

AMSED EDD Formats

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This document contains the formats for the AMSED. The AMSED format is the only EDD format that the PEMS currently supports. All fields in the EDD are required unless optional is specified in the definition.

The EDD file format is a double quote comma delimited file, sometimes referred to as a Microsoft Excel CSV file. When a field is optional, it should be blank with nothing entered between the comma preceding the field and the one following it. For example:

EDD record: 123L-24,,,"A field with a , in it",12/12/1998

Since the second field does not have any information, nothing was entered between the commas.

Note that the third field has a comma as part of the data so the whole field is enclosed in double quotes to indicate that the comma is not a field separator.

The EDD specification contains an error type column. The column is used to indicate items that will require corrective actions by the lab if the EDD does not supply the information or if the information for the field is incorrect. This column contains two values F and W. F (Fatal) indicates a corrective action is required, W (Warning) indicates no corrective action, but the field should be supplied when possible. Refer to the Terms and Conditions for a more complete description of the error type column.

While transferring files into PEMS, they will be checked for errors. If errors are detected, the laboratory will be required to correct the errors and to resubmit the corrected files. The number of errors will be tracked and will be used in the calculation of the Performance Indicator Factor (PIF) and the IPIP score.

VALID VALUES

The current list is available in the Global Admin portion of PEMS.

EDD FILE NAMING CONVENTIONS:

To make it easier for users and for AMSED support to track down problems in EDDs, please use the following conventions when naming files on the AMSED workstation:

To name RAD files, the filename should begin with an *"r"*, and end with the first seven characters of the batch id or SDG number. (Ex: r1109130.res)

RADIOLOGICAL EDD FILES:

xxxxxxx.res Results file

xxxxxxx.lcs Laboratory control samples, matrix spikes, matrix spike duplicates file

xxxxxxx.mb Method blank file

xxxxxxx.dup Duplicate file

xxxxxxx.tir Tentatively Identified Radionuclides (TIR) file.

To name NONRAD files, the filename should begin with an *"n"*, and end with the first seven characters of the batch id or SDG number. Ex: n1109130.res)

NON-RADIOLOGICAL EDD FILES

nxxxxxxx.res Results and blanks file

nxxxxxxx.ms Matrix spikes, matrix spike duplicates, and duplicates file

nxxxxxxx.lcs Laboratory control samples file

nxxxxxxx.tic Tentatively Identified Compounds (TIC) file

Where:

xxxxxxx = the first seven characters of the batch id or SDG number

AMSED EDD Format for Radiochemistry

File 1 Structure: RESULTS
(Double Quote Comma Delimited)

File Name: rxxxxxxx.res
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Max. Width | Data Type | Required | Definition | Error Type |
|---------|-----------------------------|------------|---------------|----------|--|------------|
| 1 | SOW ID | 10 | Alpha-numeric | Y | Sample Management Office Statement of Work number | F |
| 2 | Project ID | 20 | Alpha-numeric | Y | Identifier for the project this sample is a part of. For example, "IWQP-ORNL". | F |
| 3 | Project Name | 50 | Alpha-numeric | N | Name furnished by requester, usually via a SAP. Optional | |
| 4 | Customer Name | 25 | Alpha-numeric | N | Name of individual requesting analysis. Optional | |
| 5 | Laboratory Name | 10 | Alpha-numeric | Y | Code for Laboratory Name. See PEMS COC for Lab Code. | F |
| 6 | EDD Date | 10 | Date | Y | Date EDD file was generated (MM/DD/YYYY). | F |
| 7 | Lab Receipt Date | 10 | Date | Y | Date samples received by the laboratory (MM/DD/YYYY) Only 1 date rec'd per sample ID. | F |
| 8 | Analysis Date | 10 | Date | Y | The date the final prepared extract or digestate was entered or injected into the analytical instrumentation to obtain the final reported value. (MM/DD/YYYY) | F |
| 9 | Method Id | 25 | Alpha-numeric | Y | Analysis method identification reported as Method Number from the statement of work. (e.g. EPA 901.0) See Global Admin. | F |
| 10 | Method Batch | 20 | Alpha-numeric | Y | A group of samples with similar matrices, analyzed by one method, and treated as a group for QC purposes. Operationally, this batch associates sample dependent QC such as duplicates and matrix spikes with a group of samples. (If a Method Batch is not available, then the SDG number can be substituted.) | F |
| 11 | Sample Delivery Group (SDG) | 20 | Alpha-numeric | Y | Group of samples to be reported together. See AMS for more detail. (1SDG # per EDD) | F |
| 12 | Lab Sample ID | 20 | Alpha-numeric | Y | Laboratory sample identification number. | F |
| 13 | Client Sample ID | 20 | Alpha-numeric | Y | The client's sample identification number. | F |

AMSED EDD Format for Radiochemistry

File 1 Structure: RESULTS
(Double Quote Comma Delimited)

File Name: rxxxxxxx.res
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Max. Width | Data Type | Required | Definition | Error Type |
|---------|------------------------------------|------------|---------------|----------|--|------------|
| 14 | Replicate Number | 2 | Alpha-numeric | N | Sequential number identifying separate results when a sample is analyzed and reported on the EDD more than one time. (mostly used for Organics). Valid values: Blank or 0 single test 01 first replicate 02 second replicate 03 third replicate (etc.) | |
| 15 | Analyte ID | 11 | Alpha-numeric | Y | CAS number or non-standard CAS number. See Global Admin. | F |
| 16 | Analyte Name | 30 | Char | Y | Chemical name for the analyte. See Global Admin. | W |
| 17 | Matrix ID | 8 | Alpha-numeric | Y | A code for the sample matrix. See Global Admin. Matrix ID can be found on PEMS LCOC. | F |
| 18 | Result | 10 | Number | Y | Reportable numeric result for the analyte. | F |
| 19 | Result Units | 10 | Char | Y | Units for result. See Global Admin. | F |
| 20 | Instrument ID | 8 | Alpha-numeric | N | Laboratory counting instrument identification code. Optional. | |
| 21 | Counting Error | 10 | Number | Y | The 2 sigma error in the net count rate. Reported in same units as the result. Required for all reportable result values. Non-detects must also report values. | F |
| 22 | Lab Qualifiers | 5 | Char | N | A string of single letter result qualifiers assigned by the lab. Leave blank if no qualifier is applicable. See Global Admin. | F |
| 23 | Total Propagated Uncertainty | 10 | Number | Y | Total Propagated Uncertainty. Reported in the same units as the result | F |
| 24 | Total Propagated Uncertainty Level | 1 | Number | Y | The number of standard deviations reported as the uncertainty. Valid values are: '1' or '2'. 2 is preferred. | F |
| 25 | Preparation Date | 10 | Date | Y | Date the initial preparation occurred. (MM/DD/YYYY). Must be after (or on) receipt date, but before (or on) analysis date. | F |
| 26 | MDA | 14 | Number | Y | Minimum Detectable Amount for radiochemistry or method. Reported in same units as result. | F |

AMSED EDD Format for Radiochemistry

File 1 Structure: RESULTS
(Double Quote Comma Delimited)

File Name: rxxxxxxx.res
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Max. Width | Data Type | Required | Definition | Error Type |
|---------|----------------------|------------|-----------|----------|--|------------|
| 27 | Reporting Basis Flag | 1 | Char | Y | A Flag indicating sample results have been corrected to a dry weight reporting basis. Y = Corrected. N = Not corrected, processed on an "as received" reporting basis (all liquids equal 'N'). | F |
| 28 | Tracer Flag | 1 | Char | Y | A radioactive isotope, introduced into the radiochemical sample preparation/analysis process, that will behave chemically similar to the (analyte) isotope(s). The tracer isotope is of the same element as the analyte isotope(s), except where the decay mode, half-life or availability dictate the use of the isotope of a different element. The activity of tracer detected at the end of the analysis compared to that added initially is used in the calculation of the final sample result. Y = Tracer result, Reported in % units N = Not a tracer result. | F |
| 29 | Filtered/Unfiltered | Char | 1 | N | F = Sample filtered at Lab. U or blank = Sample not filtered at Lab. Liquids only. | F |

AMSED EDD Format for Radiochemistry

File 2 Structure: LCS, MS, MSD
(Double Quote Comma Delimited)

File Name: rxxxxxxx.lcs
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|-----------------------------|---------------|------------|----------|---|------------|
| 1 | Project ID | Alpha-numeric | 20 | Y | Identifier for the project this sample is a part of. For example, "IWQP-ORNL". Required | F |
| 2 | Project Name | Alpha-numeric | 50 | N | Name furnished by requester, usually via a SAP. Optional | |
| 3 | Customer Name | Alpha-numeric | 25 | N | Name of individual requesting analysis. Optional | |
| 4 | Laboratory Name | Alpha-numeric | 10 | Y | Code for Laboratory Name. See Global Admin. | F |
| 5 | EDD Date | Date | 10 | Y | Date EDD file was generated (MM/DD/YYYY). | F |
| 6 | Analysis Date | Date | 10 | Y | The date the final prepared extract or digestate was entered or injected into the analytical instrumentation to obtain the final reported value. (MM/DD/YYYY) | F |
| 7 | Method Id | Alpha-numeric | 25 | Y | Analysis method identification reported as Method Number from the statement of work. (e.g. EPA 901.0) See Global Admin. | F |
| 8 | Method Batch | Alpha-numeric | 20 | Y | A group of samples with similar matrices, analyzed by one method, and treated as a group for QC purposes. Operationally, this batch associates sample dependent QC such as duplicates and matrix spikes with a group of samples. (If a Method Batch is not available, then the SDG number can be substituted.) | F |
| 9 | Sample Delivery Group (SDG) | Alpha-numeric | 20 | Y | Group of samples to be reported together. See AMS for more detail. (1 SDG # per EDD.) | F |
| 10 | Lab Sample ID | Alpha-numeric | 20 | Y | Laboratory sample identification number. | F |
| 11 | Original Client Sample ID | Alpha-numeric | 20 | Y | The client's sample identification number for sample used to make QC sample. No suffixes should be added to the client's sample identification number. Not required (leave blank) if the QC sample was not derived from a client sample. | F |
| 12 | Analyte ID | Alpha-numeric | 11 | Y | CAS number or non-standard number. See Global Admin. | F |
| 13 | Analyte Name | Char | 30 | Y | Chemical name for the analyte. See Global Admin. | W |

AMSED EDD Format for Radiochemistry

File 2 Structure: LCS, MS, MSD
(Double Quote Comma Delimited)

File Name: rxxxxxxx.lcs
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|------------------------------------|---------------|------------|----------|--|------------|
| 14 | Matrix ID | Alpha-numeric | 8 | Y | A code for the sample matrix. See Global Admin. | F |
| 15 | QC Type | Char | 6 | Y | The client's code for the type of QC. Valid Values - MSD, MS, LCS | F |
| 16 | Result | Number | 10 | Y | Reportable numeric result for the analyte. | F |
| 17 | Result Units | Char | 10 | Y | Units for result. See Global Admin. | F |
| 18 | Amount Added | Number | 10 | Y | Known amount of analyte that has been spiked into the aliquot. Reported in same activity units as result. | F |
| 19 | Percent Recovery | Number | 10 | Y | The spiked result minus the original result as a percentage of the amount added. Must be a number or blank – required, as applicable, for MS, MSD, and LCS. | F |
| 20 | Relative Percent Difference | Number | 3 | Y | The absolute value of the difference of two values as a percentage of their average. Must be a number or blank – required, as applicable for MSD. Leave blank for MS and LCS. | F |
| 21 | Instrument ID | Alpha-numeric | 8 | N | Laboratory counting instrument identification code. Optional. | |
| 22 | Counting Error | Number | 10 | Y | The 2 sigma error in the net count rate. Reported in same units as the result. Required for all result values. | F |
| 23 | Lab Qualifiers | Char | 5 | N | A string of single letter result qualifiers assigned by the lab. Leave blank if no qualifier is applicable. See Global Admin. | F |
| 24 | Total Propagated Uncertainty | Number | 10 | Y | Total Propagated Uncertainty. Reported in the same units as the result. | F |
| 25 | Total Propagated Uncertainty Level | Number | 1 | Y | The number of standard deviations reported as the uncertainty. Valid values are: '1' or '2'. 2 is preferred. | F |
| 26 | MDA | Number | 14 | Y | Minimum Detectable Amount for radiochemistry or method. Reported in same units as result. | F |

AMSED EDD Format for Radiochemistry

File 2 Structure: LCS, MS, MSD
(Double Quote Comma Delimited)

File Name: rxxxxxxx.lcs
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|---------------------|-----------|------------|----------|--|------------|
| 27 | Tracer Flag | Char | 1 | Y | A radioactive isotope, introduced into the radiochemical sample preparation/analysis process, that will behave chemically similar to the (analyte) isotope(s). The tracer isotope is of the same element as the analyte isotope(s), except where the decay mode, half-life or availability dictate the use of the isotope of a different element. The activity of tracer detected at the end of the analysis compared to that added initially is used in the calculation of the final sample result. Y = Tracer result, (reported as %) N = Not a tracer result. | F |
| 28 | Filtered/Unfiltered | Char | 1 | N | F = Sample filtered at Lab. U or blank = Sample not filtered at Lab. Liquids only. | F |

AMSED EDD Format for Radiochemistry

File 3 Structure: METHOD BLANK
(Double Quote Comma Delimited)

File Name: rxxxxxxx.mb
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|-----------------------------|---------------|------------|----------|--|------------|
| 1 | Project ID | Alpha-numeric | 20 | Y | Identifier for the project this sample is a part of. For example, "IWQP-ORNL". Required | F |
| 2 | Project Name | Alpha-numeric | 50 | N | Name furnished by requester, usually via a SAP. Optional | |
| 3 | Customer Name | Alpha-numeric | 25 | N | Name of individual requesting analysis. Optional | |
| 4 | Laboratory Name | Alpha-numeric | 10 | Y | Code for Laboratory Name. See Global Admin. | F |
| 5 | EDD Date | Date | 10 | Y | Date EDD file was generated (MM/DD/YYYY). | F |
| 6 | Analysis Date | Date | 10 | Y | The date the final prepared extract or digestate was entered or injected into the analytical instrumentation to obtain the final reported value. (MM/DD/YYYY) | F |
| 7 | Method Id | Alpha-numeric | 25 | Y | Analysis method identification reported as Method Number from the statement of work. (e.g. EPA 901.0). See Global Admin. | F |
| 8 | Method Batch | Alpha-numeric | 20 | Y | A group of samples with similar matrices, analyzed by one method, and treated as a group for QC purposes. Operationally, this batch associates sample dependent QC such as duplicates and matrix spikes with a group of samples. (If a Method Batch is not available, then the SDG number can be substituted.) | F |
| 9 | Sample Delivery Group (SDG) | Alpha-numeric | 20 | Y | Group of samples to be reported together. See AMS for more detail. (1 SDG # per EDD.) | F |
| 10 | Lab Sample ID | Alpha-numeric | 20 | Y | Laboratory sample identification number. | F |
| 11 | Analyte ID | Alpha-numeric | 11 | Y | CAS number or non-standard CAS number. See Global Admin. | F |
| 11 | Analyte Name | Char | 30 | Y | Chemical name for the analyte. See Global Admin. | W |
| 13 | Matrix ID | Alpha-numeric | 8 | Y | A code for the sample matrix. See Global Admin. | F |
| 14 | QC Type | Char | 6 | Y | The client's code for the type of QC. Valid Value – "Blank" | F |
| 15 | Result | Number | 10 | Y | Reportable numeric result for the analyte. | F |
| 16 | Result Units | Char | 10 | Y | Units for result. See Global Admin. | F |

AMSED EDD Format for Radiochemistry

File 3 Structure: METHOD BLANK
(Double Quote Comma Delimited)

File Name: rxxxxxxx.mb
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|------------------------------------|---------------|------------|----------|---|------------|
| 17 | Counting Error | Number | 10 | Y | The 2 sigma error in the net count rate. Reported in same units as the result. Required for all result values. | F |
| 18 | Lab Qualifiers | Char | 5 | N | A string of single letter result qualifiers assigned by the lab. Leave blank if no qualifier is applicable. See Global Admin. | F |
| 19 | Instrument ID | Alpha-numeric | 8 | N | Laboratory counting instrument identification code. Optional. | |
| 20 | Total Propagated Uncertainty | Number | 10 | Y | Total Propagated Uncertainty. Reported in the same units as the result. | F |
| 21 | Total Propagated Uncertainty Level | Number | 1 | Y | The number of standard deviations reported as the uncertainty. Valid values are: '1' or '2'. 2 is preferred. | F |
| 22 | MDA | Number | 14 | Y | Minimum Detectable Amount for radiochemistry or method. Reported in same units as result. | F |
| 23 | Tracer Flag | Char | 1 | Y | A radioactive isotope, introduced into the radiochemical sample preparation/analysis process, that will behave chemically similar to the (analyte) isotope(s). The tracer isotope is of the same element as the analyte isotope(s), except where the decay mode, half-life or availability dictate the use of the isotope of a different element. The activity of tracer detected at the end of the analysis compared to that added initially is used in the calculation of the final sample result. Y = Tracer result, N = Not a tracer result. | F |
| 24 | Filtered/Unfiltered | Char | 1 | N | F = Sample filtered at Lab. U or blank = Sample not filtered at Lab. Liquids only. | F |

AMSED EDD Format for Radiochemistry

File 4 Structure: DUPLICATE
(Double Quote Comma Delimited)

File Name: rxxxxxxx.dup
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|-----------------------------|---------------|------------|----------|---|------------|
| 1 | Project ID | Alpha-numeric | 20 | Y | Identifier for the project this sample is a part of. For example, "IWQP-ORNL". Required | F |
| 2 | Project Name | Alpha-numeric | 50 | N | Name furnished by requester, usually via a SAP. Optional | |
| 3 | Customer Name | Alpha-numeric | 25 | N | Name of individual requesting analysis. Optional | |
| 4 | Laboratory Name | Alpha-numeric | 10 | Y | Code for Laboratory Name. See Global Admin. Can be found on PEMS LCOC. | F |
| 5 | EDD Date | Date | 10 | Y | Date EDD file was generated (MM/DD/YYYY). | F |
| 6 | Analysis Date | Date | 10 | Y | The date the final prepared extract or digestate was entered or injected into the analytical instrumentation to obtain the final reported value. (MM/DD/YYYY) | F |
| 7 | Method Id | Alpha-numeric | 25 | Y | Analysis method identification reported as Method Number from the statement of work. (e.g. EPA 901.0) | F |
| 8 | Method Batch | Alpha-numeric | 20 | Y | A group of samples with similar matrices, analyzed by one method, and treated as a group for QC purposes. Operationally, this batch associates sample dependent QC such as duplicates and matrix spikes with a group of samples. (If a Method Batch is not available, then the SDG number can be substituted.) | F |
| 9 | Sample Delivery Group (SDG) | Alpha-numeric | 20 | Y | Group of samples to be reported together. See AMS for more detail. (1 SDG # per EDD.) | F |
| 10 | Lab Sample ID | Alpha-numeric | 20 | Y | Laboratory sample identification number. | F |
| 11 | Original Client Sample ID | Alpha-numeric | 20 | Y | The client's sample identification number for sample used to make QC sample. No suffixes should be added to the client's sample identification number. Do not submit duplicate analysis if not from client sample. | F |

AMSED EDD Format for Radiochemistry

File 4 Structure: DUPLICATE
(Double Quote Comma Delimited)

File Name: rxxxxxxx.dup
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|------------------------------------|---------------|------------|----------|---|------------|
| 12 | Replicate Number | Alpha-numeric | 2 | N | Sequential number identifying separate results when a sample is reported more than one time on the EDD. Valid values: Blank or 0 single test 01 first replicate 02 second replicate 03 third replicate (etc.) | |
| 13 | Analyte ID | Alpha-numeric | 11 | Y | CAS number or non-standard CAS number. See Global Admin. | F |
| 14 | Analyte Name | Char | 30 | Y | Chemical name for the analyte. See Global Admin | W |
| 15 | Matrix ID | Alpha-numeric | 8 | Y | A code for the sample matrix. See Global Admin. Matrix ID can be found on PEMS COC. | F |
| 16 | QC Type | Char | 6 | Y | The client's code for the type of QC. Valid Values – "DUP" | F |
| 17 | Duplicate Result | Number | 10 | Y | Reportable duplicate result for the Analyte (numeric value only.) | F |
| 18 | Result Units | Char | 10 | Y | Units for result. See Global Admin. | F |
| 19 | Counting Error | Number | 10 | Y | The 2 sigma error in the net count rate. Reported in same units as the result. Required for all result values. | F |
| 20 | Lab Qualifiers | Char | 5 | N | A string of single letter result qualifiers assigned by the lab. Leave blank if no qualifier is applicable. See Global Admin. | F |
| 21 | Relative Percent Difference | Number | 3 | Y | The absolute value of the difference of two values as a percentage of their average. Must be a number or blank. | F |
| 22 | Instrument ID | Alpha-numeric | 8 | N | Laboratory counting instrument identification code. Optional. | |
| 23 | Total Propagated Uncertainty | Number | 10 | Y | Total Propagated Uncertainty. Reported in the same units as the result. | F |
| 24 | Total Propagated Uncertainty Level | Number | 1 | Y | The number of standard deviations reported as the uncertainty. Valid values are: '1' or '2'. 2 is preferred. | F |
| 25 | MDA | Number | 14 | Y | Minimum Detectable Amount for radiochemistry or method. Reported in same units as result. | F |

AMSED EDD Format for Radiochemistry

File 4 Structure: DUPLICATE
(Double Quote Comma Delimited)

File Name: rxxxxxxx.dup
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|---------------------|-----------|------------|----------|--|------------|
| 26 | Tracer Flag | Char | 1 | Y | A radioactive isotope, introduced into the radiochemical sample preparation/analysis process, that will behave chemically similar to the (analyte) isotope(s). The tracer isotope is of the same element as the analyte isotope(s), except where the decay mode, half-life or availability dictate the use of the isotope of a different element. The activity of tracer detected at the end of the analysis compared to that added initially is used in the calculation of the final sample result. Y = Tracer result, N = Not a tracer result. | F |
| 27 | Filtered/Unfiltered | Char | 1 | N | F = Sample filtered at Lab. U or blank = Sample not filtered at Lab. Liquids only. | F |

AMSED EDD Format for Radiochemistry

File 5 Structure: TENTATIVELY IDENTIFIED RADIONUCLIDES
(Double Quote Comma Delimited)

File Name: rxxxxxxx.tir
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|-----------------------------|---------------|------------|----------|---|------------|
| 1 | Project ID | Alpha-numeric | 20 | Y | Identifier for the project this sample is a part of. For example, "IWQP-ORNL". Required | F |
| 2 | Project Name | Alpha-numeric | 50 | N | Name furnished by requester, usually via a SAP. Optional | |
| 3 | Customer Name | Alpha-numeric | 25 | N | Name of individual requesting analysis. Optional | |
| 4 | Laboratory Name | Alpha-numeric | 10 | Y | Code for Laboratory Name. See Global Admin or PEMS LCOC. | F |
| 5 | EDD Date | Date | 10 | Y | Date EDD file was generated (MM/DD/YYYY). | F |
| 6 | Analysis Date | Date | 10 | Y | The date the final prepared extract or digestate was entered or injected into the analytical instrumentation to obtain the final reported value. (MM/DD/YYYY) | F |
| 7 | Method Id | Alpha-numeric | 25 | Y | Analysis method identification reported as Method Number from the statement of work. (e.g. EPA 901.0) See Global Admin. | F |
| 8 | Method Batch | Alpha-numeric | 20 | Y | A group of samples with similar matrices, analyzed by one method, and treated as a group for QC purposes. Operationally, this batch associates sample dependent QC such as duplicates and matrix spikes with a group of samples. (If a Method Batch is not available, then the SDG number can be substituted.) | F |
| 9 | Sample Delivery Group (SDG) | Alpha-numeric | 20 | Y | Group of samples to be reported together. See AMS for more detail. (1 SDG # per EDD.) | F |
| 10 | Lab Sample ID | Alpha-numeric | 20 | Y | Laboratory sample identification number. | F |
| 11 | Client Sample ID | Alpha-numeric | 20 | Y | The client's sample identification number. Use 'NA' for LCS and MB. | F |
| 12 | Analyte ID | Alpha-numeric | 11 | N | CAS number or blank if no CAS number or non-standard CAS number is available. | W |
| 13 | Analyte Name | Char | 30 | Y | Chemical name for the analyte. See Global Admin | W |
| 14 | Matrix ID | Alpha-numeric | 8 | Y | A code for the sample matrix. See Global Admin. | F |
| 15 | QC Type | Char | 6 | Y | The client's code for the type of QC. Valid Value equals 'TIR'. | F |

AMSED EDD Format for Radiochemistry

File 5 Structure: TENTATIVELY IDENTIFIED RADIONUCLIDES
(Double Quote Comma Delimited)

File Name: rxxxxxxx.tir
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 5)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|----------------------|---------------|------------|----------|---|------------|
| 16 | Result | Number | 10 | Y | Reportable numeric result for the analyte. | F |
| 17 | Result Units | Char | 10 | Y | Units for result. See Global Admin. | F |
| 18 | Instrument ID | Alpha-numeric | 8 | N | Laboratory counting instrument identification code. Optional. | |
| 19 | Lab Qualifiers | Char | 5 | N | A string of single letter result qualifiers assigned by the lab. Leave blank if no qualifier is applicable. See Global Admin. | F |
| 20 | Reporting Basis Flag | Char | 1 | Y | A Flag indicating sample results have been corrected to a dry weight reporting basis. Y = Corrected, N = Not corrected, processed on an "as received" reporting basis. All liquids equal 'N'. | F |
| 21 | Filtered/Unfiltered | Char | 1 | N | F = Sample filtered at Lab. U or blank = Sample not filtered at Lab. Liquids only. | F |

AMSED EDD Format for Non-Radiochemistry Results

File 1 Structure: Results and Method Blanks
(Double Quote Comma Delimited)

File Name: nxxxxxx.res
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|-----------------------------|---------------|------------|----------|--|------------|
| 1 | SOW ID | Alpha-numeric | 10 | Y | Sample Management Office Statement of Work number (found on PEMS LCOC) | F |
| 2 | Project ID | Alpha-numeric | 20 | Y | Identifier for the project this sample is a part of. For example, "IWQP-ORNL". Required (found on PEMS LCOC) | F |
| 3 | Project Name | Alpha-numeric | 50 | N | Name furnished by requester, usually via a SAP. Optional | |
| 4 | Customer Name | Alpha-numeric | 25 | N | Name of individual requesting analysis. Optional | |
| 5 | Laboratory Name | Alpha-numeric | 10 | Y | Code for Laboratory Name. See Global Admin. (found on PEMS LCOC) | F |
| 6 | EDD Date | Date | 10 | Y | Date EDD file was generated (MM/DD/YYYY). | F |
| 7 | Lab Receipt Date | Date | 10 | Y | Date samples received by the laboratory (MM/DD/YYYY). Not required (leave blank) for Method Blank samples. | F |
| 8 | Analysis Date | Date | 10 | Y | The date the final prepared extract or digestate was entered or injected into the analytical instrumentation to obtain the final reported value. (MM/DD/YYYY) | F |
| 9 | Method Id | Alpha-numeric | 25 | Y | Analysis method identification reported as Method Number from the statement of work. (e.g. EPA 901.0) See Global Admin. | F |
| 10 | Method Batch | Alpha-numeric | 20 | Y | A group of samples with similar matrices, analyzed by one method, and treated as a group for QC purposes. Operationally, this batch associates sample dependent QC such as duplicates and matrix spikes with a group of samples. (If a Method Batch is not available, then the SDG number can be substituted.) | F |
| 11 | Sample Delivery Group (SDG) | Alpha-numeric | 20 | Y | Group of samples to be reported together. See AMS for more detail (1SDG # per EDD). | F |
| 12 | Lab Sample ID | Alpha-numeric | 20 | Y | Laboratory sample identification Code. | F |
| 13 | Client Sample ID | Alpha-numeric | 20 | Y | The client's sample identification number. Required for Results only. Not required (leave blank) for Method Blanks. | F |

AMSED EDD Format for Non-Radiochemistry Results

File 1 Structure: Results and Method Blanks
(Double Quote Comma Delimited)

File Name: nxxxxxx.res
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|--------------------|---------------|------------|----------|--|------------|
| 14 | Replicate Number | Alpha-numeric | 2 | N | Sequential number identifying separate results when a sample is analyzed and reported more than one time on the EDD. (usually for Organics). Valid values: Blank or 0 single test 01 first replicate 02 second replicate 03 third replicate (etc.) | |
| 15 | Analyte ID | Alpha-numeric | 11 | Y | CAS number or non-standard CAS number. See Global Admin. | F |
| 16 | Analyte Name | Char | 30 | Y | Chemical name for the analyte. See Global Admin. | W |
| 17 | Matrix ID | Alpha-numeric | 8 | Y | A code for the sample matrix. See Global Admin. | F |
| 18 | QC Type | Char | 6 | Y | The client's code for the type of QC. Valid Value equals "Blank" for Method blank. Not required (leave blank) for result sample results. | F |
| 19 | Result | Number | 10 | Y | Reportable numeric result for the analyte. | F |
| 20 | Result Units | Char | 10 | Y | Units for result. See Global Admin. | F |
| 21 | Lab Qualifiers | Char | 5 | N | A string of single letter result qualifiers. Leave blank if no qualifier is applicable. See Global Admin. | F |
| 22 | Qualifier Class | Char | 1 | Y | A code for the type of analyte reported. The code is needed to correctly interpret the Lab Qualifiers. (Method Blanks are same code as result analyte) Valid Values Class Description 'I' Inorganic 'O' Organic | F |
| 23 | Preparation Method | Alpha-numeric | 25 | Y | Analysis method identification reported as Method Number for the statement of work for the initial preparation Required for Results only. If no Preparation Method enter 'N/A'. Not required (leave blank) for Method Blanks. | F |

AMSED EDD Format for Non-Radiochemistry Results

File 1 Structure: Results and Method Blanks
(Double Quote Comma Delimited)

File Name: nxxxxxx.res
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|----------------------|-----------|------------|----------|---|------------|
| 24 | Preparation Date | Date | 10 | Y | Date the initial preparation occurred. (MM/DD/YYYY). Leave blank if Preparation Method = 'N/A'. Required for Results only. Leave blank if Preparation Method = 'N/A'. Not required (leave blank) for Method Blanks. | F |
| 25 | MDL | Number | 14 | Y | Method Detection Limit, see AMS for more detail. Reported in same units as result. For those methods for which no MDL can be determined (e.g., pH, temperature), use 'NA'. | F |
| 26 | Filtered/Unfiltered | Char | 1 | N | F = Sample filtered at Lab. U or blank = Sample not filtered at Lab. Liquids only. | F |
| 27 | Reporting Basis Flag | Char | 1 | Y | A Flag indicating sample results have been corrected to a dry weight reporting basis. Y = Corrected, N = Not corrected, processed on an "as received" reporting basis. Required for Results only, not applicable to Method Blanks. All liquids equal 'N'. | F |
| 28 | Surrogate Flag | Char | 1 | Y | Organic compounds which are similar to analytes of interest in chemical composition, extraction, and chromatography, but which are not normally found in environmental samples. Y = Surrogate result, N = Not a surrogate result. | F |
| 29 | Dilution | Number | 8 | Y | The overall dilution of the sample aliquot. A value of 1 (one) should correspond to nominal conditions for the method. Values less than one correspond to concentrations. | F |

AMSED EDD Format for Non-Radiochemistry Results

File 2 Structure: MS/MSD/DUPS
(Double Quote Comma Delimited)

File Name: nxxxxxxx.ms
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|-----------------------------|---------------|------------|----------|---|------------|
| 1 | Project ID | Alpha-numeric | 20 | Y | Identifier for the project this sample is a part of. For example, "IWQP-ORNL". Required | F |
| 2 | Project Name | Alpha-numeric | 50 | N | Name furnished by requester, usually via a SAP. Optional | |
| 3 | Customer Name | Alpha-numeric | 25 | N | Name of individual requesting analysis. Optional | |
| 4 | Laboratory Name | Alpha-numeric | 10 | Y | Code for Laboratory Name. See Global Admin. | F |
| 5 | EDD Date | Date | 10 | Y | Date EDD file was generated (MM/DD/YYYY). | F |
| 6 | Analysis Date | Date | 10 | Y | The date the final prepared extract or digestate was entered or injected into the analytical instrumentation to obtain the final reported value. (MM/DD/YYYY) | F |
| 7 | Method Id | Alpha-numeric | 25 | Y | Analysis method identification reported as Method Number from the statement of work. (e.g. EPA 901.0) See Global Admin. | F |
| 8 | Method Batch | Alpha-numeric | 20 | Y | A group of samples with similar matrices, analyzed by one method, and treated as a group for QC purposes. Operationally, this batch associates sample dependent QC such as duplicates and matrix spikes with a group of samples. (If a Method Batch is not available, then the SDG number can be substituted.) | F |
| 9 | Sample Delivery Group (SDG) | Alpha-numeric | 20 | Y | Group of samples to be reported together. See AMS for more detail. (1 SDG # per EDD.) | F |
| 10 | Lab Sample ID | Alpha-numeric | 20 | Y | Laboratory sample identification number. | F |
| 11 | OriginalClient Sample ID | Alpha-numeric | 20 | Y | The client's sample identification number for sample used to make QC sample. No suffixes should be added to the client's sample identification number. | F |
| 12 | Analyte ID | Alpha-numeric | 11 | Y | CAS number or non-standard number. See Global Admin. | F |
| 13 | Analyte Name | Char | 30 | Y | Chemical name for the analyte. See Global Admin. | W |
| 14 | Matrix ID | Alpha-numeric | 8 | Y | A code for the sample matrix. See Global Admin. | F |

AMSED EDD Format for Non-Radiochemistry Results

File 2 Structure: MS/MSD/DUPS
(Double Quote Comma Delimited)

File Name: nxxxxxxx.ms
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|-----------------------------|-----------|------------|----------|---|------------|
| 15 | QC Type | Char | 6 | Y | The client's code for the type of QC. Valid Values - DUP, MS, MSD | F |
| 16 | Result | Number | 10 | Y | Reportable numeric result for the analyte. | F |
| 17 | Result Units | Char | 10 | Y | Units for result. See Global Admin. | F |
| 18 | Amount Added | Number | 10 | Y | Known amount of analyte that has been spiked into the aliquot. Required for MS/MSD. Reported in same units as result. Not required (leave blank) for DUPS. | F |
| 19 | Percent Recovery | Number | 10 | Y | The spiked result minus the original result as a percentage of the amount added. Must be a number or blank – required, as applicable, for MS and MSD. Must be blank for DUPS. | F |
| 20 | Relative Percent Difference | Number | 3 | Y | The absolute value of the difference of two values as a percentage of their average. Must be a number or blank – required, as applicable, for DUP and MSD. Must be blank for MS. | F |
| 21 | Lab Qualifiers | Char | 5 | N | A string of single letter result qualifiers assigned by the lab. Leave blank if no qualifier is applicable. See Global Admin. | F |
| 22 | Qualifier Class | Char | 1 | Y | A code for the type of analyte reported. The code is needed to correctly interpret the Lab Qualifiers. Valid Values Class Description 'I' Inorganic 'O' Organic | F |
| 23 | MDL | Number | 14 | Y | Method Detection Limit, see AMS for more detail. Reported in same units as result. For those methods for which no MDL can be determined (e.g., pH, temperature), use 'NA'. | F |
| 24 | Filtered/Unfiltered | Char | 1 | N | F = Sample filtered at Lab. U or blank = Sample not filtered at Lab. Liquids only. | F |
| 25 | Surrogate Flag | Char | 1 | Y | Organic compounds which are similar to analytes of interest in chemical composition, extraction, and chromatography, but which are not normally found in environmental samples. Y = Surrogate result, N = Not a surrogate result. | F |

AMSED EDD Format for Non-Radiochemistry Results

File 2 Structure: MS/MSD/DUPS
(Double Quote Comma Delimited)

File Name: nxxxxxxx.ms
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|------------|-----------|------------|----------|---|------------|
| 26 | Dilution | Number | 8 | Y | The overall dilution of the sample aliquot. A value of 1 (one) should correspond to nominal conditions for the method. Values less than 1 correspond to concentrations. | F |

AMSED EDD Format for Non-Radiochemistry Results

File 3 Structure: LCS
(Double Quote Comma Delimited)

File Name: nxxxxxxx.lcs
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|-----------------------------|---------------|------------|----------|---|------------|
| 1 | Project ID | Alpha-numeric | 20 | Y | Identifier for the project this sample is a part of. For example, "IWQP-ORNL". Required | F |
| 2 | Project Name | Alpha-numeric | 50 | N | Name furnished by requester, usually via a SAP. Optional | |
| 3 | Customer Name | Alpha-numeric | 25 | N | Name of individual requesting analysis. Optional | |
| 4 | Laboratory Name | Alpha-numeric | 10 | Y | Code for Laboratory Name. See Global Admin. | F |
| 5 | EDD Date | Date | 10 | Y | Date EDD file was generated (MM/DD/YYYY). | F |
| 6 | Analysis Date | Date | 10 | Y | The date the final prepared extract or digestate was entered or injected into the analytical instrumentation to obtain the final reported value. (MM/DD/YYYY) | F |
| 7 | Method Id | Alpha-numeric | 25 | Y | Analysis method identification reported as Method Number from the statement of work. (e.g. SW846-6010) See Global Admin. | F |
| 8 | Method Batch | Alpha-numeric | 20 | Y | A group of samples with similar matrices, analyzed by one method, and treated as a group for QC purposes. Operationally, this batch associates sample dependent QC such as duplicates and matrix spikes with a group of samples. (If a Method Batch is not available, then the SDG number can be substituted.) | F |
| 9 | Sample Delivery Group (SDG) | Alpha-numeric | 20 | Y | Group of samples to be reported together. See AMS for more detail. (1 SDG # per EDD.) | F |
| 10 | Lab Sample ID | Alpha-numeric | 20 | Y | Laboratory sample identification number. | F |

AMSED EDD Format for Non-Radiochemistry Results

File 3 Structure: LCS
(Double Quote Comma Delimited)

File Name: nxxxxxxx.lcs
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|---------------------|---------------|------------|----------|---|------------|
| 11 | Analyte ID | Alpha-numeric | 11 | Y | CAS number or non-standard CAS number. See Global Admin. | F |
| 12 | Analyte Name | Char | 30 | Y | Chemical name for the analyte. See Global Admin. | W |
| 13 | Matrix ID | Alpha-numeric | 8 | Y | A code for the sample matrix. See Global Admin. | F |
| 14 | QC Type | Char | 6 | Y | The client's code for the type of QC. Valid Value - "LCS" | F |
| 15 | Result | Number | 10 | Y | Reportable numeric result for the analyte. | F |
| 16 | Result Units | Char | 10 | Y | Units for result. See Global Admin. | F |
| 17 | Amount Added | Number | 10 | Y | Known amount of analyte that has been spiked into the aliquot. | F |
| 18 | Percent Recovery | Number | 10 | Y | The concentration reported in the LCS, divided by the true concentration -reported as % recovered. | F |
| 19 | Lab Qualifiers | Char | 5 | N | A string of single letter result qualifiers assigned by the lab. Leave blank if no qualifier is applicable. See Global Admin. | F |
| 20 | Qualifier Class | Char | 1 | Y | A code for the type of analyte reported. The code is needed to correctly interpret the Lab Qualifiers. Valid Values Class Description 'I' Inorganic 'O' Organic | F |
| 21 | MDL | Number | 14 | Y | Method Detection Limit, see AMS for more detail. Reported in same units as result. For those methods for which no MDL can be determined (e.g., pH, temperature), use 'NA'. | F |
| 22 | Filtered/Unfiltered | Char | 1 | N | F = Sample filtered at Lab. U or blank = Sample not filtered at Lab. Liquids only. | F |
| 23 | Surrogate Flag | Char | 1 | Y | Organic compounds which are similar to analytes of interest in chemical composition, extraction, and chromatography, but which are not normally found in environmental samples. Y = Surrogate result N = Not a surrogate result | F |
| 24 | Dilution | Number | 8 | Y | The overall dilution of the sample aliquot. A value of 1 (one) should correspond to nominal conditions for the method. Values less than 1 correspond to concentrations. | F |

AMSED EDD Format for Non-Radiochemistry Results

File 4 Structure: TENTATIVELY IDENTIFIED COMPOUNDS
(TIC)
(Double Quote Comma Delimited)

File Name: nxxxxxxx.tic
(xxxxxxx - alphanumeric characters
used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|-----------------------------|---------------|------------|----------|---|------------|
| 1 | Project ID | Alpha-numeric | 20 | Y | Identifier for the project this sample is a part of. For example, "IWQP-ORNL". Required | F |
| 2 | Project Name | Alpha-numeric | 50 | N | Name furnished by requester, usually via a SAP. Optional | |
| 3 | Customer Name | Alpha-numeric | 25 | N | Name of individual requesting analysis. Optional | |
| 4 | Laboratory Name | Alpha-numeric | 10 | Y | Code for Laboratory Name. See Global Admin Or PEMS LCOC | F |
| 5 | EDD Date | Date | 10 | Y | Date EDD file was generated (MM/DD/YYYY). | F |
| 6 | Analysis Date | Date | 10 | Y | The date the final prepared extract or digestate was entered or injected into the analytical instrumentation to obtain the final reported value. (MM/DD/YYYY) | F |
| 7 | Method Id | Alpha-numeric | 25 | Y | Analysis method identification reported as Method Number from the statement of work. (e.g. SW846-6010) See Global Admin. | F |
| 8 | Method Batch | Alpha-numeric | 20 | Y | A group of samples with similar matrices, analyzed by one method, and treated as a group for QC purposes. Operationally, this batch associates sample dependent QC such as duplicates and matrix spikes with a group of samples. (If a Method Blank is not available, then the SDG number can be substituted.) | F |
| 9 | Sample Delivery Group (SDG) | Alpha-numeric | 20 | Y | Group of samples to be reported together. See AMS for more detail. (1 SDG # per EDD.) | F |
| 10 | Lab Sample ID | Alpha-numeric | 20 | Y | Laboratory sample identification number. | F |
| 11 | Client Sample ID | Alpha-numeric | 20 | Y | The client's sample identification number. Use 'NA' for LCS and MB. | F |
| 12 | Replicate Number | Alpha-numeric | 2 | N | Sequential number identifying separate results when a sample is analyzed and reported on the EDD more than one time. (Mostly for Organics) Valid values: Blank or 0 single test 01 first replicate 02 second replicate 03 third replicate (etc.) | |

AMSED EDD Format for Non-Radiochemistry Results

File 4 Structure: TENTATIVELY IDENTIFIED COMPOUNDS (TIC)

(Double Quote Comma Delimited)

File Name: nxxxxxxx.tic
(xxxxxxx - alphanumeric characters used consistently for Files 1 - 4)

| Field # | Field Name | Data Type | Max. Width | Required | Definition | Error Type |
|---------|----------------------|---------------|------------|----------|---|------------|
| 13 | Analyte ID | Alpha-numeric | 11 | N | CAS number or non-standard CAS number. See Global Admin. | W |
| 14 | Analyte Name | Char | 30 | Y | Chemical name for the analyte. See Global Admin | W |
| 15 | Retention Time | Number | 11 | Y | Retention Time or Range for TIC. For 1 (one) peak, report MM:SS (retention time). For multi-peaks, report MM:SSto-MM:SS (range). Valid range from 0 to 999.99. | F |
| 16 | Matrix ID | Alpha-numeric | 8 | Y | A code for the sample matrix. See Global Admin. | F |
| 17 | QC Type | Char | 6 | Y | The client's code for the type of QC. Valid value equals TIC. | F |
| 18 | Result | Number | 10 | Y | Reportable numeric result for the analyte. | F |
| 19 | Result Units | Char | 10 | Y | Units for result. See Global Admin. | F |
| 20 | Lab Qualifiers | Char | 5 | N | A string of single letter result qualifiers assigned by the lab. Leave blank if no qualifier is applicable. See Global Admin. | F |
| 21 | Qualifier Class | Char | 1 | Y | A code for the type of analyte reported. The code is needed to correctly interpret the Lab Qualifiers. Valid Values Class Description 'I' Inorganic 'O' Organic | F |
| 22 | Filtered/Unfiltered | Char | 1 | N | F = Sample filtered at Lab. U or blank = Sample not filtered at Lab. Liquids only. | F |
| 23 | Reporting Basis Flag | Char | 1 | Y | A Flag indicating sample results have been corrected to a dry weight reporting basis. Y = Corrected, N = Not corrected, processed on an "as received" reporting basis. (all liquids are N) | F |
| 24 | Dilution | Number | 8 | Y | The overall dilution of the sample aliquot. A value of 1 (one) should correspond to nominal conditions for the method. Values less than 1 correspond to concentrations. | F |