

Data Input Formats for the Re-engineered Air Quality Subsystem

This document provides the formats to process batch transactions for the Air Quality Subsystem.

The first field of all input formats is the transaction type, *ie*, “RD”, which indicates the type of data in the record. (Valid transaction types are listed below.) The second field is the Action Indicator, *ie* “I” for insert, “U” for update, and “D” for delete, which indicates the requested database manipulation action. The third through seventh fields are the State Code (or Tribal Indicator), County Code (or Tribal Code), Site ID, Parameter, and POC, the combination of these serves to uniquely identify the record to be changed.

All transactions are pipe delimited (“|”). If you need to report a given field as null, place two delimiters back to back (“||”). Text fields should not be enclosed with single or double quotation marks. A delimiter does not need to follow the final field in a record, so there will always be one less delimiter than fields for the given transaction type. When changing a record, make sure you populate all the required fields. Once you have the required fields in a transaction, it is not necessary to supply non-required information, and you also do not need to pad the transaction with delimiters.

Example: You need to only update probe height (which is the 13th field in a “Monitor Basic” record) and you can ignore empty trailing field delimiters in that row as long as none of these fields are required.

Complete transaction would look like:

```
MA|U|01|005|0002|88502|5|||||2|||||||20060312|
```

But you could submit this:

```
MA|U|01|005|0002|88502|5|||||2
```

Other Notation: R - Field is required for any action
R(n) - Field is Required for action ‘n’ (R(I) means required for an Insert Action for example)
X(n) - Conditionally Required for action ‘n’

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Please Note

The “Formatting Rules” described on the following pages are a “quick reference” and are not intended to illustrate the complete validation procedures that a particular piece of data will be subject to.

The [AQS Data Coding Manual](#) explains business rules and errors in detail.

The [AQS Data Dictionary](#) fully describes the formatting requirements and data dependencies.

Data Input Formats

Site Information**AA Basic Site Information**

#	Field Name	Formatting Rule
1	Transaction Type ^R	AA = Basic Site Info.
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table if Action Indicator is 'U' or 'D'
6	Latitude ^{X(I)}	Number - 10.6 signed
7	Longitude ^{X(I)}	Number - 11.6 signed
8	UTM Zone ^{X(I)}	Number - 2.0 format
9	UTM Easting ^{X(I)}	Number - 8.2 format
10	UTM Northing ^{X(I)}	Number - 8.2 format
11	Horizontal Collection Method ^{R(I)}	Must exist in LDP_COLLECTION_METHODS Reference Table
12	Horizontal Datum ^{R(I)}	Must exist in LDP_HORIZONTAL_DATA Reference Table
13	Source Scale ^{X(I)}	Number - 12.0 format
14	Horizontal Accuracy ^{R(I)}	Number - 8.2 format
15	Vertical Measure ^{R(I)}	Number - 8.2 format
16	Time Zone ^{R(I)}	Must exist in TIME_ZONES Reference Table, if supplied
17	Agency Code ^{R(I)}	Must exist in STATE_AGENCIES Reference Table
18	Street Address ^{R(I)}	Text
19	City Code	Must exist in CITIES Reference Table
20	Urban Area Code	Must exist in URBANIZED_AREAS Reference Table
21	AQCR	Must exist in AQCRS Reference Table, if supplied
22	Land Use Type ^{R(I)}	Must exist in LAND_USE_TYPES Reference Table
23	Location Setting ^{R(I)}	Must exist in LOCATION_SETTINGS Reference Table
24	Date Site Established ^{R(I)}	Date - YYYYMMDD format
25	Date Site Terminated	Date - YYYYMMDD format
26	Zip Code	Must exist in ZIP_CODES Reference Table, if supplied
27	Congressional District	Must exist in CONGRESSIONAL_DISTRICTS Reference Table, if supplied
28	Block	Must exist in BLOCKS Reference Table, if supplied
29	Block Group	This field is no longer utilized. It will be ignored.
30	Census Tract	Must exist in BLOCKS Reference Table, if supplied
31	Class I Area	Must exist in CLASS_ONE_AREAS Reference Table, if supplied
32	Local Region	Must exist in LOCAL_REGIONS Reference Table, if supplied
33	Local Site Name	Text
34	HQ Evaluation Date	Date - YYYYMMDD format
35	EPA Region Evaluation Date	Date - YYYYMMDD format
36	Direction from Central Business District to Site	Must exist in COMPASS_SECTORS Reference Table
37	Distance from Central Business District to Site	Number - 8.2 format
38	Meteorological Site Type	Must exist in MET_SITE_TYPES Reference Table, if supplied
39	Meteorological Site ID ^{X(I)}	Must exist in AQS Sites table if supplied
40	Distance to Meteorological Site ^{X(I)}	Number - 8.2 format
41	Direction to Meteorological Site ^{X(I)}	Must exist in COMPASS_SECTORS Reference Table, if supplied
42	Local Site ID	Text
43	Vertical Collection Method ^{R(I)}	Must exist in LDP_VERTICAL_METHODS Reference Table
44	Vertical Datum ^{R(I)}	Must exist in LDP_VERTICAL_DATA Reference Table
45	Vertical Accuracy ^{R(I)}	Number

Data Input Formats

AB Site Street Information

#	Field Name	Formatting Rule
1	Transaction Type ^R	AB = Site Tangent Street Data
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Tangent Street Number ^R	Number - 2.0 format
7	Street Name ^{R(I)}	Text
8	Road Type ^{R(I)}	Must exist in ROAD_TYPES Reference Table
9	Traffic Count ^{R(I)}	Number - 12.0 format
10	Year of Traffic Count ^{R(I)}	Date - YYYY format
11	Direction from Site to Street ^{R(I)}	Must exist in COMPASS_SECTORS Reference Table
12	Source of Traffic Count	Must exist in TRAFFIC_VOLUME_SOURCES Reference Table, if supplied

AC Site Open Path Information

#	Field Name	Formatting Rule
1	Transaction Type ^R	AC = Site Open Path Data
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Open Path Number ^R	Number - 2.0 format
7	Direction from Receiver to Transmitter ^{R(I)}	Must exist in COMPASS_SECTORS Reference Table
8	Beam Length ^{R(I)}	Number - 8.2 format
9	Height of Transmitter ^{R(I)}	Number - 8.2 format
10	Height of Receiver ^{R(I)}	Number - 8.2 format
11	Minimum Beam Height ^{R(I)}	Number - 8.2 format
12	Maximum Beam Height ^{R(I)}	Number - 8.2 format
13	Land Use Under Path ^{R(I)}	Must exist in LAND_USE_TYPES Reference Table

Monitor Information**MA Basic Monitor Information**

#	Field Name	Formatting Rule
1	Transaction Type ^R	MA = Basic Monitor Information
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITOR table if Action Indicator is 'U' or 'D'
8	Project Class	Must exist in PROJECT_TYPES Reference Table, if supplied
9	Dominant Source	Must exist in DOMINANT_SOURCES Ref. Table, if supplied
10	Measurement Scale	Must exist in MEASUREMENT_SCALES Ref. Table, if supplied
11	Open Path Number	Must exist in Site Open Path Table, if supplied
12	Probe Location Code	Must exist in PROBE_LOCATIONS Reference Table, if supplied
13	Probe Height	Number - 8.2 format
14	Probe Horizontal Distance	Number - 8.2 format
15	Probe Vertical Distance	Number - 8.2 format
16	Surrogate Indicator	'Y' or 'N'
17	Unrestricted Air Flow Indicator	'Y' or 'N'
18	Sample Residence Time	Number - 8.2 format
19	Worst Site Type	Must exist in WORST_SITE_TYPES Reference Table, if supplied
20	Applicable NAAQS Indicator	'S', 'A', or 'B', if supplied
21	Spatial Average Indicator	'Y' or 'N', if supplied
22	Schedule Exemption Indicator	'Y' or 'N', if supplied
23	Community Monitoring Zone	Number - 4.0 format
24	Pollutant Area Code - 1	Must exist in POLLUTANT_AREAS Ref. Table, if supplied
25	Pollutant Area Code - 2	Must exist in POLLUTANT_AREAS Ref. Table, if supplied
26	Pollutant Area Code - 3	Must exist in POLLUTANT_AREAS Ref. Table, if supplied
27	Pollutant Area Code - 4	Must exist in POLLUTANT_AREAS Ref. Table, if supplied
28	Pollutant Area Code - 5	Must exist in POLLUTANT_AREAS Ref. Table, if supplied
29	Close Date	Date - YYYYMMDD

MB Monitor Sampling Periods

#	Field Name	Formatting Rule
1	Transaction Type ^R	MB = Monitor Sampling Period
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Date Sampling Began ^R	Date - YYYYMMDD
9	Date Sampling Ended	Date - YYYYMMDD

MC Monitor Type Information

#	Field Name	Formatting Rule
1	Transaction Type ^R	MC = Monitor Type Assignment
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Monitor Type ^R	Must exist in MONITOR_TYPES Reference Table
9	Monitor Type Begin Date ^R	Date - YYYYMMDD
10	Monitor Type End Date	Date - YYYYMMDD

Data Input Formats

MD Monitor Agency Role

#	Field Name	Formatting Rule
1	Transaction Type ^R	(MD = Monitor Agency Role)
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Agency Role Name ^{R(1)}	Must exist in AGENCY_ROLES Reference Table
9	Agency Code ^R	Must exist in STATE_AGENCIES Reference Table
10	Agency Role Begin Date ^{R(1)}	Date - YYYYMMDD
11	Agency Role End Date	Date - YYYYMMDD

ME Monitoring Objective Information

#	Field Name	Formatting Rule
1	Transaction Type ^R	ME = Monitor Objective
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Monitor Objective Type ^R	Must exist in MONITOR_OBJECTIVE_TYPES Reference Table
9	Urban Area Represented ^{X(1)}	Must exist in URBANIZED_AREAS Reference Table, if supplied
10	MSA Represented	Must exist in MSAS Reference Table, if supplied
11	CMSA Represented	Must exist in CMSAS Reference Table, if supplied
12	CBSA Represented ^{X(1)}	Must exist in CORE_BASED_STATISTICAL_AREAS Reference Table, if supplied
13	CSA Represented ^{X(1)}	Must exist in COMBINED_STATISTICAL_AREAS Reference Table, if supplied

MF Monitor Sampling Schedule

#	Field Name	Formatting Rule
1	Transaction Type ^R	MF = Monitor Sample Schedule
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Required Collection Frequency Code ^R	Must exist in COLLECTION_FREQUENCIES Reference Table
9	Required Collection Frequency Begin Date ^R	Date - YYYYMMDD format
10	Required Collection Frequency End Date	Date - YYYYMMDD format
11	Monthly Required Collection Frequency – Jan.	Number – 12.0 format, if supplied
12	Monthly Required Collection Frequency – Feb.	Number – 12.0 format, if supplied
13	Monthly Required Collection Frequency – Mar.	Number – 12.0 format, if supplied
14	Monthly Required Collection Frequency – Apr.	Number – 12.0 format, if supplied
15	Monthly Required Collection Frequency – May.	Number – 12.0 format, if supplied
16	Monthly Required Collection Frequency – Jun.	Number – 12.0 format, if supplied
17	Monthly Required Collection Frequency – Jul.	Number – 12.0 format, if supplied
18	Monthly Required Collection Frequency – Aug.	Number – 12.0 format, if supplied
19	Monthly Required Collection Frequency – Sep.	Number – 12.0 format, if supplied
20	Monthly Required Collection Frequency – Oct.	Number – 12.0 format, if supplied
21	Monthly Required Collection Frequency – Nov.	Number – 12.0 format, if supplied
22	Monthly Required Collection Frequency – Dec.	Number – 12.0 format, if supplied

Data Input Formats

MG Monitor Tangent Roads

#	Field Name	Formatting Rule
1	Transaction Type ^R	MG = Monitor Tangent Road
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Tangent Street Number ^R	Must exist in Site Tangent Street Table
9	Distance from Monitor to Tangent Road ^{R(I,U)}	Number - 8.2 format

MH Monitor Obstruction Information

#	Field Name	Formatting Rule
1	Transaction Type ^R	MH = Monitor Obstruction
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Probe Obstruction Type ^R	Must exist in PROBE_OBSTRUCTION_TYPES Ref. Table
9	Direction from Monitor to Probe Obstruction ^R	Must exist in COMPASS_SECTORS Reference Table
10	Distance from Monitor to Probe Obstruction ^R	Number - 8.2 format
11	Probe Obstruction Height ^R	Number - 8.2 format

MI Monitor Regulatory Compliance

#	Field Name	Formatting Rule
1	Transaction Type ^R	MI = Monitor Reg. Compliance
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Regulation Code ^R	Must exist in PARAMETER_REGULATIONS Reference Table
9	Compliance Indicator	'Y' or 'N'
10	Compliance Date	Date - YYYYMMDD format

MJ Monitor Collocation Period

#	Field Name	Formatting Rule
1	Transaction Type ^R	MJ = Monitor Collocation Period
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Collocation Begin Date ^R	Date - YYYYMMDD format
9	Collocation End Date	Date - YYYYMMDD format
10	Distance from Primary Sampler	Number - 8.2 format
11	Primary Sampler Indicator ^R	'Y' or 'N'

Data Input Formats

MK Monitor Protocol

#	Field Name	Formatting Rule
1	Transaction Type ^R	MK = Monitor Protocol
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Monitor Protocol ID (MP ID) ^R	Number - 2.0 format
9	Duration Code ^{R(I)}	Must exist in SAMPLE_DURATIONS Reference Table
10	Reported Unit ^{R(I)}	Must exist in UNITS Reference Table
11	Method Code ^{R(I)}	Must exist in SAMPLING_METHODODOLOGIES Reference Table
12	Collection Frequency Code	Must exist in COLLECTION_FREQUENCIES Reference Table, if valued
13	Composite Type	Must exist in COMPOSITE_TYPES Reference Table, if valued
14	Alternate Method Detectable Limit	Number - 5.5 format

Data Input Formats

Reported Data Values**RC Composite Raw Data**

#	Field Name	Formatting Rule
1	Transaction Type ^R	RC = Composite Data Type
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Reported Unit ^{R(I)}	Must exist in UNITS Reference Table
9	Method Code ^{R(I)}	Must exist in SAMPLING_METHODOLOGIES Reference Table
10	Composite Year ^R	Date – YYYY format
11	Composite Period ^R	Must exist in COMPOSITE_TYPES Reference Table
12	Number of Samples ^{R(I)}	Number – 10.0 format
13	Composite Type	Must exist in COMPOSITE_TYPES Reference Table
14	Reported Sample Value ^{R(I)}	Number - 5.5 format
15	Monitor Protocol ID (MP ID)	Must exist in Monitor Protocols table for the monitor
16	Qualifier Code -1	Must exist in QUALIFIERS Reference Table, if valued
17	Qualifier Code -2	Must exist in QUALIFIERS Reference Table, if valued
18	Qualifier Code -3	Must exist in QUALIFIERS Reference Table, if valued
19	Qualifier Code -4	Must exist in QUALIFIERS Reference Table, if valued
20	Qualifier Code -5	Must exist in QUALIFIERS Reference Table, if valued
21	Qualifier Code -6	Must exist in QUALIFIERS Reference Table, if valued
22	Qualifier Code -7	Must exist in QUALIFIERS Reference Table, if valued
23	Qualifier Code -8	Must exist in QUALIFIERS Reference Table, if valued
24	Qualifier Code -9	Must exist in QUALIFIERS Reference Table, if valued
25	Qualifier Code -10	Must exist in QUALIFIERS Reference Table, if valued
26	Alternate Method Detectable Limit	Number - 5.5 format
27	Uncertainty Value	Number - 6.5 format

RD Hourly, Daily, and Sub Hourly Raw Data

#	Field Name	Formatting Rule
1	Transaction Type ^R	RD = Raw Data Type
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITOR table with Parameter
8	Duration Code ^{R(I)}	Must exist in SAMPLE_DURATIONS Reference Table
9	Reported Unit ^{R(I)}	Must exist in UNITS Reference Table
10	Method Code ^{R(I)}	Must exist in SAMPLING_METHODOLOGIES Reference Table
11	Sample Date ^R	YYYYMMDD format
12	Sample Time ^R	hh:mm format
13	Reported Sample Value ^{X(I,U)}	Number - 5.5 format
14	Null Data Code ^{X(I,U)}	Must exist in QUALIFIERS Reference Table, if valued
15	Collection Frequency Code	Must exist in COLLECTION_FREQUENCIES Reference Table
16	Monitor Protocol ID (MP ID)	Must exist in Monitor Protocols Table for the Monitor
17	Qualifier Code -1	Must exist in QUALIFIERS Reference Table, if valued
18	Qualifier Code -2	Must exist in QUALIFIERS Reference Table, if valued
19	Qualifier Code -3	Must exist in QUALIFIERS Reference Table, if valued
20	Qualifier Code -4	Must exist in QUALIFIERS Reference Table, if valued
21	Qualifier Code -5	Must exist in QUALIFIERS Reference Table, if valued
22	Qualifier Code -6	Must exist in QUALIFIERS Reference Table, if valued
23	Qualifier Code -7	Must exist in QUALIFIERS Reference Table, if valued
24	Qualifier Code -8	Must exist in QUALIFIERS Reference Table, if valued
25	Qualifier Code -9	Must exist in QUALIFIERS Reference Table, if valued
26	Qualifier Code -10	Must exist in QUALIFIERS Reference Table, if valued
27	Alternate Method Detectable Limit	Number - 5.5 format
28	Uncertainty Value	Number – 6.5 format

Data Input Formats

RA Accuracy Data

#	Field Name	Formatting Rule
1	Transaction Type ^R	RA = Raw Accuracy Data
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Accuracy Audit ID Number ^R	Number - 2.0 format (Legacy "Sequence #")
9	Duration Code ^{R(I,U)}	Must exist in SAMPLE_DURATIONS Reference Table
10	Reported Unit ^{R(I,U)}	Must exist in UNITS Reference Table
11	Method Code ^{R(I,U)}	Must exist in SAMPLING_METHODOLOGIES Reference Table
12	Year Represented	Date - YYYY format
13	Quarter Represented	'Q1', 'Q2', 'Q3', or 'Q4'
14	Accuracy Date ^R	Date - YYYYMMDD format
15	Audit Type ^{R(I)}	Must exist in AUDIT_TYPES Reference Table
16	Local Primary Standard ^{R(I)}	Must exist in LOCAL_PRIMARY_STANDARDS Reference Table
17	Audit Class ^{R(I)}	Must exist in AUDIT_CALASES Reference Table
18	Accuracy Type ^{R(I)}	Must exist in ACCURACY_TYPES Reference Table, if supplied
19	Audit Sample ID	Text
20	Expiration Date	Date - YYYYMMDD format
21	Audit Scheduled	Date - YYYYMMDD format
22	Level 1 Actual Value ^{X(I,U)}	Number - 5.5 format
23	Level 1 Indicated Value ^{X(I,U)}	Number - 5.5 format
24	Level 2 Actual Value ^{X(I,U)}	Number - 5.5 format
25	Level 2 Indicated Value ^{X(I,U)}	Number - 5.5 format
26	Level 3 Actual Value ^{X(I,U)}	Number - 5.5 format
27	Level 3 Indicated Value ^{X(I,U)}	Number - 5.5 format
28	Level 4 Actual Value ^{X(I,U)}	Number - 5.5 format
29	Level 4 Indicated Value ^{X(I,U)}	Number - 5.5 format
30	Level 5 Actual Value ^{X(I,U)}	Number - 5.5 format
31	Level 5 Indicated Value ^{X(I,U)}	Number - 5.5 format
32	Zero Span	Number - 5.5 format

RP Precision Data

#	Field Name	Formatting Rule
1	Transaction Type ^R	RP = Raw Precision Data
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Precision ID ^R	Number - 2.0 format
9	Duration Code ^{R(I,U)}	Must exist in SAMPLE_DURATIONS Reference Table
10	Reported Unit ^{R(I,U)}	Must exist in UNITS Reference Table
11	Actual Method ^{R(I,U)}	Must exist in SAMPLING_METHODOLOGIES Reference Table
12	Precision Date ^R	Date - YYYYMMDD format
13	Actual Value	Number - 5.5 format
14	Indicated Method	Must exist in SAMPLING_METHODOLOGIES Reference table
15	Indicated Value	Number - 5.5 format
16	Collocated POC ^{X(I)}	Must exist in MONITOR Table (only for collocated data)
17	Precision Sample ID	Text - Up to 10 characters
18	Agency Performing FRM Audit ^{X(I)}	Must exist with STATE_AGENCIES Table (only for FRM data)

Data Input Formats

RS Annual Summary Data

#	Field Name	Formatting Rule
1	Transaction Type	Must exist in Reference Table (RS = Annual Summary)
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table with Parameter
8	Duration Code ^{R(I,U)}	Must exist in SAMPLE_DURATIONS Reference Table
9	Reported Unit ^{R(I,U)}	Must exist in UNITS Reference Table
10	Method Code ^{R(I,U)}	Must exist in SAMPLING_METHODODOLOGIES Reference Table
11	Summary Year ^R	Date - YYYY format
12	Exceptional Data Type ID ^R	'0', '1', or '2'
13	Count of Observations	Number - 5.0 format
14	Count of Exceptional Events	Number - 5.0 format
15	Maximum Value	Number - 5.5 format
16	Maximum Value Date	Date - YYYYMMDD Format
17	Maximum Value Time	Date - hh:mm format
18	Maximum Value 2nd Highest	Number - 5.5 format
19	Maximum Value Date 2nd Highest	Date - YYYYMMDD format
20	Maximum Value Time 2nd Highest	hh:mm format
21	Maximum Value 3rd Highest	Number - 5.5 format
22	Maximum Value 4th Highest	Number - 5.5 format
23	Maximum Value 5th Highest	Number - 5.5 format
24	Minimum Sample Value	Number - 5.5 format
25	Arithmetic Mean	Number - 5.5 format
26	Arithmetic Standard Deviation	Number - 5.5 format
27	Geometric Mean	Number - 5.5 format
28	Geometric Standard Deviation	Number - 5.5 format
29	Percentile Sample Value - 10th	Number - 5.5 format
30	Percentile Sample Value - 25th	Number - 5.5 format
31	Percentile Sample Value - 50th	Number - 5.5 format
32	Percentile Sample Value - 75th	Number - 5.5 format
33	Percentile Sample Value - 90th	Number - 5.5 format
34	Percentile Sample Value - 95th	Number - 5.5 format
35	Percentile Sample Value - 98th	Number - 5.5 format
36	Percentile Sample Value - 99th	Number - 5.5 format
37	Percent of Observations	Number - 6.4 format
38	Count of Half-MDL Substitutions	Number - 5.0 format

At least one of these fields must be valued on an Insert or Update

Data Input Formats

RB Blanks Data

#	Field Name	Formatting Rule
1	Transaction Type ^R	RB = Raw Blanks Type
2	Action Indicator ^R	Must = I, U, or D
3	State Code / Tribal Indicator ^R	Must exist in STATES Reference Table or be 'TT' for Tribal Site
4	County Code / Tribal Code ^R	Must exist in COUNTIES or TRIBAL_AREAS Reference Table
5	Site ID ^R	Must exist in SITES table with the {State Code, County Code} or Tribal Code
6	Parameter ^R	Must exist in PARAMETERS Reference Table
7	POC ^R	Must exist in MONITORS table (with Parameter)
8	Duration Code ^{R(I,U)}	Must exist in SAMPLE_DURATIONS Reference Table
9	Reported Unit ^{R(I,U)}	Must exist in UNITS Reference Table
10	Method Code ^{R(I,U)}	Must exist in SAMPLING METHODOLOGIES Reference Table
11	Blank Type ^R	Either 'FIELD' or 'TRIP'
12	Blank Date ^R	YYYYMMDD format
13	Blank Time ^R	hh:mm format
14	Blank Value ^{X(I)}	Number - 10.5 format
15	Null Data Code ^{X(I,U)}	Must exist in QUALIFIERS Reference Table, if valued
16	Qualifier Code -1	Must exist in QUALIFIERS Reference Table, if valued
17	Qualifier Code -2	Must exist in QUALIFIERS Reference Table, if valued
18	Qualifier Code -3	Must exist in QUALIFIERS Reference Table, if valued
19	Qualifier Code -4	Must exist in QUALIFIERS Reference Table, if valued
20	Qualifier Code -5	Must exist in QUALIFIERS Reference Table, if valued
21	Qualifier Code -6	Must exist in QUALIFIERS Reference Table, if valued
22	Qualifier Code -7	Must exist in QUALIFIERS Reference Table, if valued
23	Qualifier Code -8	Must exist in QUALIFIERS Reference Table, if valued
24	Qualifier Code -9	Must exist in QUALIFIERS Reference Table, if valued
25	Qualifier Code -10	Must exist in QUALIFIERS Reference Table, if valued
26	Alternate Method Detectable Limit	Number - 5.5 format
27	Uncertainty Value	Number - 6.5 format