

## **EMISSIONS MONITORING REQUIREMENTS UNDER THE TRANSPORT RULE TRADING PROGRAMS**

**Question:** For electricity generating units (EGUs) that are subject to one or more of the Transport Rule (TR) trading programs, what are the emissions monitoring requirements, and what are the compliance dates?

**Answer:** Affected EGUs subject to the TR NO<sub>x</sub> Annual Trading Program and/or the TR NO<sub>x</sub> Ozone Season Trading Program are required to continuously monitor NO<sub>x</sub> mass emissions and heat input according to 40 CFR Part 75, Subpart H. If a unit is also subject to the TR Group 1 or Group 2 SO<sub>2</sub> Trading Program, SO<sub>2</sub> mass emissions must be monitored in accordance with 40 CFR 75.11. The “compliance dates” for the TR programs, i.e., the dates by which Part 75-compliant monitoring methodologies for SO<sub>2</sub> and/or NO<sub>x</sub> mass emissions and heat input must be in place (including certification of all required continuous monitoring systems) are as follows:

- January 1, 2015<sup>1</sup>, for an “existing” unit (i.e., a unit that commenced commercial operation prior to July 1, 2014) located in a TR State covered by the TR SO<sub>2</sub> and NO<sub>x</sub> annual programs. Note that some of these States also are covered by the TR NO<sub>x</sub> ozone season program; or
- May 1, 2015<sup>2</sup>, for an “existing” unit (i.e., a unit that commenced commercial operation prior to July 1, 2014) located in a TR State covered by the TR NO<sub>x</sub> ozone season program and not by the TR annual programs.

The specific requirements that must be met by the above dates depend principally on two things:

1. The Part 75 monitoring methodologies selected; and
2. Whether or not the affected unit already has monitoring equipment in place.

The following paragraphs set forth the emissions monitoring requirements for TR NO<sub>x</sub> Annual units, TR SO<sub>2</sub> Group 1 units, TR SO<sub>2</sub> Group 2 units, and TR NO<sub>x</sub> Ozone Season units that are:

- Subject to the Acid Rain Program (ARP) and/or
- Subject to the Clean Air Interstate Rule (CAIR); or
- Not in ARP or CAIR.

If you have any questions about these requirements, please address them to the Emissions

---

<sup>1</sup> For a “new” unit that commences commercial operation on or after July 1, 2014 the compliance deadline is the later of: (a) January 1, 2015; or (b) 180 calendar days after the date on which the unit commences commercial operation (see 40 CFR 97.430(b)(2), 97.630(b)(2), and 97.730(b)(2)).

<sup>2</sup> For a “new” unit (i.e., a unit that commences commercial operation on or after July 1, 2014) that reports year-round, the compliance deadline is the later of: (a) May 1, 2015; or (b) 180 calendar days after date on which the unit commences commercial operation (see 40 CFR 97.530(b)(2)). For a “new” unit that reports on an ozone season-only basis, the compliance deadline is 180 calendar days after date on which the unit commences commercial operation unless “day 180” is not in the ozone season---in that case, the compliance deadline is May 1 immediately following “day 180” (see 40 CFR 97.530(b)(3)).

Monitoring contact person for your EPA Region<sup>3</sup>.

**Important Note:**

Before any required monitoring plan or certification application submittals are made concerning a TR NO<sub>x</sub> Annual unit, TR SO<sub>2</sub> Group 1 unit, TR SO<sub>2</sub> Group 2 unit, or TR NO<sub>x</sub> Ozone Season unit, the owner or operator must select and register a designated representative (DR) for for TR for the unit, using the Clean Air Markets Division (CAMD) Business System. If the affected unit is in both the ARP and one or more TR programs, the same person must be the DR for all of these programs (see the definition of “designated representative” in 40 CFR 97.402, 97.502, 97.602, and 97.702). The owner or operator should contact Laurel DeSantis, at [desantis.laurel@epa.gov](mailto:desantis.laurel@epa.gov), or at (202) 343-9191 if there are any questions about designated representatives.

---

<sup>3</sup> See, <http://www.epa.gov/airmarkets/emissions/cem-contact.html>

## **TR UNITS---CATEGORY 1 (Units in the Acid Rain Program)**

All EGUs that are subject to the Acid Rain Program (ARP) are required to continuously monitor and report SO<sub>2</sub> mass emissions according to 40 CFR 75.11, in addition to monitoring and reporting NO<sub>x</sub> emission rate (lb/mmBtu), CO<sub>2</sub> mass emissions, and heat input. The year-round SO<sub>2</sub> mass emissions monitoring and reporting requirements of the Acid Rain Program satisfy the requirements of the TR SO<sub>2</sub> programs. Therefore, for ARP units that are subject to either the TR SO<sub>2</sub> Group 1 or Group 2 Trading Program, no additional monitor certifications, monitoring plan revisions, or QA tests are required to comply with those programs.

However, Acid Rain Program units have not been required to monitor and report NO<sub>x</sub> mass emissions, except for certain units in the eastern United States and midwest that are subject to CAIR. In view of this, ARP units that are affected units under TR must meet the following NO<sub>x</sub> mass emissions monitoring requirements by **January 1, 2015**:

### **1. ARP Units in the CAIR NO<sub>x</sub> Program(s)**

For Acid Rain units currently reporting NO<sub>x</sub> mass emissions and heat input under either or both of the CAIR NO<sub>x</sub> programs, no additional monitoring system certifications, monitoring plan revisions, or quality assurance (QA) tests are required to comply with the applicable TR NO<sub>x</sub> Program(s). Owners or operators of these units should simply continue to operate and maintain their monitoring systems in accordance with Part 75 and continue to report NO<sub>x</sub> mass emissions and heat input data on a year-round basis.

### **2. ARP Units not in the CAIR NO<sub>x</sub> Program(s)**

For Acid Rain Program units that are not currently reporting NO<sub>x</sub> mass emissions under the CAIR NO<sub>x</sub> Annual Trading Program or the CAIR NO<sub>x</sub> Ozone Season Trading Program, the owner or operator must:

- Select and implement a NO<sub>x</sub> mass emissions monitoring methodology that meets the requirements of Part 75, Subpart H (see **Table 1**, below);
- Define the selected NO<sub>x</sub> mass emissions monitoring methodology in the electronic monitoring plan, with a Begin Date of January 1, 2015;
- Add a suitable NO<sub>x</sub> mass emissions formula<sup>4</sup> to the monitoring plan with a Begin Date of January 1, 2015, and perform formula verification;
- Work with the data acquisition and handling system (DAHS) vendor, as necessary<sup>5</sup>, to ensure that an hourly NO<sub>x</sub> mass emission rate data stream is generated within the DAHS; and
- Begin collecting hourly, quarterly, and year-to-date NO<sub>x</sub> mass emissions data on January 1, 2015. Report these data to EPA, beginning with the 1<sup>st</sup> quarter 2015 electronic data report.

**Recommendation:** Since the vast majority of ARP units continuously monitor NO<sub>x</sub> emission rate

---

<sup>4</sup> Note that monitoring plan formulas are not required for the low mass emissions (LME) methodology in 40 CFR 75.19.

<sup>5</sup> For the LME methodology, a DAHS is not required.

(lb/MMBtu) and heat input rate (MMBtu/hr) under Part 75<sup>6</sup>, EPA recommends, for simplicity, that the hourly NO<sub>x</sub> mass emission rate (lb/hr) be determined as the product of NO<sub>x</sub> emission rate and heat input rate whenever possible (see Case # 1 under Coal-fired Units and Cases # 1, 2 and 4 under Gas or Oil-fired Units in **Table 1**, below), and then converted to NO<sub>x</sub> mass emissions (lb) using the unit operating time.<sup>7</sup> When this calculation method is selected, no additional monitoring system certifications are required for the TR NO<sub>x</sub> program(s), provided that all of the Part 75 monitoring systems needed to monitor and report NO<sub>x</sub> emission rate and heat input rate have been previously-certified and are continuing to meet the on-going QA/QC requirements of Part 75, going into the 2015 compliance year.

However, note that Subpart H also allows the owner or operator to determine NO<sub>x</sub> mass emissions as the product of NO<sub>x</sub> concentration times stack gas flow rate (see Case # 2 under Coal-fired Units and Case # 3 under Oil/Gas-fired Units in **Table 1**, below). If this option is selected, the owner or operator must:

- Define a separate NO<sub>x</sub> concentration (NOXC) monitoring system in the electronic monitoring plan, assigning it a unique system ID number;
- Define the appropriate NO<sub>x</sub> mass emissions formula in the electronic monitoring plan with a Begin Date of January 1, 2015, and verify the formula;
- Demonstrate that the NO<sub>x</sub> concentration monitoring system meets the certification requirements of Part 75, i.e., that the system has passed a 7-day calibration error test, a cycle time test, a linearity check, a relative accuracy test audit (RATA), and a bias test. Historical data from certification and QA testing of the NO<sub>x</sub> component of a NO<sub>x</sub>-diluent monitoring system may be used to meet these requirements;
- Submit a certification application for the NO<sub>x</sub> concentration monitoring system. If additional testing is required to certify the system, submit the application within 45 days after completing all required certification tests (see **Table 2**, below). If the certification is based entirely on historical data, ensure that the application is submitted prior to January 1, 2015;
- Work with the data acquisition and handling system (DAHS) vendor, as necessary, to ensure that an hourly NO<sub>x</sub> mass emissions data stream is generated by the DAHS and that missing data substitution for NO<sub>x</sub> concentration is performed correctly;
- Begin reporting hourly, quarterly, and year-to-date NO<sub>x</sub> mass emissions data on January 1, 2015; and
- Report the results of all required on-going QA tests of the NO<sub>x</sub> concentration monitoring system.

---

<sup>6</sup> Units using the LME methodology do not continuously monitor and report these parameters.

<sup>7</sup> The mathematics for LME units is slightly different; a default NO<sub>x</sub> emission rate (lb/MMBtu) is multiplied by the apportioned hourly heat input (MMBtu) to obtain NO<sub>x</sub> mass emissions (lb) directly.

**Table 1: Emissions Monitoring and Heat Input Methodologies  
for the TR Trading Programs**

Unit Type(s)	Case	SO <sub>2</sub> or NO <sub>x</sub> Mass Emissions Monitoring Methodology	Required Monitoring for the TR Programs**
Coal-fired or Unit that burns other types of solid fuel(s)	1	NO <sub>x</sub> Emission Rate x Heat Input Rate	NO <sub>x</sub> -diluent CEMS for NO <sub>x</sub> emission rate (lb/MMBtu)  <u>and</u>  Stack gas flow rate and diluent gas (CO <sub>2</sub> or O <sub>2</sub> ) monitors for heat input rate
	2	SO <sub>2</sub> or NO <sub>x</sub> Concentration x Stack Gas Flow Rate	SO <sub>2</sub> or NO <sub>x</sub> concentration CEMS and stack gas flow rate monitor for SO <sub>2</sub> or NO <sub>x</sub> mass  <u>and</u>  Stack gas flow rate and diluent gas (CO <sub>2</sub> or O <sub>2</sub> ) monitors for heat input rate
Gas or Oil-fired Unit	1	NO <sub>x</sub> Emission Rate x Heat Input Rate	NO <sub>x</sub> -diluent CEMS for NO <sub>x</sub> emission rate  <u>and</u>  Stack gas flow rate and diluent gas (CO <sub>2</sub> or O <sub>2</sub> ) monitors for heat input rate
	2	SO <sub>2</sub> or NO <sub>x</sub> Emission Rate x Heat Input Rate	NO <sub>x</sub> -diluent CEMS for NO <sub>x</sub> emission rate  <u>and</u>  Part 75, Appendix D fuel flow meter system for SO <sub>2</sub> mass and heat input rate
	3	SO <sub>2</sub> or NO <sub>x</sub> Concentration x Stack Gas Flow Rate	SO <sub>2</sub> or NO <sub>x</sub> concentration CEMS and stack gas flow rate monitor for SO <sub>2</sub> or NO <sub>x</sub> mass  <u>and</u>  Stack gas flow rate and diluent gas (CO <sub>2</sub> or O <sub>2</sub> ) monitors for heat input rate

Gas or Oil-fired Unit (cont'd)	4	NO <sub>x</sub> Emission Rate x Heat Input Rate (peaking units, only)	Part 75, Appendix E correlation curve for NO <sub>x</sub> emission rate  <u>and</u>  Part 75, Appendix D fuel flow meter system for SO <sub>2</sub> mass and heat input rate
Gas or Oil-fired Low Mass Emissions Unit (§75.19)	1	NO <sub>x</sub> Emission Rate x Heat Input	For NO <sub>s</sub> mass emissions: <ul style="list-style-type: none"> <li>• Either generic default NO<sub>x</sub> emission rate from Table LM-2 or fuel-and unit-specific NO<sub>x</sub> emission rate from emission testing or historical CEM data;</li> </ul> <u>and</u> <ul style="list-style-type: none"> <li>• Either maximum rated heat input for each operating hour or apportioned hourly heat input from long-term fuel measurements</li> </ul>
	2	SO <sub>2</sub> Emission Rate x Heat Input	For SO <sub>2</sub> mass emissions: <ul style="list-style-type: none"> <li>• Either generic default SO<sub>2</sub> emission rate from Table LM-3 or, for fuel oil, a site-specific SO<sub>2</sub> emission rate based on a fuel sulfur content limit in the unit's permit;</li> </ul> <u>and</u> <ul style="list-style-type: none"> <li>• Either maximum rated heat input for each operating hour or apportioned hourly heat input from long-term fuel measurements</li> </ul>

\*\* Note that corrections for stack gas moisture content are sometimes necessary. If moisture correction is required, you must either install and certify a continuous moisture monitoring system or, for certain fuel types, use a fuel-specific moisture default value (see 40 CFR 75.11(b) and 75.12(b)).

## **TR UNITS---CATEGORY 2 (Non-Acid Rain EGUs in CAIR)**

- (1) For an EGU that is not Acid Rain-affected, but is currently reporting SO<sub>2</sub> mass emissions and/or NO<sub>x</sub> mass emissions and heat input under CAIR, no monitoring plan changes are required and no additional monitoring requirements must be met to comply with TR, provided that:
- The EGU is required to monitor the same parameters under TR as under CAIR (i.e., SO<sub>2</sub> and/or NO<sub>x</sub> and heat input); and
  - The applicable program(s) (i.e., NO<sub>x</sub> annual, SO<sub>2</sub> annual, and/or NO<sub>x</sub> ozone season) are the same under TR as under CAIR, for the State in which the EGU is located.
- (2) For a non-Acid Rain EGU that currently reports NO<sub>x</sub> mass emissions and heat input on an ozone-season-only basis under CAIR and is located in a State covered by the TR NO<sub>x</sub> and SO<sub>2</sub> annual programs under TR, the owner or operator must:
- Switch to year-round reporting of NO<sub>x</sub> mass emissions and heat input, by January 1, 2015;
  - Discontinue using the ozone season-only QA procedures in 40 CFR 75.74(c) and implement the year-round QA provisions in 40 CFR Part 75, Appendix B, if the unit uses CEMS to monitor NO<sub>x</sub> mass emissions and heat input under CAIR and will continue to use CEMS to comply with TR.
  - Ensure that a Part 75 SO<sub>2</sub> mass emissions monitoring methodology is in place by January 1, 2015 (see **Table 1**, above);
  - Define the selected SO<sub>2</sub> monitoring methodology in the electronic monitoring plan (including essential information on the required monitoring systems), with a Begin Date of January 1, 2015;
  - Add a suitable SO<sub>2</sub> mass emissions formula to the monitoring plan<sup>8</sup>, with a Begin Date of January 1, 2015;
  - Perform any necessary certification testing of the monitoring systems that will be used to quantify SO<sub>2</sub> mass emissions<sup>9</sup>;
  - Submit a certification application, as described in **Table 2 or Table 3**, below (as applicable);
  - Work with the DAHS vendor, as necessary, to: (a) ensure that an hourly SO<sub>2</sub> mass emissions data stream is generated by the DAHS; (b) verify the SO<sub>2</sub> mass emissions formula; and (c) ensure that missing data substitution is performed correctly.<sup>10</sup>
  - Begin collecting hourly, quarterly, and year-to-date SO<sub>2</sub> mass emissions data on January 1, 2015, and report these data year-round, starting with the 1<sup>st</sup> quarter 2015 electronic data report.
- (3) For a non-Acid Rain EGU that is located in a State covered by the CAIR SO<sub>2</sub> and NO<sub>x</sub>

---

<sup>8</sup> Monitoring plan formulas are not required for LME units---see p. 11.

<sup>9</sup> Certification testing is not required for LME units.

<sup>10</sup> For LME units, a DAHS is not required and missing data substitution is not performed.

annual programs, but is only covered by the NO<sub>x</sub> ozone season program under TR, there are two possible ways to comply with TR:

- Discontinue SO<sub>2</sub> mass emissions reporting as of January 1, 2015 and continue reporting NO<sub>x</sub> mass emissions year-round. In the electronic monitoring plan, deactivate all records associated with the SO<sub>2</sub> emissions methodology, by adding “End Dates”; or
- Discontinue SO<sub>2</sub> mass emissions reporting as of January 1, 2015 and switch to ozone-season-only reporting for NO<sub>x</sub> mass emissions, starting on May 1, 2015, if allowed by the State. In the electronic monitoring plan, deactivate all records associated with the SO<sub>2</sub> emissions methodology, by adding “End Dates”. If this option is chosen and CEMS are used to demonstrate compliance, you must implement the ozone-season-only QA provisions of 40 CFR 75.74(c).



### **TR UNITS---CATEGORY 3 (EGUs Not in ARP or CAIR)**

Many affected EGUs are not in either the Acid Rain Program or CAIR. The vast majority, if not all, of these are EGUs that are located in TR States that are outside the geographic region of CAIR, and are exempted from the Acid Rain Program under 40 CFR 72.6. The ARP-exempt units include:

- Simple-cycle turbines that commenced commercial operation before November 15, 1990;
- Cogeneration facilities that meet certain requirements concerning electricity sales;
- Qualifying facilities with certain power purchase commitments; and
- Independent power producers with certain power purchase commitments

By the applicable TR compliance date (i.e., January 1, 2015 or May 1, 2015), each of these affected units must have in place Part 75-compliant methodologies for NO<sub>x</sub> mass emissions, heat input, and (if applicable) SO<sub>2</sub> mass emissions.

Some of these affected EGUs already have installed continuous monitoring equipment, either to meet the requirements of 40 CFR Part 60 (NSPS) or a State regulation, or to satisfy conditions in their operating permits. In some instances, the existing monitors may be able to meet Part 75 performance specifications, while in other cases, new monitors will have to be purchased and installed. However, even if a unit's existing monitoring systems are able to meet Part 75 performance criteria, a data acquisition and handling systems (DAHS) upgrade may be necessary to meet Part 75 recordkeeping and reporting requirements.

#### **TR Compliance Requirements**

The specific TR compliance requirements for affected EGUs in Category 3 must be determined case-by-case, as follows:

- First, a designated representative for TR must be selected and assigned to each facility ("source") that includes one or more affected TR units. The designated representative must be registered with the CAMD Business System.
- Then, NO<sub>x</sub> mass emissions, heat input, and (if applicable) SO<sub>2</sub> mass emissions monitoring methodologies that meet Part 75 requirements must be selected and in place by the applicable compliance date (i.e., January 1, 2015 or May 1, 2015). Acceptable methodologies are listed in **Table 1**, above. If the low mass emissions (LME) methodology in 40 CFR 75.19 is selected, see pp. 11-12, below, for a detailed discussion of LME requirements.
- Submit an initial monitoring plan for the affected EGU(s), in accordance with **Table 2 or Table 3**, below (as applicable);
- Define the selected monitoring methodologies in the electronic portion of the monitoring plan (including essential information on the required monitoring systems), with the appropriate Begin Date (either January 1, 2015 or May 1, 2015, as applicable);

- Add suitable emissions and heat input formulas to the electronic monitoring plan, with the appropriate Begin Date (either January 1, 2015 or May 1, 2015, as applicable)<sup>11</sup>;
- Perform any necessary certification testing of the monitoring systems that will be used to quantify SO<sub>2</sub> and/or NO<sub>x</sub> mass emissions and heat input.<sup>12</sup>
- Submit a certification application, as described in **Table 2 or Table 3**, below (as applicable);
- Work with the DAHS vendor, as necessary, to: (a) ensure that hourly SO<sub>2</sub> and/or NO<sub>x</sub> mass emissions and heat input rate data streams are generated by the DAHS; (b) verify the formulas; and (c) ensure that missing data substitution is performed correctly.<sup>13</sup>
- Begin reporting NO<sub>x</sub> mass emissions, heat input, and (if applicable) SO<sub>2</sub> mass emissions data on either: January 1, 2015 (for year-round reporters); or May 1, 2015 (for ozone season-only reporters).
- If a unit in Category 3 is subject only to the TR NO<sub>x</sub> Ozone Season Trading Program and elects to report NO<sub>x</sub> mass emissions and heat input year-round, 40 CFR 97.534(d)(1)(i) states that mandatory reporting begins with the calendar quarter covering May 1, 2015 through June 30, 2015. However, to facilitate implementation, such a unit may opt to begin year-round reporting on January 1, 2015.

---

<sup>11</sup> Monitoring plan formulas are not required for LME units---see p. 11.

<sup>12</sup> Certification testing is not required for LME units.

<sup>13</sup> For LME units, a DAHS is not required and missing data substitution is not performed.

## LOW MASS EMISSIONS UNITS (40 CFR 75.19)

Section 75.19 of Part 75 provides an alternative to continuous emission monitoring for qualifying low mass emissions (LME) units. To qualify for LME status, a TR affected EGU must burn only gaseous fuel and/or fuel oil, and its emissions must be:

- < 100 tons of NO<sub>x</sub> per year and ≤ 50 tons of NO<sub>x</sub> in the ozone season, if the unit is subject to both the TR NO<sub>x</sub> annual and ozone season programs; or
- < 100 tons of NO<sub>x</sub> per year and ≤ 50 tons of NO<sub>x</sub> in the ozone season, if the unit is subject only to the TR NO<sub>x</sub> ozone season program and reports NO<sub>x</sub> mass emissions and heat input data year-round; or
- ≤ 50 tons of NO<sub>x</sub> in the ozone season, if the unit is subject only to the TR NO<sub>x</sub> ozone season program and reports NO<sub>x</sub> mass emissions and heat input data on an ozone-season-only basis; and
- ≤ 25 tons of SO<sub>2</sub> per year, if the unit is also subject to the TR SO<sub>2</sub> Group 1 or Group 2 Trading Program.

Note that if the LME methodology is selected for one parameter (e.g., NO<sub>x</sub>), it must be used for all other parameters under all of the applicable programs that require the use of Part 75 monitoring. You may not “mix and match” LME with other Part 75 monitoring methodologies. For example, if an EGU that qualifies for LME status is in the Acid Rain Program and is also a TR NO<sub>x</sub> Annual unit and a TR SO<sub>2</sub> Group 1 unit, the LME methodology must be used for all parameters that are required to be monitored and reported under the ARP and TR programs (i.e., for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and heat input).

The LME methodology allows the owner or operator to use conservative default SO<sub>2</sub> and NO<sub>x</sub> emission rates and heat input values to estimate emissions, in lieu of using continuous monitoring systems. The default SO<sub>2</sub> and NO<sub>x</sub> emission rates may either be generic values obtained from Tables LM-1 and LM-2 in 40 CFR 75.19 or may be site-specific. For NO<sub>x</sub>, you may determine fuel-and-unit-specific emission rates either by performing emission testing according to 40 CFR Part 75, Appendix E (with minor modifications) or by using historical CEM data, if available. For fuel oil, you may determine a site-specific SO emission rate if there is a federally-enforceable permit condition in the unit’s operating permit limiting the sulfur content of the oil.

To quantify unit heat input, you may either report the maximum rated hourly heat input for each operating hour or use long-term fuel flow. The long-term fuel flow method consists of apportioning the total quarterly heat input to each unit operating hour, based on the hourly unit load. The total quarterly heat input is determined using the gross calorific value (GCV) of the fuel together with estimates of fuel usage, obtained either from billing records (if available), by direct measurements made with certified fuel flow meters, or by making oil tank drop measurements.

Part 75 requires the owner or operator to submit a certification application for each LME unit, at least 45 days prior to the date on which the methodology begins to be used (see **Table 3**, below). Though classified as a certification “application”, it is more precisely a “declaration” that the unit qualifies for LME status. The application must contain a complete electronic monitoring plan and sufficient evidence that the unit qualifies to use the methodology. When constructing the

electronic monitoring plan for a newly-affected LME unit in Category 3, above, report the “Begin Date” as either January 1, 2015 (for year-round reporters) or May 1, 2015 (for ozone season-only reporters) in each applicable monitoring plan record that has a “Begin Date” field;

For EGUs that currently use the LME methodology under the Acid Rain Program and/or CAIR and plan to use it under TR, see Categories 1 and 2, above for the compliance requirements. For TR units that qualify for LME status, but are not in the Acid Rain Program or in CAIR, the declaration of qualification and intent to use the LME monitoring provisions under TR must be submitted at least 45 days prior to the applicable compliance date for TR. Therefore, the LME application for these units is due by November 15, 2014 for year-round reporters and by March 15, 2015 for ozone-season-only reporters.

The LME methodology is unique in that it does not require a Part 75-compliant DAHS. The required electronic reports can be generated using EPA’s “Emissions Collection and Monitoring Plan System” (ECMPS) software, which is available on the CAMD web site. ECMPS has a special module capable of generating electronic quarterly reports for LME units. A free tutorial explaining how to use the LME module is also available on the web.

For further discussion of the LME methodology, see Section 6 of the “Plain English Guide to the Part 75 Rule”, which is available on the CAMD web site.

## PART 75 CERTIFICATION PROCESSES

### (1) Administrative

The Part 75 administrative processes for submitting initial monitoring plans, revised monitoring plans, certification test notifications, and certification applications are specified in **Tables 2 and 3**, below. **Table 2** is a summary of the administrative process for initial certifications, for all monitoring methodologies except for LME. **Table 3** describes the LME certification process. If you have questions about any of these procedures, please address them to the Emissions Monitoring contact person for your EPA Region (see <http://www.epa.gov/airmarkets/emissions/cem-contact.html>).

The designated representative (or his delegated agents) for TR must submit electronic monitoring plans and the electronic portions of certification applications to CAMD. These submittals must be in XML format using the ECMPS software, which can be downloaded from the CAMD website at:

<http://www.epa.gov/airmarkets/business/report-emissions.html>

The designated representative also must submit the hardcopy portions of monitoring plans and certification applications to the appropriate State/Local Agency and to the EPA Regional Office.

### (2) Procedural

If any monitoring system certification testing is required to comply with TR:

- All required certification tests must be completed by the applicable compliance date (i.e., January 1, 2015 or May 1, 2015).
- If a particular monitoring system has not been certified by the compliance date, then, beginning with the first unit operating hour after the compliance date and continuing until all required certification tests have been successfully completed, conservatively high (“maximum potential”) substitute data values must be reported for the parameter measured by the uncertified monitoring system.
- A data acquisition and handling system (DAHS), capable of accurately reading and electronically recording signals from the monitoring systems, performing Part 75 missing data substitution, and generating electronic quarterly reports in the required XML format, should be installed and operational before certification testing commences. However, if this is not possible, certification testing may begin, provided that the data from the monitoring systems can be captured and stored electronically (e.g., using a data logger) and later loaded into the DAHS.
- For CEMS certifications, EPA recommends that the required monitor calibration tests (i.e., linearity checks, cycle time tests and 7-day calibration error tests) be performed prior to the relative accuracy test audit (RATA).

- Monitoring systems are considered to be “provisionally certified” as of the date and hour at which all required certification tests, including the DAHS verification, have been successfully completed.
- A certification application is required within 45 days of completing all certification tests.
- Then, following initial certification:
  - ✓ The date and hour of provisional certification is the point at which the CEMS data from a monitoring system are considered to be quality-assured.
  - ✓ For each certified CEMS, on-going quality assurance tests are required, either at the frequency specified in sections 40 CFR Part 75, Appendix B, sections 2.1, 2.2 , and 2.3 (for year-round reporters) or in 40 CFR 75.74(c) (for ozone-season-only reporters).
  - ✓ On-going QA tests of certified fuel flow meters are required, at the frequency specified in 40 CFR Part 75, Appendix D, section 2.1.6. For ozone season-only reporters, the provisions of 40 CFR 75.74(c)(3)(v) and (c)(4) also apply.
  - ✓ If heat input and/or NO<sub>x</sub> emissions are monitored using CEMS and reported on an ozone-season-only basis, only quality-assured data recorded during the ozone season are to be used to calculate the percent monitor data availability (PMA) and to determine the appropriate substitute data values during missing data periods (see 40 CFR 75.74(c)(7)).

## **ADDITIONAL INFORMATION**

For additional information about the Part 75 monitoring and reporting requirements, see the “Plain English Guide to the Part 75 Rule”, available on the CAMD web site.

**Table 2: Initial Certification\*\*\***

Submittal Requirement	Part 97 and 75 Rule Citation(s)	Contents of Submittal	Submit to Whom?	Submit When?	Comments
Certification Test Notification	§97.433 and parallel sections®	Written notification of date(s) for initial certification testing	CAMD, EPA Region, State	At least 21 days prior to commencement of certification testing	<p>Test date may be rescheduled if notice is provided <math>\geq 7</math> days before the earlier of original or new date.</p> <p>Tests may be repeated without notification.</p> <p>Notification is not required for Part 75, Appendix D fuel flow meter accuracy testing.</p>
	§75.61 (a)(1)(i), §75.20 (g)(2)				
Initial Monitoring Plan	§97.434(b) and parallel sections®	Hardcopy and electronic monitoring plan in format "specified by the Administrator"	Hardcopy portion to EPA Region and State Electronic portion to CAMD	At least 21 days prior to commencement of certification testing	Electronic transmittal of information in hardcopy portion is acceptable (e.g., PDF documents).
	§75.53(g) & (h), §75.62, §75.73 (e)				
Certification Application	§97.434(c), §97.431(d)(3)(ii), and parallel sections®	Monitoring plan updates and certification test data	<p>Hard copy test reports to EPA Region, State</p> <p>Electronic test results and "QA Certification Event Record" to CAMD</p> <p>Electronic monitoring plan changes (if any) to CAMD</p>	$\leq 45$ days after completion of certification testing	<p>Submit the "QA Cert Event Data Record" for initial certification of CEMS, PEMS, and stack flow monitoring systems when submitting electronic test summary data.</p> <p>For Part 75, Subpart E alternative monitoring systems, submit hard copy test results to CAMD.</p> <p>For other certifications, submit hardcopy test results to CAMD only upon request .</p>
	§75.62, §75.63		<p>Hardcopy monitoring plan changes (if any) to EPA Region, State</p>		

Notice of Incomplete Application	§97.431(d)(3)(iv) (B) and parallel sections <sup>®</sup>	Notification that the certification application is incomplete	Administrator or permitting authority (as applicable) provides notice to owner or operator.	If application is found to be incomplete	A reasonable time is provided to submit the missing information.  Non-compliance with this notice may result in disapproval of application.
	§ 75.20 (a)(4)(ii)				
Notice of Approval or Disapproval	§97.431(d)(3)(iv)(A), §97.431(d)(3)(iv)(C), and parallel sections <sup>®</sup>	Written notice of approval or disapproval of certification application	Administrator or permitting authority (as applicable) provides notice to owner or operator.	≤ 120 days after receipt of a complete certification application  If a notice of approval or disapproval is not issued within the 120 day review period, the monitoring systems are considered to be "certified by default"	120 day clock starts upon receipt of a complete application.
	§ 75.20 (a)(4)				

\*\*\* Excluding LME units

<sup>®</sup> The Part 97 citations shown are for the TR NO<sub>x</sub> Annual Trading Program rule. "Parallel" sections are the corresponding sections in the TR NO<sub>x</sub> Ozone Season, TR SO<sub>2</sub> Group 1, and TR SO<sub>2</sub> Group 2 Trading Programs. For example, the parallel sections to §97.431(d)(3)(iv)(B) are §97.531(d)(3)(iv)(B), §97.631(d)(3)(iv)(B), and §97.731(d)(3)(iv)(B) .



**Table 3: Initial Certification (LME Units)**

Submittal Requirement	Rule Citation(s)	Contents of Submittal	Submit to Whom?	Submit When?	Comments
Certification Application	§ 75.19 (a)(1) § 75.19(a)(2) § 75.63 (a)(1)(ii)	<p>Complete monitoring plan for the unit (hardcopy and electronic)</p> <p>Demonstration that the unit qualifies as an LME unit (hard copy and electronic)</p> <p>Description of the calculation methodology that will be used to ensure that the unit maintains its LME status (hardcopy)</p> <p>The projected date on which the LME methodology will first be used (hardcopy and electronic)</p> <p>LME NO<sub>x</sub> test results, if any (hardcopy and electronic)</p>	<p>The electronic information is sent to CAMD, using the ECMPS Client Tool, and the hardcopy information goes to the EPA Region and State.</p>	<p>At least 45 days prior to the date on which the methodology will first be used</p>	<p>An electronic "Monitoring Qual LME Data " record is required.</p> <p>More information about the LME methodology is available in the "<a href="#">Plain English Guide to the Part 75 Rule.</a>"</p>