

**SUPPLEMENTAL BASIS STATEMENT  
CHAPTER 117 REPEAL & REPLACE  
RESPONSE TO COMMENTS  
March 3, 2011**

**Commenters:**

- 1) Joe Lynch, Sr. Env. Engineer  
Verso Paper Corporation  
Bucksport Mill  
PO Box 1200  
Bucksport, ME 04416
  
- 2) Sarah Hedrick, Environmental Services &  
Ken Gallant, Manager,  
Verso Paper Corporation  
Androscoggin Mill  
PO Box 20, Riley Road  
Jay, ME 04239
  
- 3) Dixon Pike, Pierce Atwood  
One Monument Square  
Portland, ME 04101
  
- 4) Anne Arnold, U.S. EPA Region 1  
5 Post Office Square, Suite 100  
Boston MA 02109-3912

**Section 1 Scope and Applicability**

**Comment 1. Section 1 C (1) (c)**

The Commenter recommends that the term “extreme” in this section be replaced with the term “unreasonable”. The Department should have the flexibility to determine what is “reasonable or unreasonable” with respect to installation of a CEMS. (Commenter #3)

**Response:** The exemption language referred to by the commenter comes from Section 6.3 of Appendix P to 40 CFR Part 51, which allows states to prescribe alternative monitoring requirements in situations where installation of a CEMS cannot be implemented by a source due to physical plant limitations or extreme economic reasons. The term “extreme economic burden” is consistent with federal regulation, and so the Department is using consistent terminology to avoid any conflict with federal requirements upon implementation of this provision. To our knowledge this particular provision has never been used.

## Section 2 Definitions

### Comment 2. Section 2 E

The second sentence of the definition of "calibration drift" is: "this test is required daily". This sentence is out of place. "Calibration drifts" are not required daily although a "calibration drift test" or "check" may be required daily. The Commenter recommends that the second sentence of the definition be deleted and the requirements for conducting such tests be spelled out in the other sections of the regulation. (Commenter #3)

**Response:** The Department has modified the definition as recommended by the commenter and it is shown below, however, other sections of the regulation already specify when that test is required on a daily basis.

"Calibration drift" means the difference in the CEMS' output reading from the established reference value after a stated period of normal continuous operation during which no unscheduled maintenance, repair or adjustment took place. ~~This test is conducted daily.~~ The reference value may be supplied by cylinder gas, gas cell, optical filter, or electronic signal as approved by the Department.

### Comment 3. Sections 2 L and 2 N

The commenter requests that the term "when a source is operating" be added to the definitions of "gaseous excess emissions" and "opacity excess emissions" to clarify that an excess emission only occurs when a source is operating. (Commenter #3)

**Response:** This is consistent with the Department's intentions, and so the Department has modified the two definitions indicated by the commenter in addition to a third related definition to accommodate the recommendation, as shown below:

- L. **Gaseous excess emission.** "Gaseous excess emission" means any period during which an emissions unit is operating and the average gaseous emissions as measured by the CEMS or appropriate EPA reference method test exceed the applicable emission standard over the applicable averaging period and the data was not deemed to be invalid. This does not include periods of start up, shutdown and unavoidable malfunction determined to be exempt by the Department.
- N. **Opacity excess emission.** "Opacity excess emission" means any period during which an emissions unit is operating and opacity as measured by the COMS or appropriate EPA reference method test exceeds the applicable opacity standard over the applicable averaging period and the data was not deemed to be invalid. This does not include periods of start up, shutdown and unavoidable malfunction determined to be exempt by the Department.
- P. **Particulate matter excess emission.** "Particulate matter excess emission" means any period during which an emissions unit is operating and the average emissions as measured by the PM CEMS or EPA reference method test exceeds the applicable emission standard over the applicable averaging period and the data

was not deemed to be invalid. This does not include periods of start up, shutdown and unavoidable malfunction determined to be exempt by the Department.

**Comment 4. Section 2 AA**

**(Listed as Section 2 AB in the final revised regulation being proposed for adoption.)**

The definition of “unavoidable malfunction” should be modified by eliminating the list of CEMS components in the definition. This would provide the Department greater flexibility in determining whether a CEMS malfunction should be subject to penalty or should be exempt due to an unavoidable malfunction. (Commenter #3)

**Response:** The Department concurs with the commenter’s request for this change to the regulation.

**Comment 5. Section 2 AB and AC**

**(Listed as Section 2 AC and AD in the final revised regulation being proposed for adoption.)**

The definitions for “unit operating day” and “unit operating hour” do not mesh with the minimum valid data specifications listed in Section 3 C (2) (a-h). (Commenters 1, 2 & 3)

The rule should not generate missing data and added downtime reporting for CEM downtime caused by adhering to the rule. Also, that both definitions need to have the same type of definition as the CEMS. Or alternatively, added language that states that for operating hours and operating days that do not contain the necessary time for a valid CEM hour or day are not required to operate the CEM during that period or at least do not have to count the data as missing. (Commenter #1)

By adding these definitions, the DEP is driving the creation of excess emissions from facilities. That the proposed definitions also result in “valid or counted” operating days and hours with invalid data. The definitions should be removed from the rule. (Commenter #2)

Recommend that the definitions be aligned with the provisions of Section 3 C (2) (a) which define the number of hours of valid data required for a valid averaging time period. Otherwise, the regulation will establish an approach that makes compliance impossible. (Commenter #3)

**Response:** The “unit operating day” and “unit operating hour” definitions were not intended to be used in conjunction with the minimum valid data specifications listed in Section 3 C (2). The terms were meant only to be used in determining when quarterly audits of CEMS need to be completed. The Department has addressed all of these misperceptions by adding a definition for “Source-operating time” and using this term in Section 3 A to provide the clarification to address these concerns.

Z. “Source-operating time” means the amount of time that an emissions unit is combusting fuel or processing material.

### Section 3 Performance Specifications for Continuous Emissions Monitoring Systems

#### Comment #6. Section 3 A

The commenter requests clarification that Chapter 117 does not impose new requirements for facilities to monitor mass emission rates and that the requirements to measure mass emission rates are established through license conditions or applicable federal regulations. (Commenter #3)

**Response:** The Department did not intend to impose any new requirements for facilities to measure mass emission rates that are not already required to do so by license condition or federal regulation. Language to clarify any confusion over this concern has been added to the regulation's Basis Statement.

This replacement and repeal of Chapter 117 does not impose new requirements for facilities to monitor mass emissions rates. Requirements to install and operate continuous emission rate monitoring systems (CERMS) are established through an air emission license or as a result of applicable state or federal regulations.

#### Comment 7. Section 3 C (2)

Pursuant to 40 CFR Section 60.13 (h) (2)(vii) the commenter requests that hours of operation less than 30 minutes are not to be included in averages. For the sake of clarity and consistency with federal regulations, the commenter recommends that this provision be added to Chapter 117.

The commenter also states that data collected while a source is down or has just ceased firing fuel can consist of high oxygen values which can result in extremely high or even negative corrected ppm values. The Commenter recommends that data collected when a source has not operated for a majority of the hour (over 30 minutes) should not be considered as a valid hour of data. (Commenter #3)

#### **Responses:**

The Department believes the commenter is referring to 40 CFR Section 60.13 (h)(2)(viii) which states: "When specified in an applicable subpart, hourly averages for certain partial operating hours shall not be computed or included in the emission averages (e.g. hours with < 30 minutes of unit operation under Section 60.47b(d))". The Department has added language to address the comment offered as follows.

C. For a CEMS installed pursuant to this Chapter, the following minimum specifications apply unless otherwise specified by federal regulation.

In accordance with federal regulations and consistent with the Department's interpretation of Chapter 117, emissions data collected when a source is not operating should not be used in determining compliance with emission standards and should not be reported as valid data. Also, most air emission licenses contain unit specific start-up, shutdown, and malfunction (S/S/M) provisions which exempt emission units from having

to demonstrate compliance with emission standards during these S/S/M periods. The Department has added language to Chapter 117 clarifying this interpretation as shown in Section 3 A and 3 C (2)(b) in the next comment.

**Comment 8. Section 3 C (2)(b)**

The commenter provided comments and recommendations similar to Commenters #1 and #3 regarding valid averaging periods contained in this section as well as regarding the definitions of “unit operating day” and “unit operating hour” contained in Section 2 of the rule. The commenter recommends either removing the term “valid data averages” to prevent the calculation of “artificial excess emissions” that could result during periods of start up and shut down or malfunction or providing exemptions for periods of S/S/M in the rule. The commenter also recommends removing the definitions of “unit operating hour” and “unit operating day” from the rule. (Commenter #2)

**Response:** Rather than removing the terms as recommended by the commenter, the Department has provided the following clarifications in the Section 2 definitions of gaseous, opacity and particulate excess emissions in order to address this commenter’s concern about the possibility of calculating “artificial excess emissions”. The Department has also added language to Chapter 117 Section 2 L, N and P, clarifying our interpretation regarding the treatment of S/S/M periods.

This does not include periods of start up, shutdown and unavoidable malfunction determined to be exempt by the Department.

**Comment 9. Section 3 C (2)(b)(i)**

The commenter has concerns about the proposed two out of three hours that constitute a valid 3-hour average. It is possible that a boiler trip and subsequent start-up would yield the following: valid hour, then an invalid hour because the source was down, and then a valid hour upon start-up. The commenter listed other examples of abnormal boiler operating scenarios (i.e., start-up and shutdown periods) that could result in valid emission averages that should be considered invalid. The commenter proposes that all three hours are needed for a valid 3-hour average. Another solution would be to not count the hours of abnormal operation for 3-hour averages. (Commenter #1)

**Response:** In accordance with federal regulations and consistent with the Department’s interpretation of Chapter 117, emissions data collected when a source is not operating should not be used in determining compliance with emission standards and should not be reported as valid data. In addition, the Department works with sources to establish appropriate start-up, shutdown, and malfunction (S/S/M) provisions which exempt emission units from having to demonstrate compliance with emission standards during these S/S/M periods. These S/S/M provisions are incorporated into a source’s air emission license. However, in the interest of providing clarity, the Department has added language to Chapter 117 addressing these concerns in Section 3 A and 3 C (2) (b).

3 A. The source owner or operator shall operate the CEMS and record accurate data in the units of the applicable standard during all source operating times, except for

periods when the CEMS is subject to established quality assurance and quality control procedures or during periods of unavoidable malfunction. Any emissions data collected during periods when an emissions unit is not operating, shall not be used in determining compliance with any emission limit.

3 C (2) (b) A gaseous CEMS and CERMS must average and record the data in a manner consistent with the applicable emission standard. Data need not be recorded for a particular time period if the emissions unit did not operate during that time period.

#### Section 4 Quality Assurance/Quality Control Requirements.

##### Comment 10. Section 4 A (3)(a)&(b)

This requirement for “like-kind analyzers” is so stringent that most facilities will not likely be able to use this provision since most CEMS monitors in place now have been in use for a number of years and consequently, it is unlikely a spare analyzer of the same make and model will be available for purchase. Gas specific analyzers generally operate on the same theory of operation and requiring use of the same make and model provides no greater certainty of accuracy.

In addition, the provision in the rule that allows for use of “not like-kind systems” is unclear. A replacement analyzer can not be the “same” analyzer. In addition, is the replacement probe allowed to complete certification testing within 30 days or within 180 days as stipulated in Section 4 A (3) (b)? We request that flexibility to accommodate construction needs for both analyzers and probe equipment also be clarified in the rule. (Commenter # 2)

##### **Responses:**

The Department does not concur with the first comment. Allowing analyzers to be replaced by different make and model analyzers without completing initial certification testing goes beyond what federal regulations and associated guidance allows.

The Department’s intent in regard to the phrase “same analyzer” in Section 4A (3) (b) was the same make and model analyzer performing the same task as the analyzer it is replacing. The Department has clarified this intent. Also, the grace period for completing certification of a like-kind replacement analyzer was meant to apply only to the analyzer, not to other CEMS components such as probes. The Department has clarified this by removing reference in this section to replacement of a probe.

4 A (3) (b) Replacement analyzers that are not like-kind, require performance specification testing that must be completed within 30 days of being installed. This grace period may not be utilized more than once every 12 month period ~~at each emissions unit for the same analyzer for any particular analyzer.~~ Replacement of a probe would initiate the performance specification testing requirement.

**Comment 11. Sec 4 B (5) (b)**

The commenter is concerned that although 40 CFR Part 75 does not require very low span analyzers to conduct quarterly audits, Chapter 117 does not provide a similar exemption. The commenter proposes that the Department provide a similar exemption in this rule for having to conduct either quarterly CGA or linearity audits on very low span analyzers. (Commenter #1)

The requirement to conduct cylinder gas audits while the source is running should be removed from the rule because the way CGA gases are connected and flow through a CEMS analyzer does not change the results. CGA gases are introduced into the probe and the excess gas flows into the stack. Facilities need the flexibility to conduct CGAs when testing resources are available to meet all the timeframes specified in Chapter 117. The draft rule does state the Department can waive this requirement; however, the regulated community should (*not*) be burdened by having to make a formal request to implement what is reasonably practical. Paragraph 3 requires both written notification and verbal notification of a CGA. This is inconsistent with paragraph five of that section. (Commenter #2)

**Responses:** The Department agrees with the first comment and has added language specific to this request as follows in the last paragraph of that Section:

Section 4 B (5) (b) Units using multiple span monitors must perform the CGA or linearity testing, as appropriate, on all scales that are reasonably expected to be used during the quarter; unless specifically exempt from this requirement per 40 CFR Part 75.

Federal regulations require sources to be operating in a normal state while CGAs are conducted, unless waived by the regulatory authority. Guidance on this issue points to the influence that flue gas moisture levels and temperature can have on CGA and linearity check results. The authority in the rule for the Department to waive this requirement is there to address the types of situations brought up by the commenter.

Paragraphs 2 and 3 of this Section have been deleted to remove redundancies and inconsistencies in the section.

**Comment 12. Section 4 B (8) (b), (c)&(d)**

The Subsection (b) requirement to conduct COMS audits while the source is running should be removed from the rule because the audit is conducted by taking the COM out of service and installing a jig (calibration device) and the best zero alignments occur while the source is not operating

Subsection (c) requires an annual 7-day drift test of the COMS while the source is operating and not all boilers operate for a seven day continuous period at any time during the year.

Subsection (d) requires the COM span to be 100%; why is that span needed when these units are most frequently spanned to 80% opacity? It is also unclear regarding which

types of sources the attenuator ranges apply to, Part 75 and 60 sources, or not.  
(Commenter #2)

**Response:** Federal regulations require sources to be operating in a normal state while audits are being conducted, unless waived by the regulatory authority. The authority for the Department to waive this requirement is already included in the rule, to address the types of situations brought up by the commenter.

The 100% span requirement contained in this section applies only to COMS that are not subject to Specification 1 requirements (i.e., opacity monitors required by the Department as operational tools). The attenuator ranges specified in this section are only for the COMS required pursuant to 40 CFR Part 60, 63, or 75 and therefore subject to Specification 1 requirements.

### **Section 5 Data Recovery Requirements**

#### **Comment 13. Section 5**

As previously noted in comments to the ME DEP on June 4, 2008 and October 7, 2010, EPA has concerns with the language under the Data Recovery Requirements section of the rule which prohibits ME DEP from initiating enforcement action if the monitoring system records accurate and reliable data for 90% of the source-operating time in a calendar quarter (95% for opacity). In light of this, we recommend that the ME DEP work with the Maine Legislature to modify the language in the underlying statute, Title 38 MRSA Section 589(3), which limits enforcement authority and could be misinterpreted as granting an express exemption from data recovery requirements in regulations such as Chapter 117.

However, recognizing the challenges that legislative changes can present, in our June 4, 2008 comments, we recommended revisions to Chapter 117 that could be used to clarify the requirements of this regulation. We are pleased to see that the current proposal addresses our previous comments aimed at clarifying the requirements. Once the revised Chapter 117 is adopted, ME DEP should submit the revised rule to EPA as a State Implementation Plan (SIP) revision. (Commenter #4)

**Response:** The Department understands the concerns, had previously incorporated the recommendations into the proposed rule that was posted for public hearing. The Department does plan to submit the repealed and replaced rule to EPA as part of the State Implementation Plan (SIP).

### **Section 9 Compliance Schedule**

#### **Comment 14. Section 9**

This section requires existing sources to meet the new requirements of the rule within 60 days. Additional time is needed to implement Data Acquisition System programming changes and to train operators due to the proposed changes in Section 3 C (2)(b)(i).  
(Commenter #2)

**Response:** The Department has clarified the rule addressing a majority of the commenter's concerns and at the same time provided reassurance to regulated sources that minimal protocol changes from how things are currently done are required by this rule. The Department has made changes to Section 3C which should clarify when the valid data time periods apply and reduce time needed to implement any data acquisition system changes or training needs. Therefore, the Department maintains that 60 days from the effective date of this rule is an adequate amount of time for existing sources to make any necessary changes and for operators to be trained.

060