

# **Subpart W: Best Available Monitoring Methods**

# **Greenhouse Gas Reporting Program March 2012**

EPA has received numerous questions and requests for clarification regarding the provisions related to requesting use of best available monitoring methods (BAMM) under subpart W: Petroleum and Natural Gas System. This fact sheet is designed to outline the general BAMM requirements and address some of the most frequently asked questions.

# For which sources and for which time period may BAMM be used under subpart W?

Emissions Sources	Is Automatic BAMM Available in 2011?	May I use BAMM beyond December 31, 2011?
Well-related emissions 98.234(f)(2)		
Gas well venting during well completions and well workovers with hydraulic fracturing (§ 98.233(g))  Well testing venting and flaring (§ 98.233(l))  Specified Activity Data 98.234(f)(3)  Cumulative hours of venting, days, or times of operation in § 98.233(e), (f), (g), (h), (l), (o), (p), (q), and (r).  Number of blowdowns, completions, workovers, or other events in § 98.233(f), (g), (h), (i), and (w).  Cumulative volume produced, volume input or output, or volume of fuel used in paragraphs § 98.233(d), (e), (j), (k), (l), (m), (n), (x), (y), and (z).  Leak Detection and Measurement 98.234(f)(4)  Reciprocating compressor rod packing venting in onshore natural gas processing, onshore natural gas transmission compression, underground natural gas storage, LNG storage, and LNG import and export equipment as specified in § 98.232(d)(1), (e)(1), (f)(1), (g)(1), and (h)(1).  Centrifugal compressor wet seal oil degassing venting in onshore natural gas processing, onshore natural gas transmission compression, underground natural gas storage, LNG storage, and LNG import and export equipment as specified in § 98.232(d)(2), (e)(2), (f)(2), (g)(2), and (h)(2).  Acid gas removal vent stacks in onshore petroleum and natural gas production and onshore natural gas processing as specified in § 98.232(c)(17) and (d)(6) <sup>1</sup> .  Equipment leak emissions from valves, connectors, open ended lines, pressure relief valves, block valves, control valves, compressor blowdown valves, orifice meters, other meters, regulators, vapor recovery compressors, centrifugal compressor dry seals, and/or other equipment leaks in onshore natural gas processing, onshore natural gas transmission compression, underground natural gas storage, LNG storage, LNG import and export equipment, and natural gas transmission compression, underground natural gas storage, LNG storage, LNG import and export equipment, and natural gas distribution as specified in § 98.232(d)(7), (e)(7),	Yes.  Jan 1- Dec 31, 2011. No requests for approvals to use BAMM during this time period are required.	Yes.  To use BAMM for any time period in 2012, a Notice of Intent (NOI) must be submitted by December 31, 2011 followed by a BAMM request consistent with 40 CFR 98.234(f)(8)(ii) by March 30, 2012. If both of these submissions are made by the above-mentioned deadlines, BAMM will be automatically granted thru June 30, 2012, regardless of whether the BAMM request is ultimately approved by EPA. To use BAMM beyond June 30, 2012, EPA must approve the BAMM request.  To use BAMM beyond December 31, 2012, you must submit a BAMM request by September 30 of the year prior to the reporting year for which BAMM is being sought.

<sup>&</sup>lt;sup>1</sup> Please note that although BAMM is available for acid gas removal vent stacks, the need for BAMM for this emissions source may be limited, because in the absence of a continuous emissions monitoring system or a vent stack meter that is already in place, reporters may use engineering estimates to estimate emissions.

March 2012 1 40 CFR 98

(f)(5), (g)(3), (h)(4), and (i)(1).
Condensate (oil and/or water) storage tanks in onshore
natural gas transmission compression as specified
in § 98.232(e)(3).
Other sources not listed above. 98.234(f)(5)(iv)

## Who must submit the BAMM request?

Each NOI and BAMM request must be submitted by the designated representative, or an identified alternate designated representative or agent.

## How do I submit my NOI and BAMM request under 40 CFR subpart W?

You must submit the NOI and BAMM through the electronic GHG Reporting Tool (e-GGRT).

Please note, in order to submit your NOI and BAMM through e-GGRT, as required, you must register with e-GGRT and identify at least a designated representative to submit the notification(s). Facilities that will be reporting under subpart W and which also reported in 2011 are already registered with e-GGRT. For facilities reporting for the first time in 2012, you must register with e-GGRT prior to submitting the NOI. Please be aware that the registration process involves multiple steps and can take several days, so please plan accordingly.

You will find instructions for registering with e-GGRT at <a href="http://www.ccdsupport.com/confluence/display/help/Registration+Instructions">http://www.ccdsupport.com/confluence/display/help/Registration+Instructions</a>. In addition, you will find a number of Frequently Asked Questions about user and facility registration, among other issues, at <a href="http://www.ccdsupport.com/confluence/display/help/FAQs">http://www.ccdsupport.com/confluence/display/help/FAQs</a>

## May a company or industry association submit a BAMM request on behalf of multiple facilities?

No. The NOI and the BAMM request must be submitted through e-GGRT by the designated representative. Each NOI and BAMM submission must be facility-specific. The same designated representative, alternate designated representative (or agent) may represent multiple facilities, but any NOIs or BAMMs submitted through e-GGRT must be on behalf of the requesting facility.

#### If I am allowed to use BAMM, what methods must I follow?

If you meet the requirements of  $\S98.234$  (f)(2), (f)(3), (f)(4) or (f)(5)(iv) you may use BAMM consistent with any BAMM provisions or EPA approvals. When you use BAMM, you **MUST** estimate your facility's emissions using the equations in the rule but **MAY USE** alternate means of estimating the inputs to those equations, i.e. the parameters used in calculating emissions in  $\S98.233$  may be substituted with values determined using best available monitoring methods.

## BAMMs could include the following:

- Monitoring methods currently used by your facility that do not meet the specifications of a relevant subpart (including use of industry accepted or company used emission factors, e.g., the API Compendium).
- Supplier data.

- Engineering calculations.
- Other company records.

# For time periods beyond 2011, what must the BAMM request contain?

The content of the BAMM requests covering time periods beyond 2011, is found in 40 CFR 98.234(f)(8)(ii). EPA has made available on the Web site an optional form to facilitate the submission of a BAMM request. While facility owners or operators do not have to use this form, it might facilitate review and approval. EPA will respond to all BAMM requests. As a general matter, EPA will base its decision on the information provided in the BAMM request and does not intend to negotiate on specific issues. As time allows, EPA may follow up on BAMM requests with additional questions. The optional BAMM Request forms may be found at http://www.epa.gov/climatechange/emissions/subpart/w.html

Any notice of intent submitted prior to publication of the September 27, 2011 final rule in the Federal Register (76 FR 59533) will not be considered valid as a submission towards the NOI due by December 31, 2011 for use of BAMM during 2012.

# Would BAMM requests submitted by March 2012 have to be approved by the Administrator before receiving automatic BAMM thru June 30, 2012?

No. If the facility has submitted an NOI and a BAMM request consistent with 98.234(f)(8)(ii), then the facility would receive automatic BAMM through June 30, 2012, regardless of EPA's ultimate decision on the BAMM request.

# What must the notice of intent under §98.234(f)(1) contain?

The notice of intent should identify the reason for which you may need BAMM and the types of emissions sources for which BAMM might be requested. The notice of intent should include as much specificity as possible explaining why the sources qualify for the BAMM provisions of §98.234(f)(2), (f)(3), (f)(4) or (f)(5)(iv). Before submitting a notice of intent under §98.234(f)(1), a facility should determine whether it actually has sufficient information to submit a full BAMM request based on the regulations and information provided in this fact sheet. Submitting the complete request early, as opposed to waiting until the deadline, helps to assure a more prompt final EPA determination on the request.

#### What must the notice of intent under §98.234(f)(8)(i) contain?

The NOI required under §98.234(f)(8)(i) for facilities wishing to request BAMM in 2012 need only contain an indication that you intend to request BAMM by March 30, 2012 for one or more operations at your facility. Because the NOI must be submitted through e-GGRT, this notification will already reflect the facility name and address and the name of the designated representative.

#### Will EPA accept late BAMM requests?

For 2012, 98.234(f)(8)(i) states that "[o]wners or operators that submit a notice of intent but do not follow up with a best available monitoring methods request by March 30, 2012 cannot use best available monitoring methods in 2012." As a general matter, under §98.234(f)(1), EPA reserves the right to review requests submitted after the

deadlines but will only consider and approve late requests which demonstrate unforeseen unique or unusual circumstances.

# What are unique or unusual circumstances?

EPA considers unique or unusual circumstances to include, by way of example and not in limitation, clearly demonstrated data collection methods that do not meet safety regulations, technical infeasibility, or being counter to other local, State, or Federal regulations. Unique or unusual circumstances may include other unique site-specific activities, if properly justified, such as the inability to meet relevant monitoring and/or quality assurance/quality control procedures due to difficulty in obtaining technical and contractor support to appropriately survey a facility, inability to access a facility due to seasonal concerns, or necessity to undertake additional engineering work to address safety concerns. Please note that justifiable circumstances need not be both unique and unusual.

EPA **DOES NOT** intend to approve BAMM requests for development of an emission data management system. Also, as described in the preamble to the final subpart W rule (75 FR 74473), we do not anticipate the need for BAMM for sources other than those covered by §98.234(f)(2), §98.234(f)(3), §98.234(f)(4) or §98.234(f)(5)(iv) which are under operational control of the owner or operator, require one-time data collection at any point during the calendar year and do not require leak detection or measurement equipment. However, we will consider these requests if appropriately justified.

# Does EPA consider safety a valid reason to request BAMM?

Yes. As noted in the final rule, concerns regarding safety could be considered unique or unusual circumstances. Safety could certainly be a justification for BAMM requests submitted consistent with 998.234(f)(2), (f)(3), (f)(4) or (f)(5)(iv). Please note that safety-related BAMM requests must contain, where applicable, justification as to why ALL methods allowed by the rule are not possible to employ safely.

## Can BAMM requests be made in the event of the acquisition of new facilities?

Generally, yes. EPA generally agrees that some facilities that acquire new operations may need to use BAMM for a limited period of time in order to fully comply with the rule. While the acquisition of new facilities is not specifically addressed by the final subpart W rule, owners and operators acquiring a new facility may evaluate the specific circumstances and submit a request justifying the need for BAMM to cover the operations of the newly acquired facility. EPA is most likely to approve BAMM requests in cases where a facility demonstrates that none of the calculation methods provided in the rule for a specific emissions source could be applied to the operations at the new acquisition. The facility may also wish to describe in the BAMM request why it is not appropriate to use missing data procedures to cover the time period during which data are not available for the new acquisition. EPA is less likely to approve BAMM requests in cases in which a facility acquires new operations that were already subject to subpart W because all operations would already have been subject to subpart W from the beginning of the calendar year and there would be no need for BAMM as a result of the acquisition.

March 2012 4 40 CFR 98

# Can BAMM requests be made in cases where required equipment installation results in a facility or a unit shutdown?

Yes. EPA will consider BAMM requests for an owner or operator facing a facility shutdown which is due to unique or unusual circumstances. There are no provisions in subpart W allowing for automatic BAMM to cover facility or unit shutdowns, and thus an owner or operator of a facility facing a shutdown must provide sufficient justification that the facility is facing a shutdown in order to install necessary equipment or take measurements necessary to comply with subpart W. EPA is most likely to approve extension requests in cases where a shutdown cannot be averted. EPA is less likely to approve BAMM requests in cases where a facility can temporarily isolate a line or equipment location in order to install a monitor, because in these cases a shutdown can be averted. In cases where installation of equipment would require a hot-tap, to justify BAMM, the facility should submit sufficient documentation demonstrating to EPA why hot tapping is not appropriate for the facility, for example, information contained in standard operating procedures or company records.

## Can BAMM requests submitted in 2012 be approved for beyond 2012?

No. For 2012, when an owner or operator has submitted a notice of intent and a subsequent best available monitoring method extension request, use of best available monitoring methods will be valid, upon approval by the Administrator, until the date indicated in the approval or until December 31, 2012, whichever is earlier.

For reporting years after 2012 a new request to use best available monitoring methods must be submitted by September 30<sup>th</sup> of the year prior to the reporting year for which use of best available monitoring methods is sought.

All BAMM requests approved for use after December 31, 2011, will be approved for a maximum of one calendar year ending on the date requested or by December 31, whichever is earlier.

## How is BAMM related to the Monitoring Plan?

The use of BAMM should be reflected in an owner or operator's monitoring plan. A facility's data collection methods may change and evolve as the owner or operator more fully evaluates the facility, gains experience with monitoring procedures and equipment, and develops more effective procedures for data management. The monitoring plan must be revised to reflect these changes.

All owners or operators must have developed a monitoring plan by April 1, 2011. Monitoring plans **DO NOT** need to be submitted to EPA for approval; rather, they must be kept on site as a recordkeeping requirement.

Please note that there is no requirement to notify EPA when an owner or operator no longer uses BAMM and fully follows the methods as outlined in the rule. The monitoring plan should reflect the methods and procedures that are being used to calculate GHG emissions, therefore the plan should reflect that BAMM is no longer being used.

## Will EPA provide a template for the Monitoring Plans and review plans?

At this time, EPA has no plans to specify a monitoring plan template because the Agency wants to provide the flexibility to rely on references to existing corporate maintenance plans, operating procedures, quality assurance plans, and other documents, including those prepared under other rules (e.g., acid rain, New Source Performance Standards). However, the monitoring plan must include all of the elements listed in 40 CFR 98.3(g)(5)(i) of the rule. Monitoring plans will not be reviewed by EPA, unless EPA requests such a review as part of an audit for example.

#### For More Information

For more information, including the final preamble and rule, and other documents and tools, please visit EPA's Web site <a href="http://www.epa.gov/climatechange/emissions/subpart/w.html">http://www.epa.gov/climatechange/emissions/subpart/w.html</a>. For information sheets on specific industries, please visit EPA's Web site <a href="http://www.epa.gov/climatechange/emissions/ghgrulemaking.html">www.epa.gov/climatechange/emissions/ghgrulemaking.html</a>. For questions that cannot be answered through the Web sites, please contact us at: <a href="mailto:ghgreporting@epa.gov">ghgreporting@epa.gov</a>.

March 2012 6 40 CFR 98