

INSPECTION CHECKLIST

Primary Aluminum NESHAP

40 CFR Part 63, Subpart LL

September, 2001

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INSPECTION CHECKLIST

Primary Aluminum NESHAP
40 CFR Part 63, Subpart LL

NOTE: This checklist is a tool to evaluate compliance with the Primary Aluminum NESHAP. It does not contain an exhaustive list or description of all federal environmental regulations that may apply to a primary aluminum facility.

1. GENERAL INFORMATION:

Date of Inspection: _____
Facility Name: _____
Facility Address: _____
Facility Contact: _____
Contact Phone Number: _____
Inspector's Name & Affiliation: _____

Compliance Date:

The affected facility's compliance date is October 7, 1999, unless an extension was granted. Was one granted? (Y/N) _____. If yes, until when? _____. (The compliance date can only be extended a maximum of two years until October 8, 2001). Was a conditional extension granted? (Y/N) _____. If so, what are the conditions and are they being met? _____

2. 40 CFR § 63.840 AND § 60.190 - APPLICABILITY

Except as provided in 40 CFR § 63.840(b), the requirements of Subpart LL apply to the owner or operator of each new pitch storage tank and new or existing potline, paste production plant, or anode bake furnace associated with primary aluminum production and located at a major source.¹

¹ 40 CFR § 63.2 defines a major source as...“any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants...”.

The requirements of Subpart LL do not apply to any existing anode bake furnace that is not located on the same site as a primary aluminum reduction plant. The owner or operator shall comply with the State MACT determination established by the applicable regulatory authority.

An owner or operator of an affected facility (potroom group or anode bake plant) subject to 40 CFR § 60.190 - Subpart S - Standards of Performance for Primary Aluminum Reduction Plants, may elect to comply with either Subpart S or the requirements of Subpart LL. Section 63.844 of Subpart LL delineates emission limits for new or reconstructed sources covered by the MACT. The inspector should determine which regulation the source is subject to and proceed accordingly. If the source has chosen to be regulated under Subpart S, see that subpart for the applicable requirements.

3. NOTIFICATIONS AND REPORTS - CHECKLIST ¹

Type of Notification or report that must be submitted	If you have the following situation	Submit the report before...	Facility Compliance Status	CFR Citation	Foot-note
Initial notification of applicability	Existing affected source	2/7/98 (120 days after the effective date)		63.9(b)(2) 63.850(a)(2)	
Initial notification of applicability	New or reconstructed affected source	120 days after initial startup		63.9(b)(3) 63.850(a)(3)	
Notification of construction or reconstruction	New or reconstructed major affected source with startup after 10/7/97	Construction or re-construction commences		63.9(b)(4) 63.850(a)(4)	2
Application for approval of construction or reconstruction	New or reconstructed major affected source	ASAP before construction or re-construction		63.5(d)	
Notification of potroom group component replacement	An existing potroom group	ASAP but no later than 60 days prior to construction		63.845(a)(2)(ii)	3

Type of Notification or report that must be submitted	If you have the following situation	Submit the report before...	Facility Compliance Status	CFR Citation	Foot-note
Notification of initial performance test	All affected sources	60 days prior to the scheduled test date		63.9(e) 63.850(a)(5)	
Notification of compliance status	All affected sources	60 days after performance test		63.9(h) 63.850(a)(6)	
Notification of intent to use HF CEMS	All affected sources			63.850(a)(7)	4
Notification of compliance approach	Any affected potline if requested by the regulatory authority	Date specified by the regulatory authority		63.850(a)(8)	5
Excess emissions reports	All affected sources	30 days after each 180-day period		63.10(e)(3) 63.850(d)	
Potroom group excess emissions report	A new, modified or reconstructed potroom group	30 days after any performance test between the lower and upper TF limits		63.845(f)	
Performance test reports	All potlines and anode bake furnaces	Initial test report with notice of compliance status; submit subsequent reports annually		63.850(b)	

Type of Notification or report that must be submitted	If you have the following situation	Submit the report before...	Facility Compliance Status	CFR Citation	Foot-note
Startup, shutdown and malfunction reports	All affected sources	<p>Within 2 days if actions are not consistent with SSM plan</p> <p>30 days after each 180-day period if actions are consistent with SSM plan</p>		<p>63.6(e)(3)(iv) 63.10(d)(5)(ii) 63.850(c)(2)</p> <p>63.10(d)(5)(i)</p>	6

See Appendix A for footnotes.

4. PLANS - CHECKLIST

Plan Name	Plan Description	Plan Availability (Yes/No)	Plan Approved (Yes/No/Not Required)	CFR Citation	Foot-note
Site-specific test plan	Procedures for conducting the initial performance test and subsequent performance tests			63.7(c) 63.847(b) 63.848	1
Continuous parameter monitoring plan	Parameters to be monitored, operating limits for these parameters and monitoring frequency			63.9(h) 63.847(h) 63.848	2
Emission averaging implementation plan	Identify all sources in the average, the TF and POM limits, etc.			63.846(d)	3
Engineering plan	Describes techniques used to address the capture efficiency of the reduction cells (pots)			63.850(a)(8)	4
Startup, shutdown and malfunction plan	Describes procedures and corrective actions to be taken during these events			63.6(e)(3) 63.850(c)	5

See Appendix A for footnotes

5. RECORDKEEPING REQUIREMENTS - CHECKLIST

Required Records	Availability and Adequacy of Records	CFR Citation
The occurrence and duration of each startup, shutdown or malfunction (SSM) of process equipment		63.10(b)(2)(i)
The occurrence and duration of each SSM of air pollution control equipment		63.10(b)(2)(ii)
All maintenance performed on the air pollution control equipment		63.10(b)(2)(iii)
Actions taken during periods of SSM when different from the procedures in the SSM plan		63.10(b)(2)(iv)
All information needed to demonstrate conformance with the SSM plan		63.10(b)(2)(v)
Each period a continuous monitoring system (CMS) is malfunctioning or inoperative		63.10(b)(2)(vi)
All required measurements needed to demonstrate compliance with the standard		63.10(b)(2)(vii)
All results of performance tests, CMS performance evaluations, opacity and visible emission observations		63.10(b)(2)(viii)
All calibration checks, adjustments and maintenance performed on CMS		63.10(b)(2)(x) and (xi)
Documentation supporting initial notifications and notification of compliance status		63.10(b)(2)(xiv)
Daily production rate of aluminum		63.850(e)(4)(i)
Daily production rate of green anode material placed in the anode bake furnace(s)		63.850(e)(4)(ii)
Copy of SSM plan		63.850(e)(4)(iii)

Required Records	Availability and Adequacy of Records	CFR Citation
Records of design information for paste production plant capture systems		63.850(e)(4)(iv)
Records of design information for an alternative emission control device for a paste production plant		63.850(e)(4)(v)
Records supporting the monitoring of similar potlines		63.850(e)(4)(vi)
Records supporting a request for reduced sampling frequency for potlines		63.850(e)(4)(vii)
Records supporting the correlation of emissions measured by a continuous emission monitoring system to emissions measured by manual (reference) methods and the derivation of the alternative emissions limit derived from the measurements		63.850(e)(4)(viii)
Current implementation plan for emission averaging and any subsequent amendments		63.850(e)(4)(ix)
Records of the daily inspection of wet roof scrubbers for control of secondary potline emissions		63.850(e)(4)(x)
Records of the daily visual inspection of the exhaust stack for each control device		63.850(e)(4)(xi)
For each potline equipped with an HF CEMS, records of information and data required by 63.10(c)		63.850(e)(4)(xii)
Records documenting corrective actions taken when control device operating parameter limits were exceeded, when visible emissions indicated abnormal operation, or when a problem was detected during an inspection of a wet roof scrubber		63.850(e)(4)(xiii)

Required Records	Availability and Adequacy of Records	CFR Citation
Records documenting any POM data that are invalidated due to the installation and startup of a cathode		63.850(e)(4)(xiv)
Records documenting the particulate matter and gaseous fractions of TF when quantified separately using an approved test method		63.850(e)(4)(xv)

6. POTLINE - CHECKLIST

Requirement or Inspection Item	Measurement, observation, calculation or comment	Facility Performance (Yes/No/Not determined)	CFR Citation	Foot-note
Existing potline TF emission limit			63.843(a)(1)	1, 2
Existing potline POM emission limit			63.843(a)(2)	1, 3
New or reconstructed potline TF emission limit: 0.6 kg/Mg (1.2 lb/ton)			63.844(a)(1)	4
New or reconstructed potline POM emission limit: 0.32kg/Mg (0.63 lb/ton)			63.844(a)(2)	4
Has a new potroom group been added to an existing potline or does any potroom group meet the definition of "modified or reconstructed potroom group"?			63.845	5
Does the facility employ emission averaging?			63.846	6
For each potline, perform monthly monitoring of TF consisting of ≥ 3 runs for secondary emissions and the previous 12 month average for the primary control system emissions			63.848(a) 63.847 63.849 Site-specific test plan	

Requirement or Inspection Item	Measurement, observation, calculation or comment	Facility Performance (Yes/No/Not determined)	CFR Citation	Foot-note
Are similar potlines monitored using an alternative method?			63.848(d)	7
For Soderberg potlines perform quarterly monitoring of POM consisting of ≥ 1 run per month for secondary emissions and the previous 12 month average for the primary control system emissions			63.848(b) 63.847 63.849 Site-specific test plan	
Install, operate, and maintain a monitoring device to determine the daily weight of aluminum produced			63.848(j)	
Install, calibrate, operate and maintain continuous parameter monitoring systems to measure and record: For <i>dry alumina scrubbers</i> - alumina flow and air flow			63.848 63.848(f)(1)	
For <i>primary wet scrubbers</i> - water flow and air flow			63.848(f)(3)	
For <i>ESPs</i> - voltage and secondary current			63.848(f)(4)	
For <i>secondary wet roof scrubbers</i> - total water flow			63.848(f)(5)(i)	
For <i>any other control device</i> - recommend operating parameters for the regulatory authority to approve and add to the operating permit			63.848(f) 63.848(m)	
Alternative monitoring parameters for control devices can be approved by the regulatory authority			63.848(l)	

Requirement or Inspection Item	Measurement, observation, calculation or comment	Facility Performance (Yes/No/Not determined)	CFR Citation	Foot-note
If a continuously monitored parameter for any control device exceeds the approved limit >6 times in any semiannual reporting period, it is a violation			63.848(i)	
Calibrate the continuous parameter monitoring systems according to the manufacturer's instructions			63.848(k)	
Inspect each secondary wet roof scrubber daily to ensure proper operation and record inspection results			63.848(f)(5)(ii)	
Visually inspect the control device exhaust stack daily and record results of each inspection			63.848(g)	8
Initiate corrective action within one hour if the continuous parameter monitoring device measures a parameter outside the established limit(s) or if visible emissions indicate abnormal operation			63.848(h)	
Inspect pot emissions capture equipment to ensure it is operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions			63.6(e)(1)(i)	9
How is pot ventilation rate determined to ensure adequate capture of pot emissions?			63.6(e)(1)(i)	10
Inspect primary control system ductwork for corrosion, erosion and plugging			63.6(e)(1)(i)	11
Determine average frequency of anode effects (#/pot-day)			63.6(e)(1)(i)	12
Inspect the positive pressure side of the primary control system for leaks			63.6(e)(1)(i)	

See Appendix A for footnotes

7. ANODE BAKE FURNACE - CHECKLIST

Requirement or Inspection item	Measurement, observation, calculation or comment	Facility Performance (Yes/No/Not Determined)	CFR Citation	Foot-note
Existing, new or reconstructed anode bake furnace TF emission limit: 0.20 lb/ton green anode			63.843(c)(1) 63.844(c)(1)	1
Existing anode bake furnace POM emission limit: 0.18 lb/ton of green anode			63.843(c)(2)	1
New or reconstructed anode bake furnace POM emission limit: 0.05 lb/ton of green anode			63.844(c)(2)	1
Does the facility employ emission averaging?			63.846	2
For each anode bake furnace, perform annual monitoring for TF and POM consisting of ≥ 3 runs			63.848(c) 63.847 63.849 Site-specific test plan	
Install, operate, and maintain a monitoring device to determine the daily weight of green anode material placed in the anode bake furnace(s)			63.848(j)	
Install, calibrate, operate and maintain continuous parameter monitoring systems to measure and record:			63.848	
For <i>dry alumina scrubbers</i> - alumina flow and air flow			63.848(f)(1)	
For <i>ESPs</i> - voltage and secondary current			63.848(f)(4)	

Requirement or Inspection item	Measurement, observation, calculation or comment	Facility Performance (Yes/No/Not Determined)	CFR Citation	Foot-note
For <i>any other control device</i> - recommend operating parameters for the regulatory authority to approve and add to the operating permit			63.848(f) 63.848(m)	
Alternative monitoring parameters for control devices can be approved by the regulatory authority			63.848(l)	
If a continuously monitored parameter for any control device exceeds the approved limit >6 times in any semiannual reporting period, it is a violation			63.848(i)	
Calibrate the continuous parameter monitoring systems according to the manufacturer's instructions			63.848(k)	
Visually inspect the control device exhaust stack daily and record results of each inspection			63.848(g)	3
Initiate corrective action within one hour if the continuous parameter monitoring device measures a parameter outside the established limit(s) or if visible emissions indicate abnormal operation			63.848(h)	
Inspect the negative pressure side of the control system for air infiltration and the positive pressure side for leaks			63.6(e)(1)(i)	

See Appendix A for footnotes

8. PASTE PRODUCTION PLANT - CHECKLIST

Requirement or Inspection Item	Measurement, observation, calculation or comment	Facility Performance (Yes/No/Not Determined)	CFR Citation	Foot-note
Install, operate and maintain an emission capture system			63.843(b)(1)	1, 2
Captured emissions routed to a dry coke scrubber			63.843(b)(2)	
Has an alternate control device been approved by the regulatory authority?			63.843(b)(3)	3
Install, calibrate, operate, and maintain a continuous parameter monitoring system to measure and record:			63.848	
For <i>dry coke scrubbers</i> - coke flow and air flow			63.848(f)(2)	
For <i>alternate control device</i> - recommend operating parameters for the regulatory authority to approve and add to the operating permit			63.848(f) 63.848(m)	
Alternative monitoring parameters for the dry coke scrubber can be approved by the regulatory authority			63.848(l)	
If a continuously monitored parameter for any control device exceeds the approved limit >6 times in any semiannual reporting period, it is a violation			63.848(i)	
Calibrate the continuous parameter monitoring systems according to the manufacturer's instructions			63.848(k)	

Requirement or Inspection Item	Measurement, observation, calculation or comment	Facility Performance (Yes/No/Not Determined)	CFR Citation	Foot-note
Visually inspect the control device exhaust stack daily and record results of each inspection			63.848(g)	4
Initiate corrective action within one hour if the continuous parameter monitoring device measures a parameter outside the established limit(s) or if visible emissions indicate abnormal operation			63.848(h)	
Inspect the negative pressure side of the control system for air infiltration and the positive pressure side for leaks			63.6(e)(1)(i)	

See Appendix A for footnotes

9. NEW OR RECONSTRUCTED PITCH STORAGE TANK - CHECKLIST¹

Requirement or Inspection item	Measurement, observation, calculation or comment	Facility Performance (Yes/No/Not Determined)	CFR Citation
Design and operate an emission control system to reduce POM emissions by $\geq 95\%$			63.844(d)
Install, operate, calibrate and maintain a continuous parameter monitoring system for the control device			63.848(f) and (m)
If a continuously monitored parameter for any control device exceeds the approved limit >6 times in any semiannual reporting period, it is a violation			63.848(i)

Requirement or Inspection item	Measurement, observation, calculation or comment	Facility Performance (Yes/No/Not Determined)	CFR Citation
Calibrate the continuous parameter monitoring systems according to the manufacturer's instructions			63.848(k)
Visually inspect the control device exhaust stack daily and record results of each inspection			63.848(g)
Initiate corrective action within one hour if the continuous parameter monitoring device measures a parameter outside the established limit(s) or if visible emissions indicate abnormal operation			63.848(h)
Inspect the negative pressure side of the control system for air infiltration and the positive pressure side for leaks			63.8(e)(1)(i)

¹ This rule does not apply to existing pitch storage tanks (tanks in place on or before September 26, 1996).

APPENDIX A

FOOTNOTES

Notifications and Reports Checklist - Footnotes

1. Table 8.1 in the Plain Language Guide to the Primary Aluminum NESHAP contains further information on due dates for notifications and reports and Table 8.2 provides information on the contents of each notification and report.
2. Several notifications are required in addition to the notice of intent to construct including the date construction commenced, the anticipated startup date and the actual date of startup.
3. This notice is required if the fixed capital cost of the new components exceeds 50% of the fixed capital cost required to construct a comparable entirely new potroom group.
4. The date for submission of the notification of intent to use HF CEMS is not specified in § 63.850(a)(7). However, the source owner must receive approval from the regulatory authority to use the HF CEMS as an alternative for monthly monitoring by the procedure specified in § 63.848(d). Therefore, the notification of intent to use the HF CEMS should be submitted with or prior to submission of the analysis specified in § 63.848(d).
5. If requested by the regulatory authority, the notification of compliance approach would include the engineering plan specified in § 63.850(a)(8).
6. A report required within 2 days can be made by phone or fax followed by a letter within 7 days.

Plan Checklist- Footnotes

1. The site-specific test plan does not have to be submitted unless requested by the regulatory authority. However, in practice, many facilities have submitted the plan for approval since requests for alternative test methods are commonly proposed and alternative test procedures must be approved by the regulatory authority. An example outline for a site-specific test plan is shown in Appendix C of the Plain Language Guide to the Primary Aluminum NESHAP.

2. As part of the notification of compliance status report, the continuous parameter monitoring plan should be submitted for approval by the regulatory authority. The parts of § 63.848 most relevant to the this plan include (f), (g), (j), (k) and (l).
3. The emission averaging implementation plan must be submitted to the regulatory authority at least six months before emission averaging will be used.
4. An engineering plan may be required by the regulatory authority as part of a notification of compliance approach.
5. The startup, shutdown and malfunction plan does not have to be submitted to the regulatory authority unless requested.

Potline Checklist - Footnotes

1. Primary Aluminum Reduction Plants by Potline Type

CWPB1	CWPB2	CWPB3	VSS1	VSS2	HSS	SWPB
Alcan - Henderson, KY Alcoa - Alcoa, TN Badin, NC Goose Creek, SC Messena, NY Newburgh, IN Wenatchee, WA Noranda - New Madrid, MO	Alcoa - Rockdale, TX Kaiser - Mead, WA Ormet - Hannibal, OH Century - Ravenswood, WV Reynolds - Troutdale, OR Vanalco - Vancouver, WA	NSA - Hawesville KY	Goldendale Aluminum Company - Goldendale, WA Northwest Aluminum Company - The Dalles, OR	Columbia Falls - Columbia Falls, MT	Kaiser - Tacoma, WA Longview Aluminum LLC - Longview, WA Reynolds Messena, NY	Eastalco - Frederick, MD Alcoa Intalco Works - Ferndale, WA

2. Potline TF Limits (including emission averaging)

Monthly TF limit (lb/ton of aluminum produced) (for given number of potlines)						
Potline Type	1 line	2 lines	3 lines	4 lines	5 lines	≥6 lines
CWPB1	1.9	1.7	1.6	1.5	1.5	1.4
CWPB2	3.0	2.9	2.8	2.7	2.7	2.6
CWPB3	2.5	2.3	2.2	2.2	2.1	2.1
VSS1	2.2	2.0	1.9	1.8	1.7	1.7
VSS2	2.7	2.6	2.5	2.5	2.4	2.4
HSS	2.7	2.5	2.4	2.4	2.3	2.3
SWPB	1.6	1.4	1.3	1.2	1.2	1.2

3. Potline POM Limits (including emission averaging)

Quarterly POM Limit (lb/ton of aluminum produced) (for given number of potlines)								
Type	1 line	2 lines	3 lines	4 lines	5 lines	6 lines	7 lines	8 lines
HSS	4.7	4.1	3.8	3.7	3.5	3.5	3.4	3.3
VSS1	2.4	2.1	2.0	1.9	1.9	1.8	1.8	1.8
VSS2	3.6	3.2	3.0	2.9	2.9	2.8	2.8	2.7

4. A new potline is one for which construction commenced on or after September 26, 1996. A reconstructed potline is defined in § 63.842.
5. Emission limits for new and reconstructed potlines are defined in § 63.845(e). Modified or reconstructed potroom groups are also subject to a 10% opacity limit as described in § 63.845(h).
6. If emission averaging is used, the emission limits are shown in the tables under footnotes 2 and 3 above based on the number of potlines used in the average. Consult § 63.846 for other requirements such as preparation of an implementation plan for approval by the regulatory authority [§ 63.846(d)].
7. If an HF CEMS is used as an alternative monitoring method, the requirements of § 63.848(d)(1) through (d)(7) must be met. The regulatory authority must

approve a methodology for correlating the HF CEMS data to the reference method results for comparison to the applicable emission limit.

8. In addition to visual inspections, techniques such as sticky tape, sight gages and triboelectric bag leak detectors have been used to detect excessive particulate matter emissions from dry alumina scrubber control systems.
9. For prebake potlines, shields (hoods) should be properly placed and in good condition so that gaps are minimized. The pot superstructure should be sealed to prevent or minimize emissions from escaping around the anode rods and the ore hoppers. Side shields and end doors should be closed at all times except when specific work is being done on the pot. Work on the pots such as replacing anodes, adding bath material and tapping aluminum should be scheduled to minimize the time the shields and doors are open.
10. Determine how the facility sets and checks the pot ventilation rate. Periodic flow measurement, capture efficiency testing using tracer gases, smoke bomb tests and visual evaluation of gaps and open doors are some of the methods used. If HF CEMS for the potlines are not used, these other techniques are even more critical to achieving and maintaining good emission capture at the pots.
11. Corrosion or abrasion holes will decrease the effectiveness of the primary control system by allowing air infiltration which reduces the draft at the pots. Deposition of solids in the ducts will also reduce the capacity of the primary control system. Inquire about maintenance procedures for monitoring, maintaining and cleaning ductwork.
12. Anode effects occur when the pot has an inadequate amount of alumina dissolved in the electrolytic bath. The TF emission generation rate goes up during anode effects and most of the emissions of global warming compounds such as carbon tetrafluoride and carbon hexafluoride occur during anode effects. In addition, the corrective actions necessary to cure an anode effect cause more of the emissions to escape into the potroom. Generally, the lower the number of anode effects per pot-day and the shorter the duration of the anode effects, the better in terms of emissions generation, aluminum production and stability of operation. If available, the number of minutes in anode effect condition per pot-day is a useful measurement parameter. The trend of anode effect data over time will help indicate how the facility is operating to minimize the emission generation rate from the potlines. Anode effects are not reduced to zero because the opposite condition of too much alumina in the pots creates an even worse operating condition. See EPA 430-F-98-007, February 1998, "The Voluntary Aluminum Industrial Partnership" for additional information on global warming gases from primary aluminum reduction plants.

Anode Bake Furnace Checklist - Footnotes

1. Anode bake furnace emission limits are expressed in units of pounds of emissions per ton of green anode. Green anode means the formed anode prior to baking; therefore, the weight must be determined prior to introducing the green anodes into the anode bake furnace.
2. If emission averaging is used, the emission limits are shown in the table below based on the number of anode bake furnaces included in the average. Consult § 63.846 (c) and (d) for other requirements such as preparation of an implementation plan for approval by the regulatory authority.

Number of Anode Bake Furnaces	TF Emission Limit (lb/ton of green anode)	POM Emission Limit (lb/ton of green anode)
2	0.11	0.17
3	0.090	0.17
4	0.077	0.17
5	0.070	0.17

3. In addition to visual inspections, techniques such as sticky tape, sight gages and triboelectric bag leak detectors have been used to detect excessive particulate matter emissions from dry alumina scrubber control systems.

Paste Production Plant Checklist- Footnotes

1. The definition of paste production plant in § 63.842 includes all operations from initial mixing to final forming into briquettes, paste, or green anodes within the paste plant, including conveyors and units managing heated liquid pitch. Therefore, the capture system must be designed to capture POM emissions from all potential sources within the paste plant.
2. The capture system shall be installed and operated to meet the generally accepted engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in Chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice." The facility should have design data available to inspect for conformance to the procedures in this handbook.

3. If a dry coke scrubber is not used for control of paste plant emissions, the owner or operator may request approval from the regulatory authority for an alternate control device if the alternate control device can achieve POM emissions less than 0.011 lb/ton of paste for plants with continuous mixers or 0.024 lb/ton of paste for plants with batch mixers. The POM emission rate shall be determined by sampling using EPA Method 315. Disposable fiberglass filter control devices have been demonstrated to meet these emission limits at Goldendale Aluminum and Kaiser - Tacoma.
4. In addition to visual inspections, techniques such as sticky tape, sight gages and triboelectric bag leak detectors can be used to detect excessive particulate matter emissions from dry coke scrubber control systems.

APPENDIX B

EPA APPROVED ALTERNATE TEST METHODS

The Office of Air Quality Planning and Standards (OAQPS) has approved a number of alternatives to the test methods specified in the primary aluminum NESHAP. As of July 2001, the following alternatives have been approved. Some are general approvals and some are plant specific. Consult the Emission Measurement Center, OAQPS for up-dated information or clarification if necessary.

1. In a Federal Register notice dated January 18, 1977, ASTM Standard Method D3270-73T was approved as an alternative to the analytical procedures specified in EPA Methods 13A and 13B. (Federal Register, Volume 42, No. 17, January 26, 1977) The latest version of Method 13A has incorporated this by reference in section 16.1 which reads: "Compliance with ASTM D 3270-73T, 80, 91, or 95 (incorporated by reference - see § 60.17) "Analysis of Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method) is an acceptable alternative for the requirements specified in Sections 11.2, 11.3, and 11.4.1 when applied to suitable aliquots of Containers 1 and 2 samples. "
2. In a letter to Alcoa dated August 8, 1996, EPA approved Alcoa Method 4075-TF and Method 4076-TF as an alternative to EPA Methods 13A or 13B.
3. In a letter to Alcoa dated July 9, 1998, EPA approved the use of scintillation anemometer technology as an alternate method to determine roof monitor velocity from aluminum potrooms. (EPA Method 14 specifies propeller anemometers for determining roof monitor velocity from aluminum potrooms.)
4. In two letters to Alcoa dated June 17, 1999, EPA approved single point sampling as an alternative to traversing using EPA Method 13A or 13B and EPA Method 14 for a specific sample point in the Method 14 sampling duct at the Alcoa aluminum plants in Badin, North Carolina and Alcoa, Tennessee.
5. In a letter to Vanalco dated December 14, 1999, EPA approved single point sampling as an alternative to traversing using EPA Method 13A or 13B and EPA Method 14 for a specific sample point in the Method 14 sampling duct at the Vanalco aluminum plant in Vancouver, Washington.
6. In a letter to Alcoa dated December 15, 1999, EPA approved single point sampling as an alternative to traversing using EPA Method 13A or 13B and EPA Method 14 for a specific sample point in the Method 14 sampling duct at the Alcoa Wenatchee Works.
7. In a letter to Noranda dated August 30, 2000, EPA approved the use of a Met One Model 50.5 sonic anemometer as an alternative to the propeller

anemometer specified in EPA Method 14 for measuring the velocity of gases from the potroom roof monitors.

8. In a memo to Dore LaPosta, EPA Region 2, dated February 20, 2001, EPA approved single point sampling as an alternative to traversing using EPA Method 13A or 13B and EPA Method 14 for a specific sample point in the Method 14 sampling duct at the Alcoa-Messena aluminum plant.

REFERENCES

1. Plain Language Guide to the Primary Aluminum NESHAP - 40 CFR Part 63, Subpart LL, EPA-450/R-99-011, October 1999. Available on the EPA Unified Air Toxics Website (www.epa.gov/ttn/atw/alum/alumpg.html).
2. The Voluntary Aluminum Industrial Partnership, Pollution Prevention Program, EPA 430-F-98-007, February 1998.
3. Primary Aluminum: Guideline for Control of Fluoride Emissions for Existing Primary Aluminum Plants, EPA-450/2-78-049b, December 1979.

