the specified metadata.	Always
12	End Date	Date in 'YYYYMMDD' format	End of date range where the channel has the specified metadata.	Never

MP Monitor Channel

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'MP'	This is a Monitor Channel transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
4	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor. If the previous field on the transaction contains "TT", then the Tribal Code of the site.	Always
5	Site number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county and/or tribe.	Always
6	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS	Always
7	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
8	Sampler ID	Must exist for Site in database	The user's unique name or id for the sampler at the site.	Always
9	Channel Number	Must be defined for Sampler in database	Number assigned to channel on sampler	Always
10	Begin Date	Date in 'YYYYMMDD' format	Beginning of date range where the monitor is the primary for the parameter at the site.	Always
11	End Date	Date in 'YYYYMMDD' format	End of date range where the monitor the primary for the parameter at the site.	Never

QA Transactions For Monitors

QA 1-Point Quality Control (QC)

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "1-Point QC"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert
13	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Concentration" units type	Units associated with the assessment concentrations (Monitor Concentration and Check Standard Concentration)	Insert / Update

Field #	Field Name	Formatting Rule	Field Description	When Reqd
14	Monitor Concentration	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert
15	Assessment Concentration	Number (unrestricted)	The value of the known gas standard concentration.	Insert

QA Annual Performance Evaluation (PE)

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Annual PE"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert
13	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Concentration" units type	Units associated with the assessment concentrations (Monitor Concentration and Check Standard Concentration)	Insert / Update
14	Level 1 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 1.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
15	Level 1 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 1.	Insert
16	Level 2 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 2.	Insert
17	Level 2 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 2.	Insert
18	Level 3 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 3.	Insert
19	Level 3 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 3.	Insert
20	Level 4 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 4.	Insert
21	Level 4 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 4.	Insert
22	Level 5 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 5.	Insert
23	Level 5 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 5.	Insert
24	Level 6 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 6.	Insert
25	Level 6 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 6.	Insert
26	Level 7 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 7.	Insert
27	Level 7 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 7.	Insert
28	Level 8 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 8.	Insert
29	Level 8 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 8.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
30	Level 9 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 9.	Insert
31	Level 9 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 9.	Insert
32	Level 10 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 01.	Insert
33	Level 10 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 10.	Insert

QA Flow Rate Verification

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Flow Rate Verification"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert
13	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Flow" units type	Units associated with the assessment	Insert / Update
14	Monitor Flow Rate	Number (unrestricted)	The measured flow rate provided by the monitor being assessed.	Insert
15	Assessment Flow Rate	Number (unrestricted)	The flow rate of the flow transfer standard	Insert

QA Semi-Annual Flow Rate Audit

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Semi Annual Flow Rate Audit"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert
13	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Flow" units type	Units associated with the assessment	Insert / Update
14	Monitor Flow Rate	Number (unrestricted)	The measured flow rate provided by the monitor being assessed.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
15	Assessment Flow Rate	Number (unrestricted)	The flow rate of the flow transfer standard.	Insert

QA Flow Rate Verification for PMc

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "PMc Flow Rate V"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	PM10 Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the PM10 monitor being assessed.	Insert
13	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Flow" units type	Units associated with the assessment	Insert / Update
14	PM10 Monitor Flow Rate	Number (unrestricted)	The measured flow rate provided by the monitor being assessed.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
15	PM10 Assessment Flow Rate	Number (unrestricted)	The flow rate of the flow transfer standard.	Insert
16	PM 2.5 Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the PM 2.5 monitor being assessed.	Insert
17	PM 2.5 Monitor Flow Rate	Number (unrestricted)	The measured flow rate provided by the monitor being assessed.	Insert
18	PM 2.5 Assessment Flow Rate	Number (unrestricted)	The flow rate of the flow transfer standard.	Insert

QA Semi-Annual Flow Rate Audit for PMc

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "PMc Semi Annual Flow Rate Audit"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	PM10 Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert
13	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Flow" units type	Units associated with the assessment	Insert / Update
14	PM10 Monitor Flow Rate	Number (unrestricted)	The measured flow rate provided by the monitor being assessed.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
15	PM10 Assessment Flow Rate	Number (unrestricted)	The flow rate of the flow transfer standard.	Insert
16	PM 2.5 Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert
17	PM 2.5 Monitor Flow Rate	Number (unrestricted)	The measured flow rate provided by the monitor being assessed.	Insert
18	PM 2.5 Assessment Flow Rate	Number (unrestricted)	The flow rate of the flow transfer standard.	Insert

QA Performance Evaluation Program (PEP)

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "PEP"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	PEP Type	Literal: "INDEPENDENT" or "COLLOCATED"	Indicates where the PEP monitor is operated by the Audit Agency or by the Monitoring Agency.	Insert
13	Assessment Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the PEP monitor used for assessment.	Insert
14	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Concentration" units type	Units associated with the assessment concentration	Insert / Update

Field #	Field Name	Formatting Rule	Field Description	When Reqd
15	Assessment Concentration	Number (unrestricted)	The value reported by the PEP monitor for the Date-Time.	Insert

QA National Performance Audit Program

Field #	Field Name	Formatting Rule	Field Description	When Reqd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "NPAP"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	NPAP Type	Literal: "TTP" or "BOA"	Code meaning "Through the probe" or "Back of analyzer"	Insert
13	Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Req'd
14	Assessment Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	For parameters other than Ozone, this is the method code of the CO monitor used to determine check gas dilution.	Conditional on Insert (not ozone)
15	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Concentration" units type	Units associated with the assessment concentrations (Monitor Concentration and Check Standard Concentration)	Insert / Update
16	Level 1 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 1.	Insert
17	Level 1 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 1.	Insert
18	Level 2 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 2.	Insert
19	Level 2 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 2.	Insert
20	Level 3 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 3.	Insert
21	Level 3 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 3.	Insert
22	Level 4 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 4.	Insert
23	Level 4 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 4.	Insert
24	Level 5 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 5.	Insert
25	Level 5 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 5.	Insert
26	Level 6 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 6.	Insert
27	Level 6 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 6.	Insert
28	Level 7 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 7.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
29	Level 7 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 7.	Insert
30	Level 8 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 8.	Insert
31	Level 8 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 8.	Insert
32	Level 9 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 9.	Insert
33	Level 9 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 9.	Insert
34	Level 10 Monitor Concentration	Number	The concentration value provided by the monitor being assessed at level 10.	Insert
35	Level 10 Assessment Concentration	Number	The value of the known gas standard concentration in Audit Level 10.	Insert

QA Field Proficiency Test (PT)

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Field Proficiency Test"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert
13	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Concentration" units type	Units associated with the assessment concentrations (Monitor Concentration and Check Standard Concentration)	Insert / Update
14	Monitor Concentration	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
15	Assessment Concentration	Number (unrestricted)	The known value of the analyte concentration.	Insert

QA Duplicate

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Duplicate"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert
13	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Concentration" units type	Units associated with the assessment concentrations (Monitor Concentration and Check Standard Concentration)	Insert / Update
14	Duplicate Value 1	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
15	Duplicate Value 2	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert
16	Duplicate Value 3	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert
17	Duplicate Value 4	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert
18	Duplicate Value 5	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert

QA Replicate

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Replicate"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional (default to user agency)
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the monitor being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county.	Always
8	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
9	POC	Must exist in MONITORS table with Parameter	Parameter Occurrence Code: One or two digit number identifying a specific monitor for a parameter at the site.	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	Monitor Method Code	Must exist in SAMPLING_METHODOLOGIES Reference table	The sampling methodology of the monitor being assessed.	Insert
13	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Concentration" units type	Units associated with the assessment concentrations (Monitor Concentration and Check Standard Concentration)	Insert / Update
14	Replicate Value 1	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
15	Replicate Value 2	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert
16	Replicate Value 3	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert
17	Replicate Value 4	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert
18	Replicate Value 5	Number (unrestricted)	The concentration value provided by the monitor being assessed.	Insert

QA Transactions For Labs

QA Pb Analysis Audit

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Pb Analysis Audit"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of laboratory performing assessment (analysis of strips)	Always
5	Primary Quality Assurance Organization	Must exist in AGENCIES Reference Table	Agency Code of organization responsible for the quality of data for Monitoring Organization	Always
6	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
7	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
8	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
9	Reported Unit	Must be literal '077' (micrograms)	Units for mass of lead on test strip. Required by Part 58.3.3.4.(c) to be this unit code.	Insert / Update
10	Laboratory Response Value 1	Number (unrestricted)	The mass of lead reported by lab for level 1.	Insert
11	Assessment Mass 1	Number (Must be in range of mass values for audit level 1 in AUDIT_LEVELS able in database)	The known mass of lead on the test strip for level 1.	Insert
12	Laboratory Response Value 2	Number (unrestricted)	The mass of lead reported by lab for level 2.	Insert
13	Assessment Mass 2	Number (Must be in range of mass values for audit level 2 in AUDIT_LEVELS able in database)	The known mass of lead on the test strip for level 2.	Insert

QA Lab Proficiency Test (PT)

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Lab Proficiency Test"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of laboratory performing assessment (analysis of strips)	Always
5	Primary Quality Assurance Organization	Must exist in AGENCIES Reference Table	Agency Code of organization responsible for the quality of data for Monitoring Organization	Always
6	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code assigned to the monitor in AQS for which the assessment is being performed	Always
7	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
8	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
9	Reported Unit	Must exist in UNITS Reference table	Units of measure of analyte by Lab.	Insert / Update
10	Laboratory Response Value 1	Number (unrestricted)	The mass of analyte reported by Lab.	Insert
11	Assessment Mass 1	Number	The known mass of analyte on the test media.	Insert

QA Transactions For Verification of Standards

QA Ambient Air Protocol Gas Verification Program (AA-PGVP)

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "AA-PGVP"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment (Regional Analytical Verification Laboratory)	Always
5	Producer ID	Must exist in AAPGVP_PRODUCERS Reference Table	Unique identifier of organization that produced cylinder being assessed.	Always
6	Cylinder ID	Text string (limited to 40 character)	Unique identifier (e.g. serial number) of gas cylinder being assessed.	Always
7	Parameter Code	Must exist in PARAMETERS Reference Table	The AQS parameter code of check gas in cylinder	Always
8	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
9	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day.	Always
10	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Concentration" units type	Units of measure of cylinder gas.	Insert / Update
11	Cylinder Certified Concentration	Positive Number	Gas concentration specified by cylinder producer.	Insert
12	Assessment Concentration	Positive Number	Measured concentration of gas in cylinder.	Insert

QA Ozone SRP and Ozone Transfer Standard Verifications (SRP)

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Ozone SRP"	Indicates the specific QA assessment associated with the transaction.	Always
4	Verification Type	Literal: "6X6" or "Standard"	"6X6" is for the initial verification of a new standard ozone generator. "Standard" is for a routine SRP assessment.	Always
5	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Always
6	Primary Quality Assurance Organization	Must exist in AGENCIES Reference Table	Agency Code of organization responsible for the quality of instrument being assessed.	Always
7	Parameter Code	Literal "44201"	The AQS parameter code	Always
8	Authoritative Standard ID	Must exist on SRP_STANDARDS Reference Table	Unique ID for Authoritative standard.	Always
9	Authoritative Standard Level	Number; must be 1, 2, or 3.	Primary EPA standard is Level 1, those validated against it are level 2, and those validated against level 2 standards are level 3.	Always
10	Transfer Standard ID	Text string (limited to 40 character)	Unique ID code (serial number) for transfer standard	Always
11	Transfer Standard Level	Number; must be >= authoritative standard.	Level 1, 2, 3, 4 transfer standard has to be equal or a higher number than the Authoritative Standard	Always
12	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
13	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional assessments are performed.	Always
14	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Concentration" units type	Units associated with the assessment concentrations (Monitor Concentration and Check Standard Concentration)	Insert / Update
15	Transfer Standard Value 1	Number	Measurement from instrument being assessed.	Insert
16	Authoritative Standard Value 1	Number	Measurement from authoritative standard instrument.	Insert
17	Transfer Standard Value 2	Number	Measurement from instrument being assessed.	Insert
18	Authoritative Standard Value 2	Number	Measurement from authoritative standard instrument.	Insert

Field #	Field Name	Formatting Rule	Field Description	When Reqd
19	Transfer Standard Value 3	Number	Measurement from instrument being assessed.	Insert
20	Authoritative Standard Value 3	Number	Measurement from authoritative standard instrument.	Insert
21	Transfer Standard Value 4	Number	Measurement from instrument being assessed.	Insert
22	Authoritative Standard Value 4	Number	Measurement from authoritative standard instrument.	Insert
23	Transfer Standard Value 5	Number	Measurement from instrument being assessed.	Insert
24	Authoritative Standard Value 5	Number	Measurement from authoritative standard instrument.	Insert
25	Transfer Standard Value 6	Number	Measurement from instrument being assessed.	Insert
26	Authoritative Standard Value 6	Number	Measurement from authoritative standard instrument.	Insert
27	Transfer Standard Value 7	Number	Measurement from instrument being assessed.	Insert
28	Authoritative Standard Value 7	Number	Measurement from authoritative standard instrument.	Insert
29	Transfer Standard Value 8	Number	Measurement from instrument being assessed.	Insert
30	Authoritative Standard Value 8	Number	Measurement from authoritative standard instrument.	Insert
31	Transfer Standard Value 9	Number	Measurement from instrument being assessed.	Insert
32	Authoritative Standard Value 9	Number	Measurement from authoritative standard instrument.	Insert
33	Transfer Standard Value 10	Number	Measurement from instrument being assessed.	Insert
34	Authoritative Standard Value 10	Number	Measurement from authoritative standard instrument.	Insert

QA Transactions Speciation Flow

Speciation Flow Rate Verification

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Speciation Flow Rate V"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the site being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county and/or tribe.	Always
8	Sampler ID	Must exist for Site in database	The user's unique name or id for the sampler at the site.	Always
9	Channel Number	Must be defined for Sampler in database	Number assigned to channel on sampler	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional same assessments are performed.	Always
12	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Flow" units type	Units associated with the flow values	Insert / Update
13	Sampler Flow Rate	Number (unrestricted)	The measured flow rate provided by the sampler being assessed.	Insert
14	Assessment Flow Rate	Number (unrestricted)	The flow rate of the flow transfer standard.	Insert

Speciation Semi-Annual Flow Rate Audit

Field #	Field Name	Formatting Rule	Field Description	When Req'd
1	Transaction Type	Literal: 'QA'	This is a Quality Assurance transaction.	Always
2	Action Indicator	{'I', 'U', 'D', or 'R'}	Indicator for Insert, Update, Delete, or Replace action.	Always
3	Assessment Type	Literal: "Speciation Flow Rate Audit"	Indicates the specific QA assessment associated with the transaction.	Always
4	Performing Agency	Must exist in AGENCIES Reference Table	Agency Code of organization performing assessment	Optional
5	State Code / Tribal Indicator	Must exist in STATES Reference Table or be 'TT' for Tribal Site	The FIPS state code of the site being assessed, or "TT" to indicate that the next field on the transaction is a Tribal code.	Always
6	County Code / Tribal Code	Must exist in COUNTIES (for state) or TRIBAL_AREAS Reference table	The FIPS County Code of the monitor being assessed. If the previous field on the transaction contains "TT", then the Tribal Code of the site being assessed.	Always
7	Site Number	Must exist in SITES table with {State Code, county Code} or Tribal Code	Four digit number to uniquely identify site in county and/or tribe.	Always
8	Sampler ID	Must exist for Site in database	The user's unique name or id for the sampler at the site.	Always
9	Channel Number	Must be defined for Sampler in database	Number assigned to channel on sampler	Always
10	Assessment Date	Date in YYYYMMDD format	Date that the assessment was performed	Always
11	Assessment Number	Positive Number	A unique number associated with an assessment performed at a site on a given day. Value should be "1" unless additional assessments are performed.	Always
12	Reported Unit	Must exist in UNITS Reference table, and unit code must be for "Flow" units type	Units associated with the flow values	Insert / Update
13	Sampler Flow Rate	Number (unrestricted)	The measured flow rate provided by the sampler being assessed.	Insert
14	Assessment Flow Rate	Number (unrestricted)	The flow rate of the flow transfer standard.	Insert