

| Section #     | Section Title           | Reference                                 | Comment/Issue  | Response  |
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| Section 2.0   | Emissions               | Version element (p. 4)                    | Since sources have included the letter “v” in this field for the past decade and a half, it might be useful to clarify that this field is now solely numeric; that no “v” is to be reported.   | OK, will add a comment.   |
| Section 2.1   | Summary Value Data      | Overview (p. 5)                           | It would be helpful to clarify reporting for common stacks and pipes, and for LME units served by a common pipe, by including the examples given in the old v2.2 instructions (on pages 61 and 65). Similarly, the explanation for multiple stacks in the old v2.2 instructions on pages 61-62 contains helpful information that should be carried over to the new instructions. Lastly, for the explanation for complex stacks, it would be helpful to retain the sentence from the v2.2 instructions that tell us to “report only one record for each individual unit, regardless of the number of stacks to which the unit discharges its emissions” (p. 62). | OK, will review those original statements and add as appropriate.   |
|               |                         | Summary NOx Emission Rate (p. 8)          | Assuming that this instruction is still valid, include the old v2.2 instruction: “If the recorded NOx emission rate is zero, include these hours in your average only if the operating time for the hour is greater than zero.” If this instruction is not valid, provide advice on handling zero NOx rate hours.  | Instruction is still valid. Will add, although it is redundant information.   |
|               |                         | NOx Emission Rate (pp. 8-9)               | Assuming that this instruction is still valid, include the old v2.2 instructions regarding multi-stack configurations for combined-cycle CTs where NOx monitoring is done on both stacks and Appendix D is used for heat input determination (p. 64).  | OK, will add.   |
|               |                         |   | Assuming that this instruction is still valid, include the old v2.2 instructions regarding the determination of NOx rate for LME units (p.64).   | OK, will add.   |
|               |                         | HIT ... from Hourly Data (p. 8)           | Retain instructions from the old v2.2 document on page 65 that detailed the reporting for LME units using a common pipe and the long-term fuel flow option.  | OK, will add.   |
| Section 2.2   | Daily Test Summary Data | General                                   | Why is section 2.2 titled “Daily Test Summary Data,” when it includes 2.2.1, which represents detailed calibration data?   | Daily Test Summary Data is the parent record for detailed daily cal data. Will look at options for establishing different section numbering that is not based solely on the XML structure.                                    |
|               |                         | Hour, minute elements (p. 12)             | Please clarify that this is the ending time stamp of the test.   | OK, will modify accordingly.  |
| Section 2.2.1 | Daily Calibration Data  | Overview (p. 15)                          | Please clarify that this record is not used to report daily interference tests for stack flow monitoring systems. Why not combine these?   | Only the Daily Test Summary record is needed to report the daily interference tests.  |
|               |                         | OnLine OffLine Indicator element (p. 16)  | We’d prefer using “ON” and “OFF” instead of the Boolean 0/1, for comprehension when reviewing the files. This type of translation is not made in other fields where there are only two choices, as in the following field for Upscale Gas Code, for example.   | While your point is legitimate, it is quite late in the process to be making this type of change. We will consider changing the name of the element to "Online Indicator" so that it will be clearer what is being indicated. |
|               |                         | Zero Injection Date/Hour elements (p. 16) | Please clarify that this is the ending time stamp of the injection.  | OK, will modify accordingly.  |
|               |                         | Zero Measured Value element (p. 17)       | This paragraph includes the sentence “for all monitors except flow, the units (and specificity) should match the hourly reporting.” We’d recommend replacing the word “specificity” with the phrase “decimal precision.” Same comment for the Upscale Measured Value element.  | OK, will make this change.  |

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| Section 2.2.1 | Daily Calibration Data    | Upscale Calibration Error element (p. 18)       | This section instructs sources to when to report the standard error versus the alternative calculation, however, there is no instruction for which computation to report when the test fails both the standard performance specification and the alternative specification. In that same section, there is a paragraph detailing the 2002 changes to the alternative specification tiers; recommend deleting this text due to its age. | Will add this sentence: If the test does not pass either specification, report the result as a percentage of span. Will delete or modify the old paragraph about 2002 changes. |
|               |                           | Upscale Calibration Error element (p. 18)       | The end of this section details how small calibration error results for low-span DP-type flow monitors should be reported. Why is this old logic being preserved? One of the benefits of using an XML structure is that field lengths can be variable; why not increase the size of this field to two decimal places so that the actual calibration error result may be reported?  | Good point. We will revise this field to support two decimal places.   |
|               |                           | Specific Considerations (p. 19)                 | The paragraphs here should be replicated in the Daily Test Summary Data section.   | They only apply to Daily cals, not other daily tests (i.e., interference checks).  |
| Section 2.4   | Hourly Operating Data     | Overview (p. 24)                                | Assuming that this instruction is still valid, include the old v2.2 instructions: "Report ... as follows: (a) for each affected unit, irrespective of the location(s) at which the emissions are measured; and (b) for each common stack (or pipe) or multiple stack location at which emissions are measured."  | OK, will add.  |
|               |                           |   | Include also the examples given in the paragraphs following that text on page 56. If these instructions are no longer true, please clarify how reporting is to be done.  | OK, will add.  |
|               |                           | Date element and Hour element                   | This would read better as: "Report the date/hour corresponding to the data being reported."  | OK, will make this change.   |
|               |                           | Fc Factor                                       | Should this field be left blank if this is a non-operating hour? Should zeros be reported?   | Do not report zero, since that would never be accurate. This field should be left blank for non-operating hours.   |
| Section 2.4.1 | Monitor Hourly Value Data | Description of Data - CO2 Concentration (p. 36) | Subparagraph (a) is titled "Whenever you use a CO2 monitor to determine CO2 mass emissions and/or for heat input rate," however, the second paragraph in this section discusses issues relative to NOx-diluent monitoring systems. Perhaps the subparagraph title should change?   | Disagree. Still applies only if you use CO2 monitor to determine CO2 mass emissions and/or for heat input rate   |
|               |                           | Table 14 (p. 46).                               | Method Code 09 is described as "xx percentile value in lookback period," however, for some parameters, this is more accurately described as "the xx percentile value in the lookback period for the corresponding load bin."   | OK. Will change for MODCs 8, 9 and 10.   |
|               |                           |   | Method Codes 10 and 12 are described as "maximum hourly concentration value in lookback period," however, this code actually represents a minimum value for some O2 or moisture hours.   | OK. Will edit.   |

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| Section 2.4.2    | Derived Hourly Value Data       | Description of Data – Derived NOx Hourly Emission Rate (p. 54) | The first sentence in the second paragraph would be clearer if it read: “...calculate the heat input-weighted hourly emission rate for the unit...”  | OK. Will edit.   |
|                  |                                 | Derived CO <sub>2</sub> Mass Emission Rate (p. 55)             | The first sentence in the first paragraph would be clearer if it read: “...at which CO <sub>2</sub> emissions are monitored using CEMS, including the use of O <sub>2</sub> CEMS, ...”   | OK. Will edit.   |
|                  |                                 | Appendix G Method for Hourly CO <sub>2</sub> (p. 56)           | Does this paragraph not apply to sources using Equation G-1?   | No, because that is reported daily, not hourly.  |
|                  |                                 | LME Methods (p. 57)  | Please confirm that this instruction (report for every operating hour) differs from the old instructions (report for every hour in the calendar quarter).  | Yes, because LME units will report operating data in Hourly Operating Data records.  |
|                  |                                 | (pp. 57 – 61)  | Overall, the discussion of LME reporting for this record seems incomplete. This methodology is not even listed under the heading for “Unadjusted Hourly Value,” and under “Adjusted Hourly Value” there is a two-sentence paragraph with minimal detail. Since LME reporting has changed fairly substantially, much more instruction is needed.  | EPA will be providing additional information similar to some of the Appendices in the current EDR instructions. This will include more guidance about what to report for LME.                                  |
|                  |                                 | Fuel Code element (p. 66)                                      | Include text from the old v2.2 instructions that says: “If records are missing as to which fuel was burned in the hour, report...”   | OK, will add this: If records are missing as to which fuel was burned in the hour, report the fuel with the highest emission factor for this parameter of all of the fuels capable of being burned in the unit |
| Section 2.4.3    | Hourly Fuel Flow Data           | Table 21 (p. 70).  | Why were specific fuel type codes retained for gaseous fuels (in Table 22) but not for oil?  | Oil codes were optional and very few chose to report them  |
|                  |                                 | Table 24 (p. 73).  | There is a blank row in the table; should code 2 be listed there?  | See redline/strikeout version. 2 has been removed and replaced with 9.   |
| Section 2.4.3.1  | Hourly Parameter Fuel Flow Data | Description of Data (p. 77).                                   | Since one record for each parameter, for the given parent fuel code record, will be reported, meaning that for a given hour multiple sets of records are reported (a set for each fuel), how are the parameter values summed/averaged for the hour?  | Use the appropriate formula (e.g., D-12) to calculate total mass or heat input for the hour, then divide by unit or pipe operating time. For NOx emission rate from Appendix E, use formula E-2                |
|                  |                                 | Parameter Value for Fuel (p. 78).                              | Why is this not reported as a “Derived Hourly Value”?  | Because it is specific to the fuel and is best linked directly to the fuel record.   |
|                  |                                 | Table 27 (p. 79).  | Is sample code 1 intended to encompass flow proportional sampling?   | Yes.   |
| Summary Comments |                                 |  | We support many of the changes in the emissions reporting structure: Having a single record type for the summation values that is used by all accumulated parameters, Using one record type for monitored values and a single, different record type for derived hourly values, and Combining the fuel flow system reporting into fewer records. | Good!  |

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| Recommend a different approach |               | 1         | Let's not perpetuate our old thought process of blanking certain elements in specific circumstances. For example, why omit a Monitor Hourly Value Data record for some systems when missing data substitution is applied? It would be more streamlined to always report the monitored value, and let the method codes tell you when that record is valid or not.   | EPA does not plan to change this. There is no MODC to indicate that the reported value is a measured value but should be ignored because the system is OOC.  |
|                                |               | 2         | If the relationship between the Daily Test Summary Data record and the Daily Calibration Data record is one-to-one, why not combine these records?   | Because Daily interference checks only require the few fields in daily test summary. And there may be other daily tests in the future that have different detailed records than the daily cal.   |
|                                |               | 3         | The nomenclature "Hourly Operating Data" for section 2.4 is likely to cause confusion. Most sources are going to expect "operating data" to include parameters that represent information about unit operations: time on line, unit load, etc. Including emissions information under such a heading is not intuitive.  | Hourly Operating Data is the parent record for all the other hourly records. EPA will consider changing the organization of this document to have broader section headers that encompass groups of XML elements.   |
| General                        |               | 1         | Is there a prescribed order for the records in these files? For example, must the calibration records be ordered by date, then grouped by component ID, etc.? Must the Monitor Hourly Value Data records be ordered by date?   | The XML itself only requires that the fields within an element are properly ordered. However, to make it possible to locate data within the emissions file, EPA has imposed a chronological order on the XML export from the ECMPS client tool and will recommend that order for all XML files. EPA will publish this order.   |
|                                |               | 2         | Some records contain tags that are not applicable to every source. For example, in the Monitor Hourly Value Data, there is an element titled "Moisture Basis" that is used only when this record is reported for O2 readings comprising a moisture value. Should this field be reported when parameters other than O2 are being reported? Another example: suppose a source is not subject to ozone season reporting. In the summary value data record, should the "Ozone Season to Date Total" element be left blank? Should the <OzoneSeasonToDateTotal /> (empty) element be present (as it is in the sample output files provided) or should there be no tag at all? Does the absence of tags indicate a null (missing) value whereas the empty element indicates the presence of a value but with empty contents such as an empty string? | See separate reply to John Russell for David Ward's complete answer. All of the data elements for a complex data element are necessary whether the data element includes data or not. For your example, you should include the single tag <OzoneSeasonToDateTotal/> or <OzoneSeasonToDateTotal></OzoneSeasonToDateTotal>. The only case in which you can exclude tags is when the entire complex data element is not included in your XML. All data elements without values are imported as null values. There are no empty strings stored in the database. From a database perspective, it is much clearer to interpret the absence of a value as null rather than an empty string. |