

Appendix E-O
Western Backstop SO₂ Trading Program - Model Rule.
(See Section C, Stationary Sources.)

NOTE: This is the 7/1/03 near final version, prepared by the WESTAR Model Rule/MOU Working Group.

This Model Rule applies to the post-trigger phase of the Western Backstop SO₂ Trading Program ("WEB Trading Program"). This rule needs to be adopted by the state in conjunction with the Section 309 SIP that is due by December 31, 2003. The pre-trigger and post-trigger phases of the WEB Trading Program are covered by the Model SIP/TIP (known as the SO₂ Milestones and Backstop Trading Program), which is incorporated into Section C, Stationary Source Requirements. The Model SIP/TIP and the Model Rule should be reviewed together in order to fully understand the complete WEB Trading Program. As each participating 309 State develops its state's rule, care should be taken to include or reference any local or delegated authority that may have responsibilities under the state's rule (most notably - local governmental units with Title V permitting authority). Delegation agreements should be examined for any relevant revisions necessary to assure the program is conducted as the rule specifies.

A. Purpose

1. This Rule implements the Western Backstop SO₂ Trading Program ("WEB Trading Program") provisions required under the federal Regional Haze Rule, 40 CFR 51.309, and [state or tribe]'s regional haze Implementation Plan.
2. Nothing in this Rule waives any requirement otherwise in effect or subsequently required under another program, including Rules governing new sources.

B. Definitions

The definitions in this part apply only to this Rule:

1. **Account Certificate of Representation** means the completed and signed submission required to designate an Account Representative for a WEB source or an Account Representative for a general account.
2. **Account Representative** means the individual who is authorized through an Account Certificate of Representation to represent owners and operators of the WEB source with regard to matters under the WEB Trading Program or, for a general account, who is authorized through an Account Certificate of Representation to represent the persons having an ownership interest in allowances in the general account with regard to matters concerning the general account.
3. **Act** means the federal Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.*
4. **Actual Emissions** means total annual sulfur dioxide emissions determined in accordance with Section I of this Rule, or determined in accordance with [refer to state or tribal inventory rule] for sources that are not subject to Section I of this Rule.

5. **Allocate** means to assign allowances to a WEB source through section C1 of the Implementation Plan.
1. **Allowance** means the limited authorization under the WEB Trading Program to emit one ton of SO₂ during a specified control period or any control period thereafter subject to the terms and conditions for use of unused allowances as established by this Rule.
2. **Allowance limitation** means the tonnage of SO₂ emissions authorized by the allowances available for compliance deduction for a WEB source for a control period under Section L1 of this Rule on the allowance transfer deadline for that control period.
8. **Allowance Tracking System** means the system developed by [state or tribe] where allowances under the WEB Trading Program are recorded, held, transferred and deducted.
9. **Allowance Tracking System account** means an account in the Allowance Tracking System established for purposes of recording, holding, transferring, and deducting allowances.
10. **Allowance transfer deadline** means the deadline established in Section J.2 of the Model Rule when allowances must be submitted for recording in a WEB source's compliance account in order to demonstrate compliance for that control period.
11. **Compliance account** means an account established in the Allowance Tracking System under Section H1 of this Rule for the purpose of recording allowances that a WEB source might hold to demonstrate compliance with its allowance limitation.
12. **Compliance certification** means a submission to [state or tribe] by the Account Representative as required under Section L2 of this Rule to report a WEB source's compliance or noncompliance with this Rule.
13. **Control period** means the period beginning January 1 of each year and ending on December 31 of the same year, inclusive.
3. **Emissions tracking database** means the central database where SO₂ emissions for WEB sources as recorded and reported in accordance with this Rule are tracked to determine compliance with allowance limitations.
15. **Emission unit** means any part of a stationary source that emits or would have the potential to emit any pollutant submitted to regulations under the Clean Air Act.
16. **Existing source** means, a stationary source that commenced operation before the Program Trigger Date.
17. **Fugitive emissions** are those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
18. **General account** means an account established in the Allowance Tracking System under Section H of this Rule for the purpose of recording allowances held by a person that are not to be used to show compliance with an allowance limitation.

4. **Milestone** means the maximum level of stationary source regional sulfur dioxide emissions for each year from 2003 to 2018, established according to the procedures in Section A of the SO₂ Milestones and Backstop Trading Program Implementation Plan.
20. **New WEB Source** means a WEB source that commenced operation on or after the Program Trigger Date.
5. **New Source Set-aside** means a pool of allowances that are available for allocation to new sources in accordance with the provisions of Section C1.3 of the SO₂ Milestones and Backstop Trading Program Implementation Plan.
22. **Owner or operator** means any person who is an owner or who operates, controls or supervises a WEB source, and includes but is not be limited to any holding company, utility system or plant manager.
23. **Potential to emit** means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA Administrator.
6. **Program trigger date** means the date that [state or tribe] determines that the WEB Trading Program has been triggered in accordance with the provisions of Section A2 of the SO₂ Milestones and Backstop Trading Program Implementation Plan.
7. **Program trigger years** means the years shown in Table 1, column 3, of the SO₂ Milestones and Backstop Trading Program Implementation Plan for the applicable milestone if the WEB Trading Program is triggered as described in Section A of the SO₂ Milestones and Backstop Trading Program Implementation Plan.
26. **Renewable Energy Resource** means a resource that generates electricity by non-nuclear and non-fossil technologies that results in low or no air emissions. The term includes electricity generated by wind energy technologies; solar photovoltaic and solar thermal technologies; geothermal technologies; technologies based on landfill gas and biomass sources, and new low-impact hydropower that meets the Low-Impact Hydropower Institute criteria. Biomass includes agricultural, food and wood wastes. The term does not include pumped storage or biomass from municipal solid waste, black liquor, or treated wood.
27. **Retired source** means a WEB source that has received a retired source exemption as provided in Section D3 of this Rule.
28. **Serial number** means, when referring to allowances, the unique identification number assigned to each allowance by the Tracking Systems Administrator, in accordance with Section G2.
8. **SO₂ emitting unit** means any equipment that is located at a WEB source and that emits SO₂.

30. **Stationary source** means any building, structure, facility or installation that emits or may emit any air pollutant subject to regulation under the Clean Air Act.
31. **Submit** means sent to the appropriate authority under the signature of the Account Representative. For purposes of determining when something is submitted, an official U.S. Postal Service postmark, or equivalent electronic time stamp, shall establish the date of submittal.
32. **Ton** means 2000 pounds and, for any control period, any fraction of a ton equaling 1000 pounds or more shall be treated as one ton and any fraction of a ton equaling less than 1000 pounds shall be treated as zero tons.
33. **Tracking System Administrator** means the person designated by [state or tribe] as the administrator of the Allowance Tracking System and the emission tracking database.
34. **WEB source** means a stationary source that meets the applicability requirements of Section D of this Rule.
9. **Western Backstop SO₂ Trading Program (“WEB Trading Program”)** refers to this Rule, triggered as a backstop in accordance with the provisions in the SO₂ Milestones and Backstop Trading Program Implementation Plan, if necessary, to ensure that regional SO₂ emissions are reduced.

C. WEB Trading Program Trigger

1. Except as provided in C2, this Rule shall become effective on the program trigger date that is established in accordance with the procedures outlined in the SO₂ Milestones and Backstop Trading Program Implementation Plan.
2. Section M of this Rule, Special Penalty Provisions for Year 2018, shall become effective on January 1, 2018 and shall remain effective until the provisions of section M have been fully implemented.

D. WEB Trading Program Applicability

1. General Applicability

This Rule applies to any stationary source or group of stationary sources that are located on one or more contiguous or adjacent properties and which are under the control of the same person or persons under common control, belonging to the same industrial grouping, and that are described in paragraphs (a) through (d) of this subsection. A stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

The following are WEB sources:

- (a) All BART-eligible sources as defined in 40 CFR 51.301 that are BART-eligible due to SO₂ emissions.

(b) All stationary sources not meeting the criteria of D1(a) of this Rule that have actual SO₂ emissions of 100 tons or more per year in the Program Trigger Years or any subsequent year. The fugitive emissions of a stationary source shall not be considered in determining whether it is a WEB source unless the source belongs to one of the following categories of stationary source:

- (i) Coal cleaning plants (with thermal dryers);
- (ii) Kraft pulp mills;
- (iii) Portland cement plants;
- (iv) Primary zinc smelters;
- (v) Iron and steel mills;
- (vi) Primary aluminum ore reduction plants;
- (vii) Primary copper smelters;
- (viii) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (ix) Hydrofluoric, sulfuric, or nitric acid plants;
- (x) Petroleum refineries;
- (xi) Lime plants;
- (xii) Phosphate rock processing plants;
- (xiii) Coke oven batteries;
- (xiv) Sulfur recovery plants;
- (xv) Carbon black plants (furnace process);
- (xvi) Primary lead smelters;
- (xvii) Fuel conversion plants;
- (xviii) Sintering plants;
- (xix) Secondary metal production plants;
- (xx) Chemical process plants;
- (xxi) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (xxiii) Taconite ore processing plants;
- (xxiv) Glass fiber processing plants;
- (xxv) Charcoal production plants;
- (xxvi) Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; or
- (xxvii) Any other stationary source category, which as of August 7, 1980 is being regulated under Section 111 or 112 of the Act.

(c) A new source that begins operation after the Program Trigger Date and has the potential to emit 100 tons or more of SO₂ per year.

(d) [State or tribe] may determine on a case-by-case basis, with concurrence from the EPA Administrator, that a source is not a WEB source if the source:

(1) In each of the previous five years had actual SO₂ emissions of less than 100 tons per year, and

(i) had actual SO₂ emissions of 100 tons or more in a single year due to a temporary emission increase that was caused by a sudden, infrequent, and not reasonably preventable failure of air pollution

control equipment, process equipment, or a process to operate in a normal or usual manner and that the source took timely and reasonable action to minimize the temporary emission increase. A temporary emission increase due to poor maintenance or careless operation does not meet the criteria of this section; and

(ii) has corrected the failure of air pollution control equipment, process equipment, or process by the time of the [state or tribe]'s determination under this section; or

(iii) had to switch fuels or feedstocks on a temporary basis and as a result of an emergency situation or unique and unusual circumstances besides cost of such fuels or feedstocks.

2. Duration of Program Participation

Except as provided for in Section D3 of this Rule, once a source is subject to the WEB Trading Program, it will remain in the program every year thereafter.

3. Retired Source Exemption

(a) Application

Any WEB that is permanently retired shall apply for a retired source exemption. The WEB source may only be considered permanently retired if all SO₂ emitting units at the source are permanently retired. The application shall contain the following information:

(1) Identification of the WEB source, including plant name and an appropriate identification code in a format specified by the [state or tribe].

(2) Name of Account Representative.

(3) Description of the status of the WEB source, including the date that the WEB source was permanently retired.

(4) Signed certification that the WEB source is permanently retired and will comply with the requirements of Section D3 of this Rule.

(5) Verification that the WEB source has a general account where any unused allowances or future allocations will be recorded.

(b) Notice

The retired source exemption becomes effective when [state or tribe] notifies the source that the retired source exemption has been granted. [*For example, state or tribe could include a provision requiring the permitting authority to notify the source.*]

(c) Responsibilities of Retired Sources:

(1) A retired source shall be exempt from Sections I and L of this Rule, except as provided below.

(2) A retired source shall not emit any SO₂ after the date the retired source exemption is issued.

(3) A source shall submit SO₂ emissions reports, as required by Section I5 of this Rule for any time period the source was operating prior to the effective date of the retired source exemption. The retired source shall be subject to the compliance provisions of Section L of this Rule, including the requirement to hold allowances in the source's compliance account to cover all SO₂ emissions prior to the date the source was permanently retired.

(4) A retired source that is still in existence but no longer emitting SO₂ shall, for a period of five years from the date the records are created, retain records demonstrating the effective date of the retired source exemption for purposes of this Rule.

(d) Resumption of Operations

(1) Should a retired source desire to resume operation, the retired source must submit registration materials as follows:

(i) If the source is required to obtain a new source review permit or operating permit under [refer to applicable permitting Rules] prior to resuming operation, then registration information as described in Section F1 of this Rule and a copy of the retired source exemption must be submitted with the application required under [refer to applicable permitting Rules];

(ii) If the source is not required to obtain a new source review permit or operating permit under [refer to applicable permitting Rules] prior to resuming operation, then registration information as described in Section F1 of this Rule and a copy of the retired source exemption must be submitted to [state or tribe] at least ninety days prior to resumption of operation.

(2) The retired source exemption shall automatically expire on the day the source resumes operation.

(e) Loss of Future Allowances

A WEB source that is permanently retired and that does not apply to [state or tribe] for a retired source exemption within ninety days of the date that the source is permanently retired shall forfeit any unused and future allowances. The abandoned allowances shall be retired by the Tracking System Administrator.

Note: This is not intended to be a punitive action, but a method to correct the number of allowances being tracked by the state. [State or tribe] will need to establish due process procedures for forfeiting these "abandoned" allowances in a manner that is consistent with the administrative procedures process. This provision is intended to

address sources that go out of business, leave no forwarding address, and truly abandon their allowances. It is assumed that [state or tribe] will have a process to notify sources that their allowances may be forfeited so this provision does not lead to forfeiture just because the deadline was missed.

E. Account Representative for WEB Sources

Each WEB source must identify one Account Representative and may also identify an alternate Account Representative who may act on behalf of the Account Representative. Any representation, action, inaction or submission by the alternate Account Representative will be deemed to be a representation, action, inaction or submission by the Account Representative.

1. Identification and Certification of an Account Representative.

- (a) The Account Representative and any Alternate Account Representative shall be appointed by an agreement that makes the representations, actions, inactions or submissions of the Account Representative and any alternate binding on the owners and operators of the WEB source.
- (b) The Account Representative shall submit to [state or tribe] and the Tracking System Administrator a signed and dated Account Certificate of Representation (Certificate) that contains the following elements:

- (1) Identification of the WEB source by plant name, state and an appropriate identification code in a format specified by the [state or tribe];

- (2) The name, address, e-mail (if available), telephone and facsimile number of the Account Representative and any alternate;

- (1) A list of owners and operators of the WEB source;

- (2) Information to be part of the emission tracking system database in accordance with the Implementation Plan. The specific data elements shall be as specified by the [state or tribe] to be consistent with the data system structure, and may include basic facility information that may appear in other reports and notices submitted by the WEB source, such as county location, industrial classification codes, and similar general facility information.

- (3) The following certification statement:

"I certify that I was selected as the Account Representative or alternate Account Representative, as applicable, by an agreement binding on the owners and operators of the WEB source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the WEB Trading Program on behalf of the owners and operators of the WEB source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or

submissions and by any decision or order issued to me by the [state or tribe] regarding the WEB Trading Program.”

- (c) Upon receipt by the [state or tribe] of the complete Certificate, the Account Representative and any alternate Account Representative represents and, by his or her representations, actions, inactions, or submissions, legally binds each owner and operator of the WEB source in all matters pertaining to the WEB Trading Program. The owners and operators shall be bound by any decision or order issued by [state or tribe] regarding the WEB Trading Program.
- (d) No WEB Allowance Tracking System account shall be established for the WEB source until the Tracking System Administrator has received a complete Certificate. Once the account is established, the Account Representative shall make all submissions concerning the account, including the deduction or transfer of allowances.

2. Requirements and Responsibilities

- (a) The responsibilities of the Account Representative include, but are not limited to, the transferring of allowances, and the submission of monitoring plans, registrations, certification applications, SO₂ emissions data and compliance reports as required by this Rule, and representing the source in all matters pertaining to the WEB Trading Program.
- (b) Each submission under this program shall be signed and certified by the Account Representative for the WEB source. Each submission shall include the following truth and accuracy certification statement by the Account Representative:

“I am authorized to make this submission on behalf of the owners and operators of the WEB source for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”

3. Changing the Account Representative or Owners and Operators

- (a) Changes to the Account Representative or the alternate Account Representative

The Account Representative or alternate Account Representative may be changed at any time by sending a complete superseding Certificate to the [state or tribe] and the Tracking System Administrator under Section E1(c) of this Rule, with the change taking effect upon receipt of such Certificate by the [state or tribe]. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous Account Representative or alternate prior to the time and date when the Tracking System Administrator receives the superseding Certificate shall be binding

on the new Account Representative and the owners and operators of the WEB source.

(b) Changes in Owners and Operators

(1) Within thirty days of any change in the owners and operators of the WEB source, including the addition of a new owner or operator, the Account Representative shall submit a revised Certificate amending the list of owners and operators to include such change.

(2) In the event a new owner or operator of a WEB source is not included in the list of owners and operators submitted in the Certificate, such new owner or operator shall be deemed to be subject to and bound by the Certificate, the representations, actions, inactions, and submissions of the Account Representative of the WEB source, and the decisions, orders, actions, and inactions of [state or tribe] as if the new owner or operator were included in such list.

F. Registration

1. Deadlines

(a) Each source that is a WEB source on or before the Program Trigger Date shall register by submitting the initial Certificate required in Section E1 of this Rule to the [state or tribe] no later than 180 days after the Program Trigger Date.

(b) Any existing source that becomes a WEB source after the Program Trigger Date shall register by submitting the initial Certificate required in Section E1 of this Rule to the [state or tribe] by September 30 of the year following the inventory year in which the source exceeded the emission threshold.

(c) Any new WEB source shall register by submitting the initial Certificate required in Section E1 of this Rule to the [state or tribe] prior to the commencement of operation.

2. Interface with Title V

Any allocation, transfer or deduction of allowance to or from the compliance account of a WEB source shall not require revision of the WEB source's operating permit.

G. Allowance Allocations

1. The Tracking System Administrator will record the allowances for each WEB source in the compliance account for a WEB source once the allowances are allocated by the [state or tribe] under Section C1 of the SO₂ Milestones and Backstop Trading Program Implementation Plan. If applicable, the Tracking System Administrator will record a portion of the SO₂ allowances for a WEB source in a special reserve account assigned to the [state or tribe] to account for any allowances to be held by the [state or tribe] in accordance with Section I1(b) of this Rule.

2. The Tracking System Administrator will assign a serial number to each allowance in accordance with Section C2 of the SO₂ Milestones and Backstop Trading Program Implementation Plan.

3. All allowances shall be allocated, recorded, transferred, or used as whole allowances. To determine the number of whole allowances, the number of allowances shall be rounded down for decimals less than 0.50 and rounded up for decimals of 0.50 or greater.

4. An allowance is not a property right, and is a limited authorization to emit one ton of SO₂ valid only for the purpose of meeting the requirements of this Rule. No provision of this WEB Trading Program or other law should be construed to limit the authority of the United States or [state or tribe] to terminate or limit such authorization.

5. Early Reduction Bonus Allocation.

Any WEB source that reduces permitted annual SO₂ emissions to a level that is below the floor level allocation established for that source in Section C1 of the SO₂ Milestones and Backstop Trading Program Implementation Plan between 2003 and the program trigger year may apply to [state or tribe] for an early reduction bonus allocation. The application must be submitted no later than ninety days after the Program Trigger Date. Any WEB source that applies and receives early reduction bonus allocations must retain the records referenced below for a minimum of five years after the early reduction bonus allowance is certified in accordance with Section C1.3 of the Implementation Plan.

The application for an early reduction bonus allocation must contain the following information:

(a) Copies of all permits or other enforceable documents that include annual SO₂ emissions limits for the WEB source during the period the WEB source was generating the early reductions. Such permits or enforceable documents require monitoring for SO₂ emissions that meets the requirements in Section I of this Rule.

Note: the early reduction bonus allocation needs to address sources that are not using Part 75 equipment monitoring.

(b) Copies of emissions monitoring reports, for the period the WEB source was generating the early reductions, that documents the actual annual SO₂ emissions and demonstrates that the actual annual SO₂ emissions were below the floor level allocation established for that source in Section C1 of the SO₂ Milestones and Backstop Trading Program Implementation Plan.

(c) Demonstration that the floor level established for the source in accordance with Section C1 of the SO₂ Milestones and Backstop Trading Program Implementation Plan was calculated using data that are consistent with the new monitoring methodology. If new monitoring techniques will change the floor level for the source, then a demonstration of the new floor level based on new monitoring techniques should be included in the application.

6. Request for allowances for new WEB sources or modified WEB Sources.

(a) A new WEB source or an existing WEB source that has increased production capacity through a permitted change in operations [refer to state or tribal NSR Rules] may apply to [state or tribe] for an allocation from the new source set-aside, as outlined in Section C1.3 of the Implementation Plan.

(1) A new WEB source is eligible to apply for an annual allocation equal to the permitted annual SO₂ emission limit for that source after the source has commenced operation.

(2) An existing WEB source is eligible to apply for an annual allocation equal to the permitted annual SO₂ emission limit for that source that is attributable to any amount of production capacity that is greater than the permitted production capacity for that source as of January 1, 2003.

(3) A source that has received a retired source exemption under Section D3 of this Rule is not eligible to apply for an allocation from the new source set-aside.

(b) The application for an allocation from the new source set-aside must contain the following information:

(1) Demonstration that shows the permitted production capacity of the source before and after the new permit;

(2) For new WEB sources, documentation of the actual date of the commencement of operation and a copy of the permit.

H. Establishment of Accounts

1. Allowance Tracking System Accounts

All WEB sources are required to open a compliance account. Any person may open a general account for holding and transferring allowances. To open either type of account, an application that contains the following information shall be submitted:

(a) The name, mailing address, e-mail address, telephone number, facsimile number of the Account Representative. For a compliance account, include a copy of the Account Certificate of Representation of the Account Representative and any alternate as required in Section E1(b) of this Rule. For a general account, include the Account Certificate of Representation of the Account Representative and any alternate as required in Section H3(b) of the Rule.

(b) The WEB source or organization name;

(c) The type of account to be opened; and

(d) A signed certification of truth and accuracy by the Account Representative according to Section E2(b) of this Rule for compliance accounts and for general accounts, certification of truth and accuracy by the Account Representative according to Section H4 of this Rule.

2. Account Representative for General Accounts

For a general account, one Account Representative must be identified and an alternate Account Representative may be identified and may act on behalf of the Account Representative. Any representation, action, inaction or submission by the alternate Account Representative will be deemed to be a representation, action, inaction or submission by the Account Representative.

3. Identification and Certification of an Account Representative for General Accounts

(a) The Account Representative shall be appointed by an agreement that makes the representations, actions, inactions or submissions of the Account Representative binding on all persons who have an ownership interest with respect to allowances held in the general account.

(b) The Account Representative shall submit to [state or tribe] and the Tracking System Administrator a signed and dated Account Certificate of Representation (Certificate) that contains the following elements:

(1) The name, address, e-mail (if available), telephone and facsimile number of the Account Representative and any alternate;

(2) The organization name;

(3) The following certification statement:

"I certify that I was selected as the Account Representative or alternate Account Representative, as applicable, by an agreement binding on all persons who have an ownership interest in allowances in the general account with regard to matters concerning the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the WEB Trading Program on behalf of said persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the [state or tribe] regarding the general account."

(c) Upon receipt by the [state or tribe] of the complete Certificate, the Account Representative represents and, by his or her representations, actions, inactions, or submissions, legally binds each person who has an ownership interest in allowances held in the general account with regard in all matters concerning the general account. Such persons shall be bound by any decision or order issued by [state or tribe]

(d) No WEB Allowance Tracking System general account shall be established until the Tracking System Administrator has received a complete Certificate. Once the account is established, the Account Representative shall make all submissions concerning the account, including the deduction or transfer of allowances.

4. Requirements and Responsibilities

Each submission for the general account shall be signed and certified by the Account Representative for the general account. Each submission shall include the following truth and accuracy certification statement by the Account Representative:

“I am authorized to make this submission on behalf of all person who have an ownership interest in allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.”

5. Changing the Account Representative

The Account Representative or alternate Account Representative may be changed at any time by sending a complete superseding Certificate to the [state or tribe] and the Tracking System Administrator under section H3(b) of this rule, with the change taking effect upon receipt of such Certificate by the [state or tribe]. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous Account Representative or alternate prior to the time and date when the [state or tribe] receives the superseding Certificate shall be binding on the new Account Representative and all person having ownership interest with respect to allowances held in the general account.

6. Changes to the Account

Any change to the information required in the application for an existing account under H1 of this Rule shall require a revision of the application.

I. Monitoring, Recordkeeping and Reporting

1. General Requirements

(a) For each SO₂ emitting unit at a WEB source the owner or operator shall comply with the following, as applicable, to monitor and record SO₂ mass emissions:

(1) If a unit is subject to 40 CFR Part 75 under a requirement separate from the WEB Trading Program, the unit shall meet the requirements contained in Part 75 with respect to monitoring, recording and reporting SO₂ mass emissions.

(2) If a unit is not subject to 40 CFR Part 75 under a requirement separate from the WEB Trading Program, a unit shall use one of the following monitoring methods, as applicable:

(A) A continuous emission monitoring system (CEMS) for SO₂ and flow that complies with all applicable monitoring provisions in 40 CFR Part 75;

(B) If the unit is a gas- or oil-fired combustion device, the excepted monitoring methodology in Appendix D to 40 CFR Part 75, or, if applicable, the low mass emissions (LME) provisions (with respect to SO₂ mass emissions only) of section 75.19 of 40 CFR Part 75;

(C) One of the optional WEB protocols, if applicable, in Appendix A to this Rule; or

(D) A petition for site-specific monitoring that the source submits for approval by [state or tribe], and approval by the U.S. Environmental Protection Agency in accordance with Section 18(e) of this Rule (relating to petitions).

(3) A permanently retired unit shall not be required to monitor under this Section if such unit was permanently retired and had no emissions for the entire period for which the WEB source implements this paragraph (3) and the Account Representative certifies in accordance with Section L2 of this Rule that these conditions were met.

(b) Notwithstanding paragraph (a) of this Section, the owner or operator of a unit that meets one of the conditions of paragraph (b)(1) may elect to have the provisions of this paragraph (b) apply to that unit.

(1) Any of the following units may implement this paragraph (b):

(A) Any smelting operation where all of the emissions from the operation are not ducted to a stack; or

(B) Any flare, except to the extent such flares are used as a fuel gas combustion device at a petroleum refinery.

(C) Any other type of unit without add-on SO₂ control equipment, if no control level was assumed for the WEB source in establishing the floor level (and reducible allocation) provided in Section C1 of the Implementation Plan.

(2) For each unit covered by this paragraph (b), the Account Representative shall submit a notice to request that this paragraph (b) apply to one or more SO₂ emitting units at a WEB source. The notice shall be submitted in accordance with the compliance dates specified in Section 16(a) of this Rule, and shall include the following information (in a format specified by [state or tribe] with such additional, related information as may be requested):

(A) A notice of all units at the applicable source, specifying which of the units are to be covered by this paragraph (b);

- (B) Consistent with the emission estimation methodology used to determine the floor level (and reducible allocation) for the source in accordance with Section C1 of the Implementation Plan, the portion of the WEB source's overall allowance allocation that is attributable to any unit(s) covered by this paragraph; and
- (C) An identification of any such units that are permanently retired.
- (3) For each new unit at an existing WEB source for which the owner or operator seeks to comply with this paragraph (b) and for which the Account Representative applies for an allocation under the new source set-aside provisions of Section G6 of this Rule, the Account Representative shall submit a modified notice under paragraph (b)(2) that includes such new SO₂ emitting unit(s). The modified notice shall be submitted in accordance with the compliance dates in Section I6(a) of this Rule, but no later than the date on which a request is submitted under Section G6 of this Rule for allocations from the set-aside.
- (4) [State or tribe] shall evaluate the information submitted by the WEB source in paragraphs (b)(2) and (b)(3), and may issue a notice to the source to exclude any units that do not qualify under this paragraph (b) or to adjust the portion of allowances attributable to units that do qualify to be consistent with the emission estimation methodology used to establish the floor level (and reducible allocation) for the source. Any such notice shall be provided within 180 days after the date on which the notice from the WEB source was received.
- (5) [State or tribe] shall hold allowances equal to the adjusted portion of the WEB source's allowances under paragraphs (b)(2), (b)(3), and (b)(4) in an account maintained by [state or tribe], provided that no such hold back of the WEB source's allocation will be required for any unit that is permanently retired.
- (6) The Account Representative for a WEB source shall submit an annual emissions statement for each unit under this paragraph (b). The WEB source shall maintain operating records sufficient to estimate annual emissions in a manner consistent with the emission estimation methodology used to establish the floor level (and reducible allocation) for the source. [State or tribe] will retire the allowances held under paragraph (b)(5) to account for the emissions from such units. In addition, if the estimated emissions from all such units at the WEB source are greater than the allowances held under paragraph (b)(5) for the WEB source, the Account Representative will report the excess amount as part of the cumulative annual emissions report for the WEB source and be required to use other allowances in the compliance account for the WEB source to account for such emissions, in accordance with Section I8 of this Rule.
- (7) The remaining provisions of this Section I shall not apply to units covered by this paragraph except where otherwise noted.
- (8) A WEB source may opt to modify the monitoring for an SO₂ emitting unit to use monitoring under Section I1.(a) of this Rule, but any such monitoring change must take effect on January 1 of the next compliance year. In addition, the Account Representative must submit an initial monitoring plan at least 180

days prior to the date on which the new monitoring will take effect and a detailed monitoring plan in accordance with Section 12 of this Rule. The Account Representative shall also submit a revised notice under paragraph (b)(2) at the same time that the initial monitoring plan is submitted.

(c) For any monitoring method that the owner or operator uses under this Section (including paragraph (b)), the owner or operator (and, as applicable, the Account Representative) shall install, certify, and operate such method in accordance with this Section, and record and report the data from such method as required in this Section. In addition, the owner or operator (and, as applicable, the Account Representative) may not:

(1) Use an alternative monitoring system, alternative reference method or another alternative for the required monitoring method without having obtained prior written approval in accordance with Section 18(e) of this Rule (relating to petitions);

(2) Operate an SO₂ emitting unit so as to discharge, or allow to be discharged, SO₂ emissions to the atmosphere without accounting for these emissions in accordance with the applicable provisions of this Section;

(3) Disrupt the approved monitoring method or any portion thereof, and thereby avoid monitoring and recording SO₂ mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing or maintenance is performed in accordance with the applicable provisions of this Section; or

(4) Retire or permanently discontinue use of an approved monitoring method, except under one of the following circumstances:

(A) During a period when the unit is exempt from the requirements of this Section, including retirement of a unit as addressed in Section 11(a)(3);

(B) The owner or operator is monitoring emissions from the unit with another certified monitoring method approved under this Section for use at the unit that provides data for the same parameter as the retired or discontinued monitoring method; or

(C) The Account Representative submits notification of the date of certification testing of a replacement monitoring system in accordance with this Section, and the owner or operator recertifies thereafter a replacement monitoring system in accordance with the applicable provisions of this Section.

2. Monitoring Plan

(a) General Provisions. The owner or operator of an SO₂ emitting unit that uses a monitoring method under Section 11(a)(2) of this Rule shall meet the following requirements:

(1) Prepare and submit to [state or tribe] an initial monitoring plan for each monitoring method that the owner or operator uses to comply with this Section. In accordance with paragraph I2(c) of this Rule, the plan shall contain sufficient information on the units involved, the applicable method, and the use of data derived from that method to demonstrate that all unit SO₂ emissions are monitored and reported. The plan shall be submitted in accordance with the compliance dates specified in Section I5 of this Rule.

(2) Prepare, maintain and submit to [state or tribe] a detailed monitoring plan at least 45 days prior to the first day of certification testing. The plan will contain the applicable information required by paragraph I2(d) of this Rule. [State or tribe] may require that the monitoring plan (or portions thereof) be submitted electronically. The [state or tribe] also may require that the plan be submitted on an ongoing basis in electronic format as part of the quarterly report submitted under Section I8.(a) of this Rule or resubmitted separately within 30 days after any change is made to the plan in accordance with the following paragraph (a)(3).

(3) Whenever the owner or operator makes a replacement, modification, or change in one of the systems or methodologies provided for in Section I1(a)(2), including a change in the automated data acquisition and handling system or in the flue gas handling system, that affects information reported in the monitoring plan (e.g., a change to serial number for a component of a monitoring system), then the owner or operator shall update the monitoring plan.

(b) The owner or operator of an SO₂ emitting unit that uses a method under Section I1(a)(1) of this Rule (a unit subject to 40 CFR Part 75 under a program other than this WEB Trading Program) shall meet the requirements of Section I2(a)-(f) by preparing, maintaining and submitting a monitoring plan in accordance with the requirements of 40 CFR Part 75, provided that the owner or operator also shall submit the entire monitoring plan to [state or tribe] upon request.

(c) Initial Monitoring Plan. The Account Representative shall submit an initial monitoring plan for each SO₂ emitting unit (or group of units sharing a common methodology) that, except as otherwise specified in an applicable provision in Appendix A, contains the following information:

(1) For all SO₂ emitting units involved in the monitoring plan:

(A) Plant name and location;

(B) Plant and unit identification numbers assigned by [state or tribe];

(C) Type of unit (or units for a group of units using a common monitoring methodology);

(D) Identification of all stacks or pipes associated with the monitoring plan;

(E) Types of fuel(s) fired (or sulfur containing process materials used in the SO₂ emitting unit), and the fuel classification of the unit if combusting more than one type of fuel and using a 40 CFR Part 75 methodology;

(F) Type(s) of emissions controls for SO₂ installed or to be installed, including specifications of whether such controls are pre-combustion, post-combustion, or integral to the combustion process;

(G) Maximum hourly heat input capacity, or process throughput capacity, if applicable;

(H) Identification of all units using a common stack; and

(I) Indicator of whether any stack identified in the plan is a bypass stack.

(2) For each unit and parameter required to be monitored, identification of monitoring methodology information, consisting of monitoring methodology, monitor locations, substitute data approach for the methodology, and general identification of quality assurance procedures. If the proposed methodology is a site-specific methodology submitted pursuant to Section I1(a)(2)(D) of this Rule, the description under this paragraph shall describe fully all aspects of the monitoring equipment, installation locations, operating characteristics, certification testing, ongoing quality assurance and maintenance procedures, and substitute data procedures.

(3) If the WEB source intends to petition for a change to any specific monitoring requirement otherwise required under this Section, such petition may be submitted as part of the initial monitoring plan.

(4) [State or tribe] may issue a notice of approval or disapproval of the initial monitoring plan based on the compliance of the proposed methodology with the requirements for monitoring in this Section. Except for any petition contained in the initial monitoring plan, if such notice is not issued within 180 days after the date on which [state or tribe] received the initial monitoring plan, the plan shall be deemed approved.

(d) Detailed Monitoring Plan. The Account Representative shall submit a detailed monitoring plan that, except as otherwise specified in an applicable provision in Appendix A, shall contain the following information:

(1) Identification and description of each monitoring component (including each monitor and its identifiable components, such as analyzer and/or probe) in a CEMS (e.g., SO₂ pollutant concentration monitor, flow monitor, moisture monitor), a 40 CFR Part 75, Appendix D monitoring system (e.g., fuel flowmeter, data acquisition and handling system), or a protocol in Appendix A, including:

(A) Manufacturer, model number and serial number;

(B) Component/system identification code assigned by the facility to each identifiable monitoring component, such as the analyzer and/or probe;

- (C) Designation of the component type and method of sample acquisition or operation (e.g., in situ pollutant concentration monitor or thermal flow monitor);
 - (D) Designation of the system as a primary or backup system;
 - (E) First and last dates the system reported data;
 - (F) Status of the monitoring component; and
 - (G) Parameter monitored.
- (2) Identification and description of all major hardware and software components of the automated data acquisition and handling system, including:
- (A) Hardware components that perform emission calculations or store data for quarterly reporting purposes (provide the manufacturer and model number); and
 - (B) Software components (provide the identification of the provider and model/version number).
- (3) Explicit formulas for each measured emissions parameter, using component/system identification codes for the monitoring system used to measure the parameter that links the system observations with the reported concentrations and mass emissions. The formulas must contain all constants and factors required to derive mass emissions from component/system code observations and an indication of whether the formula is being added, corrected, deleted, or is unchanged. The owner or operator of a low mass emissions unit for which the owner or operator is using the optional low mass emissions excepted methodology in section 75.19(c) of 40 CFR Part 75 is not required to report such formulas.
- (4) Inside cross-sectional area (ft²) at flow monitoring location (for units with flow monitors, only).
- (5) If using CEMS for SO₂ and flow, for each parameter monitored: scale, maximum potential concentration (and method of calculation), maximum expected concentration (if applicable) (and method of calculation), maximum potential flow rate (and method of calculations), span value, full-scale range, daily calibration units of measure, span effective date/hour, span inactivation date/hour, indication of whether dual spans are required, default high range value, flow rate span, and flow rate span value and full scale value (in scfh) for each unit or stack using SO₂ or flow component monitors.
- (6) If the monitoring system or excepted methodology provides for use of a constant, assumed, or default value for a parameter under specific circumstances, then include the following information for each value of such parameter:
- (A) Identification of the parameter;

- (B) Default, maximum, minimum, or constant value, and units of measure for the value;
 - (C) Purpose of the value;
 - (D) Indicator of use during controlled/uncontrolled hours;
 - (E) Types of fuel;
 - (F) Source of the value;
 - (G) Value effective date and hour;
 - (H) Date and hour value is no longer effective (if applicable); and
 - (I) For units using the excepted methodology under section 75.19 of 40 CFR Part 75, the applicable SO₂ emission factor.
- (7) Unless otherwise specified in section 6.5.2.1 of Appendix A to 40 CFR Part 75, for each unit or common stack on which hardware CEMS are installed:
- (A) The upper and lower boundaries of the range of operation (as defined in section 6.5.2.1 of Appendix A to 40 CFR Part 75), or thousand of lb/hr of steam, or ft/sec (as applicable);
 - (B) The load or operating level(s) designated as normal in section 6.5.2.1 of Appendix A to 40 CFR Part 75, or thousands of lb/hr of steam, or ft/sec (as applicable);
 - (C) The two load or operating levels (i.e., low, mid, or high) identified in section 6.5.2.1 of Appendix A to 40 CFR Part 75 as the most frequently used;
 - (D) The date of the data analysis used to determine the normal load (or operating) level(s) and the two most frequently-used load (or operating) levels; and
 - (E) Activation and deactivation dates when the normal load or operating level(s) change and are updated.
- (8) For each unit that is complying with 40 CFR Part 75 for which the optional fuel flow-to-load test in section 2.1.7 of appendix D to 40 CFR Part 75 is used:
- (A) The upper and lower boundaries of the range of operation (as defined in section 6.5.2.1 of Appendix A to 40 CFR Part 75), expressed in thousand of lb/hr of steam;
 - (B) The load level designated as normal, pursuant to section 6.5.2.1 of Appendix A to 40 CFR Part 75, expressed in thousands of lb/hr of steam; and

(C) The date of the load analysis used to determine the normal load level.

(9) Information related to quality assurance testing, including (as applicable): identification of the test strategy; protocol for the relative accuracy test audit; other relevant test information; calibration gas levels (percent of span) for the calibration error test and linearity check; calculations for determining maximum potential concentration, maximum expected concentration (if applicable), maximum potential flow rate, and span;

(10) If applicable, apportionment strategies under sections 75.10 through 75.18 of 40 CFR Part 75.

(11) Description of site locations for each monitoring component in a monitoring system, including schematic diagrams and engineering drawings and any other documentation that demonstrates each monitor location meets the appropriate siting criteria. For units monitored by a continuous emission monitoring system, diagrams shall include:

(A) A schematic diagram identifying entire gas handling system from unit to stack for all units, using identification numbers for units, monitor components, and stacks corresponding to the identification numbers provided in the initial monitoring plan and paragraphs (d)(1) and (3). The schematic diagram must depict the height of any monitor locations. Comprehensive and/or separate schematic diagrams shall be used to describe groups of units using a common stack.

(B) Stack and duct engineering diagrams showing the dimensions and locations of fans, turning vanes, air preheaters, monitor components, probes, reference method sampling ports, and other equipment that affects the monitoring system location, performance, or quality control checks.

(12) A data flow diagram denoting the complete information handling path from output signals of CEMS components to final reports.

(e) In addition to supplying the information in paragraphs (c) and (d) above, the owner or operator of an SO₂ emitting unit using either of the methodologies in paragraph I.1(a)(2)(B) of this Section shall include the following information in its monitoring plan for the specific situations described:

(1) For each gas-fired or oil-fired SO₂ emitting unit for which the owner or operator uses the optional protocol in appendix D to 40 CFR Part 75 for SO₂ mass emissions, the Account Representative shall include the following information in the monitoring plan:

(A) Parameter monitored;

- (B) Type of fuel measured, maximum fuel flow rate, units of measure, and basis of maximum fuel flow rate (i.e., upper range value or unit maximum) for each fuel flowmeter;
 - (C) Test method used to check the accuracy of each fuel flowmeter;
 - (D) Submission status of the data;
 - (E) Monitoring system identification code;
 - (F) The method used to demonstrate that the unit qualifies for monthly GCV sampling or for daily or annual fuel sampling for sulfur content, as applicable;
 - (G) A schematic diagram identifying the relationship between the unit, all fuel supply lines, the fuel flowmeter(s), and the stack(s). The schematic diagram must depict the installation location of each fuel flowmeter and the fuel sampling location(s). Comprehensive and/or separate schematic diagrams shall be used to describe groups of units using a common pipe;
 - (H) For units using the optional default SO₂ emission rate for "pipeline natural gas" or "natural gas" in appendix D to 40 CFR Part 75, the information on the sulfur content of the gaseous fuel used to demonstrate compliance with either section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR Part 75;
 - (I) For units using the 720 hour test under section 2.3.6 of appendix D to 40 CFR Part 75 to determine the required sulfur sampling requirements, report the procedures and results of the test; and
 - (J) For units using the 720 hour test under section 2.3.5 of appendix D to 40 CFR Part 75 to determine the appropriate fuel GCV sampling frequency, report the procedures used and the results of the test.
- (2) For each SO₂ emitting unit for which the owner or operator uses the low mass emission excepted methodology of section 75.19 to 40 CFR Part 75, the designated representative shall include the following information in the monitoring plan that accompanies the initial certification application:
- (A) The results of the analysis performed to qualify as a low mass emissions unit under section 75.19(c) to 40 CFR Part 75. This report will include either the previous three years actual or projected emissions. The following items should be included:
 - (i) Current calendar year of application;
 - (ii) Type of qualification;
 - (iii) Years one, two, and three;

(iv) Annual measured, estimated or projected SO₂ mass emissions for years one, two, and three; and

(v) Annual operating hours for years one, two, and three.

(B) A schematic diagram identifying the relationship between the unit, all fuel supply lines and tanks, any fuel flowmeter(s), and the stack(s). Comprehensive and/or separate schematic diagrams shall be used to describe groups of units using a common pipe;

(C) For units which use the long term fuel flow methodology under section 75.19(c)(3) to 40 CFR Part 75, a diagram of the fuel flow to each unit or group of units and a detailed description of the procedures used to determine the long term fuel flow for a unit or group of units for each fuel combusted by the unit or group of units;

(D) A statement that the unit burns only gaseous fuel(s) and/or fuel oil and a list of the fuels that are burned or a statement that the unit is projected to burn only gaseous fuel(s) and/or fuel oil and a list of the fuels that are projected to be burned;

(E) A statement that the unit meets the applicability requirements in sections 75.19(a) and (b) to 40 CFR Part 75 with respect to SO₂ emissions; and

(F) Any unit historical actual, estimated and projected SO₂ emissions data and calculated SO₂ emissions data demonstrating that the unit qualifies as a low mass emissions unit under sections 75.19(a) and (b) to 40 CFR Part 75.

(3) For each gas-fired unit the Account Representative shall include the following in the monitoring plan: current calendar year, fuel usage data as specified in the definition of gas-fired in section 72.2 of 40 CFR Part 72, and an indication of whether the data are actual or projected data.

(f) An operating permit for a WEB source issued in accordance with Title V of the Clean Air Act shall require a source to maintain a detailed monitoring plan in accordance with this Part, but the specific elements of the plan shall not be part of the permit, and modifications to the elements of the plan shall not require a permit modification.

3. Certification/Recertification

(a) All monitoring systems are subject to initial certification and recertification testing as specified in 40 CFR Part 75 or Appendix A to this Rule, as applicable. Certification or recertification of a monitoring system by the U.S. Environmental Protection Agency for a WEB source that is subject to 40 CFR Part 75 under a requirement separate from this Rule shall constitute certification under the WEB Trading Program.

(b) The owner or operator of an SO₂ emitting unit not otherwise subject to 40 CFR Part 75 that monitors SO₂ mass emissions in accordance with 40 CFR Part 75 to satisfy the

requirements of this Section shall perform all of the tests required by that regulation and shall submit the following:

(1) A test notice, not later than 21 days before the certification testing of the monitoring system, provided that [state or tribe] may establish additional requirements for adjusting test dates after this notice as part of the approval of the initial monitoring plan under paragraph I2.(c) of this Rule; and

(2) An initial certification application within 45 days after testing is complete. A monitoring system will be considered provisionally certified while the application is pending, and the system shall be deemed certified if [state or tribe] does not approve or disapprove the system within six months after the date on which the application is submitted.

4. Ongoing Quality Assurance and Quality Control

The WEB source shall satisfy the applicable quality assurance and quality control requirements of Part 75 or, if the WEB source is subject to a WEB protocol in Appendix A, the applicable quality assurance and quality control requirements in Appendix A on and after the date that certification testing commences.

5. Substitute Data Procedures

(a) For any period after certification testing is complete in which valid data are not being recorded by a monitoring system specified in this Rule, missing or invalid data shall be replaced with substitute data in accordance with 40 CFR Part 75 or, if the WEB source is subject to a WEB protocol in Appendix A, with substitute data in accordance with Appendix A.

(b) For an SO₂ emitting unit that does not have a certified (or provisionally certified) monitoring system in place as of the beginning of the first control period for which the unit is subject to the WEB Trading Program, the owner or operator shall:

(1) If the owner or operator will use a CEMS to comply with this Section, substitute the maximum potential concentration of SO₂ for the unit and the maximum potential flow rate, as determined in accordance with 40 CFR Part 75. The procedures for conditional data validation under section 75.20(b)(3) may be used for any monitoring system under this Rule that uses these 40 CFR Part 75 procedures, as applicable;

(2) If the owner or operator will use the 40 CFR Part 75 Appendix D methodology, substitute the maximum potential sulfur content, density or gross calorific value for the fuel and the maximum potential fuel flow rate, in accordance with section 2.4 of Appendix D to 40 CFR Part 75;

(3) If the owner or operator will use the 40 CFR Part 75 LME methodology, substitute the SO₂ emission factor required for the unit as specified in 40 CFR 75.19 and the maximum rated hourly heat input, as defined in 40 CFR 72.2; or

(4) If using a protocol in Appendix A to this Rule, follow the procedures in the applicable protocol.

6. Compliance Dates

(a) The initial monitoring plan shall be submitted by the following dates:

(1) For each source that is a WEB source on or before the Program Trigger Date, the monitoring plan shall be submitted 180 days after such Program Trigger Date.

(2) For any existing source that becomes a WEB source after the Program Trigger Date, the monitoring plan shall be submitted by September 30 of the year following the inventory year in which the source exceeded the emissions threshold.

(3) For any new WEB source, the monitoring plan shall be included with the permit application for New Source Review. [State or tribe shall modify the language as necessary to conform with their new source review rules.]

(b) Emission monitoring systems shall be installed, operational and shall have met all of the certification testing requirements of this Section I (including any referenced in Appendix A) by the following dates:

(1) For each source that is a WEB source on or before the Program Trigger Date, two years prior to the start of the first control period as described in Section L of this Rule.

(2) For any existing source that becomes a WEB source after the Program Trigger Date, one year after the due date for the monitoring plan under I.1(c)(2) of this Rule.

(3) For any new WEB source, the earlier of 90 unit operating days or 180 calendar days after the date the new source commences operation.

7. Recordkeeping

(a) Except as provided in Section I7(b), the WEB source shall keep copies of all reports, registration materials, compliance certifications, sulfur dioxide emissions data, quality assurance data, and other submissions under this Rule for a period of five years. Unless otherwise requested by the WEB source and approved by [state or tribe], the copies shall be kept on site.

(b) The WEB source shall keep all Account Certificates of Representation on site at the source through the year 2018.

(c) The WEB source shall keep records of all operating hours, quality assurance activities, fuel sampling measurements, hourly averages for SO₂, stack flow, fuel flow, or other continuous measurements, as applicable, and any other applicable data elements specified in this Section or in Appendix A to this Rule. The WEB source shall maintain the applicable records specified in 40 CFR Part 75 for any SO₂ emitting unit that uses a Part 75 monitoring method to meet the requirements of this Section.

8. Reporting

(a) Quarterly Reports. For each SO₂ emitting unit, the Account Representative shall submit a quarterly report within thirty days after the end of each calendar quarter. The report shall be in a format specified by [state or tribe] and shall be submitted in a manner compatible with the emissions tracking database designed for the WEB Trading Program. [State or tribe] may require the WEB source to submit hourly and quality assurance activity information comparable to quarterly reports under 40 CFR Part 75. If the owner or operator submits a quarterly report under 40 CFR Part 75 to the U.S. EPA Administrator, no additional report under this paragraph (a) shall be required, provided, however, that [state or tribe] may require that a copy of that report (or a separate statement of quarterly and cumulative annual SO₂ mass emissions) be submitted separately to [state or tribe].

(b) Annual Report. Based on the quarterly reports, each WEB source shall submit an annual statement of total annual SO₂ emissions for all SO₂ emitting units at the source. The annual report shall contain four elements: total emissions for all units monitored in accordance with Section I1(a) of this Rule; total emissions for all units with emissions estimated in accordance with Section I1(b) of this Rule; the number of tons, if any, of SO₂ emissions estimated under Section I1(b) of this Rule that are subject to deduction of allowances from the source's compliance account in accordance with Section I1(b)(6); and the total number of SO₂ tons subject to deduction of allowances from the source's compliance account in accordance with Section L of this Rule. The annual report shall be submitted within 30 days after the end of a control period.

(c) [State or tribe] may direct that any monitoring plan, report, certification/recertification, or emissions data required to be submitted under this Section be submitted to the Tracking System Administrator.

(d) [State or tribe] may review and reject any report submitted under this Section 17 that contains errors or fails to satisfy the requirements of this Section, and the Account Representative shall resubmit the report to correct any deficiencies.

(e) Petitions. A WEB source may petition for an alternative to any requirement specified in Section I1(a)(2). The petition shall require approval of [state or tribe] and the U.S. EPA Administrator. Any petition submitted under this paragraph shall include sufficient information for the evaluation of the petition, including, at a minimum, the following information:

- (1) Identification of the WEB source and applicable SO₂ emitting unit(s);
- (2) A detailed explanation of why the proposed alternative is being suggested in lieu of the requirement;
- (3) A description and diagram of any equipment and procedures used in the proposed alternative, if applicable;
- (4) A demonstration that the proposed alternative is consistent with the purposes of the requirement for which the alternative is proposed and is consistent with the purposes of this Rule and that any adverse effect of approving such alternative will be *de minimis*; and

(4) Any other relevant information that [state or tribe] may require.

(f) For any monitoring plans, reports, or other information submitted under Section I of this Rule, the Account Representative shall ensure that, where applicable, identifying information is consistent with the identifying information provided in the most recent certificate of representation for the WEB source submitted under Section E of this Rule.

J. Allowance Transfers

1. Procedure

To transfer allowances, the Account Representative shall submit the following information to the Tracking System Administrator:

- (a) The transfer account number(s) identifying the transferor account;
- (b) The transfer account number(s) identifying the transferee account;
- (c) The serial number of each allowance to be transferred; and
- (d) The transferor's Account Representative's name and signature and date of submission.

2. Deadline

The allowance transfer deadline is midnight Pacific Standard Time March 1 of each year (or if this date is not a business day, midnight of the first business day thereafter) following the end of the control period. By this time, the transfer of the allowances into the WEB source's compliance account must be correctly submitted to the Tracking System Administrator in order to demonstrate compliance under Section L1 of the rule for that control period.

3. Retirement of Allowances

To transfer allowances for the purpose of retirement, the Account Representative shall submit the following information to the Tracking System Administrator:

- (a) The transfer account number(s) identifying the transferor account;
- (b) The serial number of each allowance to be retired; and
- (c) The transferor's Account Representative's name and signature and date of submission accompanied by a signed statement acknowledging that each retired allowance as no longer available for future transfers from or to any account.

K. Use of Allowances from a Previous Year

1. Any allowance that is held in a compliance account or general account will remain in such an account unless and until the allowance is deducted in conjunction with the compliance process, or transferred to another account.

2. In order to demonstrate compliance under section L1 of this rule for a control period, WEB sources shall only use allowances allocated for that current control period or any previous year.

3. If flow control procedures for the current control period have been triggered as outlined in Section C4.2 of the SO₂ Milestones and Backstop Trading Program Implementation Plan, then the use of allowances that were allocated for any previous year will be limited as follows:

(a) The number of allowances that are held in each compliance account and general account as of the allowance transfer deadline for the immediately previous year and that were allocated for any previous year will be determined.

(b) The number determined in (a) will be multiplied by the flow control ratio established in accordance with Section C7.1 of the SO₂ Milestones and Backstop Trading Program Implementation Plan to determine the number of allowances that were allocated for a previous year that can be used without restriction for the current control period.

(c) Allowances that were allocated for a previous year in excess of the number determined in (b) may also be used for the current control period. If such allowances are used to make a deduction, two allowances must be deducted for each deduction of one allowance required under Section L of this Rule.

4. Special provisions for the year 2018. After compliance with the 2017 allowance limitation has been determined in accordance with Section L1 of this Rule, allowances allocated for any year prior to 2018 shall not be used for determining compliance with the 2018 allowance limitation or any future allowance limitation.

L. Compliance

1. Compliance with Allowance Limitations

(a) The WEB source must hold allowances, in accordance with Section L1(b) and Section K of this Rule, as of the allowance transfer deadline in the WEB source's compliance account (together with any current control year allowances held for the WEB source by the [state or tribe] under Section I1(b) of this Rule) in an amount not less than the total SO₂ emissions for the control period from the WEB source, as determined under the monitoring and reporting requirements of Section I of this Rule.

(1) For each source that is a WEB source on or before the Program Trigger Date, the first control period is the calendar year that is six years following the calendar year for which SO₂ emissions exceeded the milestone in accordance with procedures in Section A of the SO₂ Milestones and Backstop Trading Program Implementation Plan.

(2) For any existing source that becomes a WEB source after the Program Trigger Date, the first control period is the calendar year that is four years following the inventory year in which the source exceeded the SO₂ emissions threshold.

(3) For any new WEB source after the Program Trigger Date the first control period is the first full calendar year that the source is in operation.

(4) If the WEB Trading Program is triggered in accordance with the 2013 review procedures in section A4 of the SO₂ Milestones and Backstop Trading Program implementation plan, the first control period for each source that is a WEB source on or before the Program Trigger Date is the year 2018.

(b) Allowance transfer deadline

An allowance may only be deducted from the WEB source's compliance account if:

(1) the allowance was allocated for the current control period or meets the requirements in Section K of this Rule for use of allowances from a previous control period, and

(2) the allowance was held in the WEB source's compliance account as of the allowance transfer deadline for the current control period, or was transferred into the compliance account by an allowance transfer correctly submitted for recording by the allowance transfer deadline for the current control period.

(c) Compliance with allowance limitations shall be determined by comparing the following two numbers:

(1) the monitored SO₂ emissions data reported by the source to [state or tribe], in accordance with Section I of this Rule, and recorded in the emissions tracking database and

(2) the allowance allocations and transfers recorded in the Allowance Tracking System, adjusted in accordance with Section K of this Rule.

(d) To the extent consistent with Section K of this Rule, allowances shall be deducted for a WEB source for compliance with the allowance limitation as directed by the WEB source's Account Representative. Deduction of any other allowances as necessary for compliance with the allowance limitation shall be on a first-in, first-out accounting basis in the order of the date and time of their recording in the WEB source's compliance account, beginning with the allowances allocated to the WEB source and continuing with the allowances transferred to the WEB source's compliance account from another compliance account or general account. The allowances held by the [state or tribe] for compliance at a WEB source pursuant to Section I1(b) of this Rule shall be deducted as specified in that Section.

2. Certification of Compliance

(a) For each control period in which a WEB source is subject to the allowance limitation, the Account Representative of the source shall submit to [state or tribe] a Compliance Certification report for the source.

(b) The Compliance Certification report shall be submitted no later than the allowance transfer deadline of each control period, and shall contain the following:

(1) Identification of each WEB source;

(2) At the Account Representative's option, the serial numbers of the allowances that are to be deducted from a source's compliance account for compliance with the allowance limitation; and

(1) The Compliance Certification report according to subpart (c) of this section.

(c) In the Compliance Certification report, the Account Representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the WEB source in compliance with the WEB Trading Program, whether the WEB source for which the compliance certification is submitted was operated during the control period covered by the report in compliance with the requirements of the WEB Trading Program applicable to the source including:

(1) Whether the WEB source operated in compliance with the SO₂ allowance limitation;

(2) Whether SO₂ emissions data has been submitted to [states or tribe] in accordance with Section 11 of this Rule and other applicable guidance, for review, revision as necessary, and finalization for forwarding to the SO₂ Allowance Tracking System for recording;

(3) Whether the monitoring plan that governs the WEB source has been maintained to reflect the actual operation and monitoring of the source, and contains all information necessary to attribute SO₂ emissions to the source, in accordance with Section 11 of this Rule;

(4) Whether all the SO₂ emissions from the WEB source if applicable, were monitored or accounted for either through the applicable monitoring or through application of the appropriate missing data procedures;

(5) If applicable, whether any SO₂ emitting unit for which the WEB source is not required to monitor in accordance with Section 11A(3) of this rule remained permanently retired and had no emissions for the entire applicable period; and

(6) Whether there were any changes in the method of operating or monitoring the WEB source that required monitor recertification. If there were any such changes, the report must specify the nature, reason, and date of the change, the method to determine compliance status subsequent to the change, and specifically, the method to determine SO₂ emissions.

3. Penalties for any WEB source exceeding its allowance limitations

Note: Until such time that [state or tribe] has authority to exercise administrative penalties, states or tribes will rely on their existing penalty structure for enforcement of the program. The following language is suggested. The concept of consistent and stringent penalties across the region was a critical element of the Annex. States will need to address this issue perhaps through additional legislative authority.

(a) Allowance deduction penalties

(1) An allowance deduction penalty will be assessed equal to two times the number of the WEB source's tons of SO₂ emissions in excess of its allowance limitation for a control period, determined in accordance with Section L1 of this Rule. Allowances allocated for that control period in the amount of the allowance deduction penalty will be deducted from the source's compliance account. If the compliance account does not have sufficient allowances allocated for that control period, the required number of allowances will be deducted from the WEB source's compliance account regardless of the control period for which they were allocated, once allowances are recorded in the account.

(2) Any allowance deduction required under this Section shall not affect the liability of the owners and operators of the WEB source for any fine, penalty or assessment or their obligation to comply with any other remedy, for the same violation, as ordered under the Clean Air Act, implementing regulations or applicable state or tribal law. Accordingly, a violation can be assessed each day of the control period for each ton of SO₂ emissions in excess of its allowance limitation if [state or tribe] so chooses.

(b) Financial penalties

A financial penalty of \$5,000 (adjusted each year for inflation, based on the consumer price index) per ton of SO₂ emissions in excess of the WEB source's allowance limitation shall be levied.

4. Liability

(a) WEB Source liability for non-compliance

Separate and regardless of any automatic penalties assessed for allowance deduction penalty and financial penalty, a WEB source that violates any requirement of this Rule is subject to civil and criminal penalties under [state or tribe] law and the Clean Air Act. Each day of the control period is a separate violation, and each ton of SO₂ emissions in excess of a source's allowance limitation is a separate violation.

(b) General liability

[State or tribe] may or may not be able to adopt the liability provisions. If a state has existing liability Rules, those can be referenced in this location.]

(1) Any provision of the WEB Trading Program that applies to a source or an Account Representative shall apply also to the owners and operators of such source.

(2) Any person who violates any requirement or prohibition of the WEB Trading Program will be subject to enforcement pursuant to applicable state, tribal or federal law.

(3) Any person who knowingly makes a false material statement in any record, submission, or report under this WEB Trading Program shall be subject to criminal enforcement pursuant to the applicable state, tribal or federal law.

M. Special Penalty Provisions for Year 2018

1. If the WEB Trading Program is triggered as outlined in Section A of the SO₂ Milestones and Backstop Trading Program Implementation Plan, and the first control period will not occur until after the year 2018, the following provisions shall apply for the 2018 emissions year.

(a) All WEB sources shall register, and open a compliance account within 180 days after the Program Trigger Date, in accordance with Sections F1 and H of this Rule.

(b) The Tracking System Administrator will record the allowances for the 2018 control period for each WEB source in the source's compliance account once [state or tribe] allocates the 2018 allowances under Section C1 of the SO₂ Milestones and Backstop Trading Program Implementation Plan.

(c) The allowance transfer deadline is midnight Pacific Standard Time on May 30, 2021. WEB sources may transfer allowances as provided in Section J1 of this Rule until the allowance transfer deadline.

(d) A WEB source must hold allowances allocated for 2018 including those transferred into the compliance account by an allowance transfer correctly submitted by the allowance transfer deadline, in an amount not less than the WEB source's total SO₂ emissions for 2018. Emissions are determined using the pre-trigger monitoring provisions in Section B of the SO₂ Milestones and Backstop Trading Program Implementation Plan, and [refer to state or tribe emission inventory rule].

(e) An allowance deduction penalty and financial penalty shall be assessed and levied in accordance with Sections K4, L1(d) and L3 of this Rule, except that SO₂ emissions shall be determined under Section M1(d) of this Rule.

2. The provisions in section M.1 of this rule shall continue to apply for each year after the 2018 emission year until:

(a) The first control period under the WEB trading program; or

(b) [State or Tribe] determined, in accordance with section A3.10 of the Implementation Plan, that the 2018 SO₂ milestone has been met.

APPENDIX A: WEB MODEL RULE MONITORING PROTOCOLS

Protocol WEB-1: SO₂ Monitoring of Fuel Gas Combustion Devices

1. Applicability

(a) The provisions of this protocol are applicable to fuel gas combustion devices at petroleum refineries.

(b) Fuel gas combustion devices include boilers, process heaters, and flares used to burn fuel gas generated at a petroleum refinery.

(c) Fuel gas means any gas which is generated and combusted at a petroleum refinery. Fuel gas does not include: (1) natural gas, unless combined with other gases generated at a petroleum refinery, (2) gases generated by a catalytic cracking unit catalyst regenerator, (3) gases generated by fluid coking burners, (4) gases combusted to produce sulfur or sulfuric acid, or (5) process upset gases generated due to startup, shutdown, or malfunctions.

2. Monitoring Requirements

(a) Except as provided in paragraphs (b) and (c) of this Section 2, fuel gas combustion devices shall use a continuous fuel gas monitoring system (CFGMS) to determine the total sulfur content (reported as H₂S) of the fuel gas mixture prior to combustion, and continuous fuel flow meters to determine the amount of fuel gas burned.

(1) Fuel gas combustion devices having a common source of fuel gas may be monitored for sulfur content at one location, if monitoring at that location is representative of the sulfur content of the fuel gas being burned in any fuel gas combustion device.

(2) The CFGMS shall meet the performance requirements in Performance Specification 2 in Appendix B to 40 CFR Part 60, and the following:

(i) Continuously monitor and record the concentration by volume of total sulfur compounds in the gaseous fuel reported as ppmv H₂S.

(ii) Have the span value set so that the majority of readings fall between 10 and 95% of the range.

(iii) Record negative values of zero drift.

(iv) Calibration drift shall be 5.0% of the span.

(v) Methods 15A, 16, or approved alternatives for total sulfur, are the reference methods for the relative accuracy test. The relative accuracy test shall include a bias test in accordance with paragraph 4(c) of this section.

(3) All continuous fuel flow meters shall comply with the applicable provisions of Appendix D to 40 CFR Part 75.

(4) The hourly mass SO₂ emissions shall be calculated using the following equation:

$$E = (C_s)(Q_f)(K)$$

where:

E = SO₂ emissions in lbs/hr

C_s = Sulfur content of the fuel gas as H₂S(ppmv)

Q_f = Fuel gas flow rate (scfh)

$K = 1.660 \times 10^{-7}$ (lb/scf)/ppmv

(b) In place of a CFGMS in paragraph (a) of this Section 2, fuel gas combustion devices having a common source of fuel gas may be monitored with an SO₂ CEMS and flow CEMS at only one location, if the CEMS monitoring at that location is representative of the SO₂ emission rate (lb SO₂/scf fuel gas burned) of all applicable fuel gas combustion devices. Continuous fuel flow meters shall be used in accordance with paragraph (b), and the fuel gas combustion device monitored by a CEMS shall have separate fuel metering.

(1) Each CEMS for SO₂ and flow shall comply with the operating requirements, performance specifications, and quality assurance requirements of 40 CFR Part 75.

(2) All continuous fuel flow meters shall comply with the applicable provisions of Appendix D to 40 CFR Part 75.

(3) The SO₂ mass emissions for all the fuel gas combustion devices monitored by this approach shall be determined by the ratio of the amount of fuel gas burned by the CEMS-monitored fuel gas combustion device to the total fuel gas burned by all applicable fuel gas combustion devices using the following equation:

$$E_t = (E_m)(Q_t)/(Q_m)$$

where:

- E_t = Total SO₂ emissions in lbs/hr from applicable fuel gas combustion devices.
- E_m = SO₂ emissions in lbs/hr from the CEMS-monitored fuel gas combustion device.
- Q_t = Fuel gas flow rate (scfh) from applicable fuel gas combustion devices.
- Q_m = Fuel gas flow rate (scfh) from the CEMS-monitored fuel gas combustion device.

(c) In place of a CFGMS in paragraph (a) of this section, fuel gas combustion devices having a common source of fuel gas may be monitored with an SO₂ - diluent CEMS at only one location, if the CEMS monitoring at that location is representative of the SO₂ emission rate (lb SO₂/mmBtu) of all applicable fuel gas combustion devices. If this option is selected, the owner or operator shall conduct fuel gas sampling and analysis for gross calorific value (GCV), and shall use continuous fuel flow metering in accordance with paragraph (a) of this Section 2, with separate fuel metering for the CEMS-monitored fuel gas combustion device.

(1) Each SO₂-diluent CEMS shall comply with the applicable provisions for SO₂ monitors and diluent monitors in 40 CFR Part 75, and shall use the procedures in section 3 of Appendix F to Part 75 for determining SO₂ emission rate (lb/mmBtu) by substituting the term SO₂ for NO_x in that section.

(2) All continuous fuel flow meters and fuel gas sampling and analysis for GCV to determine the heat input rate from the fuel gas shall comply with the applicable provisions of Appendix D to 40 CFR Part 75.

(3) The SO₂ mass emissions for all the fuel gas combustion devices monitored by this approach shall be determined by the ratio of the fuel gas heat input to the CEMS-monitored fuel gas combustion device to the total fuel gas heat input to all applicable fuel gas combustion devices using the following equation:

$$E_t = (E_m)(H_t)/(H_m)$$

where:

- E_t = Total SO₂ emissions in lbs/hr from applicable fuel gas combustion devices.
- E_m = SO₂ emissions in lb/mmBtu from the CEMS - monitored fuel gas combustion device.
- H_t = Fuel gas heat input (mmBtu/hr) from applicable fuel gas combustion devices.
- H_m = Fuel gas heat input (mmBtu/hr) from the CEMS - monitored fuel gas combustion device.

3. Certification/Recertification Requirements

All monitoring systems are subject to initial certification and recertification testing as follows:

(a) The owner or operator shall comply with the initial testing and calibration requirements in Performance Specification 2 in Appendix B of 40 CFR Part 60 and paragraph 2 (a)(2) of this section for each CFGMS.

(b) Each CEMS for SO₂ and flow or each SO₂-diluent CEMS shall comply with the testing and calibration requirements specified in 40 CFR Part 75, section 75.20 and Appendices A and B, except that each SO₂-diluent CEMS shall meet the relative accuracy requirements for a NO_x-diluent CEMS (lb/mmBtu).

(c) A continuous fuel flow meter shall comply with the testing and calibration requirements in 40 CFR Part 75, Appendix D.

4. Quality Assurance/Quality Control Requirements

(a) A quality assurance/quality control (QA/QC) plan shall be developed and implemented for each CEMS for SO₂ and flow or the SO₂-diluent CEMS in compliance with Appendix B of 40 CFR Part 75.

(b) A QA/QC plan shall be developed and implemented for each continuous fuel flow meter and fuel sampling and analysis in compliance with Appendix B of 40 CFR Part 75.

(c) A QA/QC plan shall be developed and implemented for each CFGMS in compliance with sections 1 and 1.1 of Appendix B of 40 CFR Part 75, and the following:

(1) Perform a daily calibration error test of each CFGMS at two gas concentrations, one low level and one high level. Calculate the calibration error as described in Appendix A to 40 CFR Part 75. An out of control period occurs whenever the error is greater than 5.0% of the span value.

(2) In addition to the daily calibration error test, an additional calibration error test shall be performed whenever a daily calibration error test is failed, whenever a monitoring system is returned to service following repairs or corrective actions that may affect the monitor measurements, or after making manual calibration adjustments.

(3) Perform a linearity test once every operating quarter. Calculate the linearity as described in Appendix A to 40 CFR Part 75. An out of control period occurs whenever the linearity error is greater than 5.0 percent of a reference value, and the absolute value of the difference between average monitor response values and a reference value is greater than 5.0 ppm.

(4) Perform a relative accuracy test audit once every four operating quarters. Calculate the relative accuracy as described in Appendix A to 40 CFR Part 75. An out of control period occurs whenever the relative accuracy is greater than 20.0% of the mean value of the reference method measurements.

(5) Using the results of the relative accuracy test audit, conduct a bias test in accordance with Appendix A to 40 CFR Part 75, and calculate and apply a bias adjustment factor if required.

5. Missing Data Procedures

(a) For any period in which valid data are not being recorded by an SO₂ CEMS or flow CEMS specified in this section, missing or invalid data shall be replaced with substitute data in accordance with the requirements in Subpart D of 40 CFR Part 75.

(b) For any period in which valid data are not being recorded by an SO₂-diluent CEMS specified in this section, missing or invalid data shall be replaced with substitute data on a rate basis (lb/mmBtu) in accordance with the requirements for SO₂ monitors in Subpart D of 40 CFR Part 75.

(c) For any period in which valid data are not being recorded by a continuous fuel flow meter or for fuel gas GCV sampling and analysis specified in this section, missing or invalid data shall be replaced with substitute data in accordance with missing data requirements in Appendix D to 40 CFR Part 75.

(d) For any period in which valid data are not being recorded by the CFGMS specified in this section, hourly missing or invalid data shall be replaced with substitute data in accordance with the missing data requirements for units performing hourly gaseous fuel sulfur sampling in section 2.4 of Appendix D to 40 CFR Part 75.

6. Monitoring Plan and Reporting Requirements

In addition to the general monitoring plan and reporting requirements of Section I of this Rule, the owner or operator shall meet the following additional requirements:

(a) The monitoring plan shall identify each group of units that are monitored by a single monitoring system under this Protocol WEB-1, and the plan shall designate an identifier for the group of units for emissions reporting purposes. For purpose of

submitting emissions reports, no apportionment of emissions to the individual units within the group is required.

(b) If the provisions of paragraphs 2(b) or (c) are used, provide documentation and an explanation to demonstrate that the SO₂ emission rate from the monitored unit is representative of the rate from non-monitored units.

Protocol WEB-2: Predictive Flow Monitoring Systems for Kilns with Positive Pressure Fabric Filter

1. Applicability

The provisions of this protocol are applicable to cement kilns or lime kilns that (1) are controlled by a positive pressure fabric filter, and (2) have operating conditions upstream of the fabric filter that the WEB source documents would reasonably prevent reliable flow monitor measurements.

2. Monitoring Requirements

(a) A cement or lime kiln with a positive pressure fabric filter shall use a predictive flow monitoring system (PFMS) to determine the hourly kiln exhaust gas flow.

(b) A PFMS is the total equipment necessary for the determination of exhaust gas flow using process or control device operating parameter measurements and a conversion equation, a graph, or computer program to produce results in cubic feet per hour.

(c) The PFMS shall meet the following performance specifications:

(1) The PFMS must allow for the automatic or manual determination of failed monitors. At a minimum a daily determination must be performed.

(2) The PFMS shall have provisions to check the calibration error of each parameter that is individually measured. The owner or operator shall propose appropriate performance specifications in the initial monitoring plan for all parameters used in the PFMS comparable to the degree of accuracy required for other monitoring systems used to comply with this Rule. The parameters shall be tested at two levels, low: 0 to 20% of full scale, and high: 50 to 100% of full scale. The reference value need not be certified.

(3) The relative accuracy of the PFMS must be $\leq 10.0\%$ of the reference method average value, and include a bias test in accordance with paragraph 4(c) of this section.

3. Certification Requirements

The PFMS is subject to initial certification testing as follows:

(a) Demonstrate the ability of the PFMS to identify automatically or manually a failed monitor.

(b) Provide evidence of calibration testing of all monitoring equipment. Any tests conducted within the previous 12 months of operation that are consistent with the QA/QC plan for the PFMS are acceptable for initial certification purposes.

(c) Perform an initial relative accuracy test over the normal range of operating conditions of the kiln. Using the results of the relative accuracy test audit, conduct a bias test in accordance with Appendix A to 40 CFR Part 75, and calculate and apply a bias adjustment factor if required.

4. Quality Assurance/Quality Control Requirements

A QA/QC plan shall be developed and implemented for each PFMS in compliance with sections 1 and 1.1 of Appendix B of 40 CFR Part 75, and the following:

(a) Perform a daily monitor failure check.

(b) Perform calibration tests of all monitors for each parameter included in the PFMS. At a minimum, calibrations shall be conducted prior to each relative accuracy test audit.

(c) Perform a relative accuracy test audit and accompanying bias test once every four operating quarters. Calculate the relative accuracy (and bias adjustment factor) as described in Appendix A to 40 CFR Part 75. An out of control period occurs whenever the flow relative accuracy is greater than 10.0% of the mean value of the reference method.

5. Missing Data

For any period in which valid data are not being recorded by the PFMS specified in this section, hourly missing or invalid data shall be replaced with substitute data in accordance with the flow monitor missing data requirements for non-load based units in Subpart D of 40 CFR Part 75.

6. Monitoring Plan Requirements

In addition to the general monitoring plan requirements of Section I of this Rule, the owner or operator shall meet the following additional requirements:

(a) The monitoring plan shall document the reasons why stack flow measurements upstream of the fabric filter are unlikely to provide reliable flow measurements over time.

(b) The initial monitoring plan shall explain the relationship of the proposed parameters and stack flow, and discuss other parameters considered and the reasons for not using those parameters in the PFMS. The [state or tribe] may require that the subsequent monitoring plan include additional explanation and documentation for the reasonableness of the proposed PFMS.