#### Enclosure 1 Information Collection Request for Secondary Aluminum Production National Emission Standards for Hazardous Air Pollutants (NESHAP)

#### Part A. Applicability

If the facility is permanently closed or is not subject to 40 CFR part 63, subpart RRR, please complete this page, sign below and send this page certified mail to the non-CBI address listed on the instruction sheet by XXX. If the facility is subject to 40 CFR part 63, subpart RRR, please continue with the survey and submit responses by XXXX.

#### Part B. Facility Information

(Print Name)

(Title)

1.	Name and address of legal OWNER of the facility:
2.	Name and address of legal OPERATOR of the facility, if different from the legal OWNER
3.	Complete street address of facility (physical location):         a. Address:         b. City:         c. State:         d. Zip:         e. County:
4.	Provide mailing address of the facility if different from physical location:   a. Address:   b. City:   c. State:   d. Zip:
5.	Facility contact able to answer technical questions about the completed survey         a. Name (First Name, Last Name):
	fy that this facility is permanently closed or is not subject to the National Emission Standards for dous Air Pollutants for Secondary Aluminum Production as defined in 40 CFR part 63, subpart RRR

A Responsible Official can be the president, vice-president, secretary, or treasurer of the company that owns the facility, owner of the facility, plant manager, plant engineer or supervisor.

(Signature of Responsible Official)

(Date)

6. What is the facility size classification for hazardous air pollutant (HAP) emissions? *(CHECK one)* 

EPA Major Source of Hazardous Air Pollutants (HAP): EPA Area source (based on potential to emit) of HAP: EPA Area source (Synthetic Minor)<sup>1</sup> of HAP:

- 7. Facility NAICS codes Note: The primary NAICS code represents the line of business that generates the most income for the facility
  - a. Primary NAICS code\_
  - b. Other facility NAICS codes: \_\_\_\_\_, \_\_\_\_\_,
- 8. Company Size (CHECK one)

Note: Approximate average number of all employees (worldwide) of the business enterprise that owns this facility, including where applicable, the parent company and all subsidiaries, branches, and unrelated establishments owned by the parent company: If your company has a primary NAICS code that does not begin with "**331**---," please also include your average annual sales receipts \$\_\_\_\_\_

(How to calculate average annual receipts and average employment of a firm can be found in 13 CFR § 121.104 and 13 CFR § 121.106, respectively).

- \_\_\_\_ ≤ 50 \_\_\_\_ 51-100 \_\_\_\_ 101-500 501-750
- \_\_\_\_\_751-1000
- \_\_\_\_>1000
- 9. Facility Size *(CHECK one)*

*Note: Approximate average number of all employees at facility in location identified in question #3 above.* 

 $\begin{array}{r} \leq 50 \\ 51-100 \\ 101-500 \\ 501-750 \\ 751-1000 \\ \end{array}$ 

10. Is the legal owner a small entity as defined by the Regulatory Flexibility Act? *(CHECK one)* <u>Yes</u> No

Note: For private businesses, small entity is defined for each NAICS of the owning entity based on number of employees and/or company revenue. The NAICS codes used for Secondary Aluminum production are 331312, 331314, 331315, 331316, 331319, 331521, 331524 and various codes used for operations with Sweat Furnaces. The small business size standards for NAICS subsectors are located at the following link: <u>http://www.sba.gov/contractingopportunities/officials/size/table/index.html</u>

Note 1: Synthetic Minor facilities are facilities that have taken a voluntary emission limit or cap to avoid becoming a major source.

e. (CHECK all that apply to this facility).
num)
,
)
Other (SPECIFY rule name and subpart)
Other (SPECIFY rule name and subpart)
NSPS)
(SPECIFY rule name and subpart)
(SPECIFY rule name and subpart)
SPECIFY the basis for your Title V permit)
(SPECIFY rule name and subpart)
(SPECIFY rule name and subpart)
e Coatings MACT):
(SPECIFY emission unit and rule)
ours:
<u>(a x b x c)</u>
in 2009. If 2009 is not representative of normal operations, pl
ve year (2004 or later) and specify the year.
minum produced

- 14. Amount of total charge to the facility used to produce the amount of aluminum reported in question #13: Tons of charge
- 15. Please provide a copy of a schematic of the plant layout for equipment subject to subpart RRR, control devices, and discharge stacks associated with these units. Drawings can be handwritten as illustrated in Appendix C. Label the schematic with the unit IDs, control device IDs, and stack IDs, which should also match the unit IDs, control device IDs, and stack IDs used to respond to later questions. Please properly identify units that are permanently "out of service" or not yet installed.

16. Please provide all of the pertinent information listed below. Please provide electronic copies, if available, and indicate items provided below.

(CHECK all items provided):

- □ Title V permit
- □ State Air Operating permit
- □ Pending air permit applications (except for state and Title V renewal applications)
- Performance test reports (submit most recent test reports for each subpart RRR related process).
   This includes any test data on air emission sources, e.g. HF testing, bag house dust analyses, etc., not previously submitted to our office under a section 114 request.
- □ Emission inventory reports (*reporting years should be the same as the years selected for this survey*)
- $\hfill\square$  Most recent consent decree or order for air related issues
- □ Notice(s) of air operating permit violations for the past 3 years
- □ Startup, shutdown, and malfunction (SSM) plan
- □ Operating, maintenance, and monitoring plan (OM&M)

**Part C. Facility Equipment Regulated under Subpart RRR (Secondary Aluminum NESHAP)** *Please provide the information below for all equipment at your facility:* 

Unit Identification Numbers (Unit ID No.)	Unit ID No. as Designated in Title V or State Operating Permit*	Subpart RRR Equipment	Do You Have This Equipment at the Facility? (Y or N)	Add-on Controls (Y or N)	Operating in 2009? (Y or N) If "No," list last year of operation
		Aluminum Scrap Shredder			
		Thermal Chip Dryer			
		Scrap Dryer/Delacquering/ Decoating Kiln			)
		Group 1 Furnace- Clean charge only**	Ý.		
		Group 1 Furnace- Handling other than clean charge**		<	
		Group 2 Furnace**			
		In-line Fluxer			
		Dross-only Furnace			
		Rotary Dross Cooler			
		Sweat Furnace			

17. Regulated Equipment List

\* Please complete this column if ID numbers used in this form are different from those in the permit. \*\* Please indicate which of the Group 1 or Group 2 furnaces listed above that have sidewells.

### Part D. Charge Rates and Controls Used for Major Sources Subpart RRR MACT

Please provide the information below for all regulated equipment at your facility; Use information for this section from whichever year (2004 or later) is representative of normal emissions per ton of production. (please specify year). For batch processes, the charge rate should be calculated as the total charge

divided by the duration of the performance test.

For purposes of this section, "Maximum Capacity" of a unit is defined as the unit's potential to process charge or produce aluminum at its maximum rate on mass/time basis. If your permit limits the throughput or output of the unit, then that permitted amount may be used to calculate the maximum capacity.

18. For Ea	ch Scrap Shredd	er		
Unit ID No.	Amount of Charge (tons/yr)	Maximum Capacity of Unit (tons/yr)	Charge Rate During Most Recent Performance Test (lbs/hr)*	Control Device Device Type ID No.

#### 19. For Each Thermal Chip Dryer

	Amount of Chips Charged (tons/yr)	Maximum Capacity of Unit (tons chips/yr)	Charge Rate	Control	Device
Unit ID No.			During Most Recent Performance Test (lbs/hr)*	Туре	Device ID No.

~ ~		D (D ) .	T711 /D 1 T711
20.	For Each Scrap	Drver/Delacquering	Kiln/Decoating Kiln
20.	I OI Lucii Ociup	Di yei/Dendequernis	Tuni Decouting Tuni

		MaximumDurAmount of ChargeCapacity of UnitF	Charge Rate During Most	Control Device**	
Unit ID No.	Charge		Recent Performance Test (lbs/hr)*	Туре	Device ID No.

\*\*If the kiln is equipped with an afterburner operated at a minimum of 760°C (1400°F), with a design residence time of 1 second minimum, enter the control device ID Nos. here:

#### 21. For Each Dross Only Furnace

	_		Charge Rate During		Control Device		
	Amount of Dross Charged	Maximum Capacity of Unit	Most Recent Performance Test	m		<b>Device</b>	
Unit ID No.	(tons/yr)	(tons dross/yr)	(lbs/hr)*	Ty	pe	ID No.	

#### 22. For Each Rotary Dross Cooler

		Maximum Capacity of Unit (tons dross/yr)	Charge Rate During	<b>Control Device</b>	
Unit ID No.	Amount of Dross Charged (tons/yr)		Most Recent Performance Test (lbs/hr)*	Туре	Device ID No.

			Maximum	Charge Rate During	Contro	l Device
Unit ID	Amount of Charge	Only Clean Charge	Capacity of Unit	Most Recent Performance Test		Device ID
No.	(tons/yr)	(yes/no)	(tons/yr)	(lbs/hr)*	Туре	No.

#### 23. For Each Group 1 Furnace

#### 24. For Each Group 2 Furnace

Unit ID No.	Amount of Charge (tons/yr)	Maximum Capacity of Unit (tons/yr)	Charge Rate During Most Recent Performance Test (lbs/hr)*	Contro	Device

#### 25. For Each In-line Fluxer

			<b>Charge Rate</b>	<b>Control Device</b>		
	A	Maximum	Maximum	During Most		
	Amount of	Capacity of	Number of Times	Recent		<b>D I I D</b>
Unit ID	Charge	Unit	the Unit Can Run	Performance Test		Device ID
No.	(tons/yr)	(tons/yr)	in a 24-hr Period	(lbs/hr)*	Туре	No.

26.	For Each Sweat Furnace	
-0.	i of Each officat i arnace	

		Maximum	Charge Rate During	Control Device**		
Unit ID No.	Amount of Charge (tons/yr)	Capacity of Unit (tons/yr)	Most Recent Performance Test (lbs/hr)*	Туре	Device ID No.	
					<b>K</b>	

\* If more than one performance test was conducted to demonstrate operation with different types of charge, please enter the maximum charge rate. If a test on a representative unit was conducted to demonstrate compliance for similar units, please enter the charge rate during the test used to demonstrate compliance for untested units. If no performance test was conducted, it is not necessary to fill out this column. \*\* If the sweat furnace is equipped with an afterburner operated at a minimum of 1600°F, with a design residence time of 0.8 second minimum, enter the control device ID here:

- 27. For Each Secondary Aluminum Processing Unit (SAPU) Using Emissions Averaging (as per section 63.1505(k))
  - a. Complete this table if your facility chose to measure compliance using the *weight of the feed/charge*.

				-
	Unit Nos. from Questions #23			
	and #25	SAPU Type?	Amount of	Percent Clean
SAPU Unit	making up the	N=New	Feed/Charge	Charge
ID No.	SAPU(s)	E=Existing	(tons/year)	(approximate)

b. Complete this table if your facility chose to measure compliance using the *weight of the aluminum produced*.

SAPU Unit ID No.	Unit Nos. from Questions #23 and #25 making up the SAPU(s)	SAPU Type? N=New E=Existing	Amount of Aluminum Produced (tons/year)	Percent Clean Charge (approximate)
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## Part E. Charge Rates and Controls Used for <u>Area</u> Sources Subpart RRR MACT

Please provide the information below for all regulated equipment at your facility; Use information for this section from 2004 or later, whichever year is representative of normal emissions per ton of production. \_\_\_\_\_\_ (please specify year). For batch processes, the charge rate should be calculated as the total charge divided by the duration of the performance test.

For purposes of this section, "Maximum Capacity" of a unit is defined as the unit's potential to process charge or produce aluminum at its maximum rate on mass/time basis. If your permit limits the throughput or output of the unit, then that permitted amount may be used to calculate the maximum capacity.

## 28. For Each Thermal Chip Dryer

	Amount of Chips	Maximum	0		l Device
Unit ID No.	Charged (tons/yr)	Capacity of Unit (tons/yr) (lbs/hr)*		Туре	Device ID No.

#### 29. For Each Scrap Dryer/Delacquering Kiln/Decoating Kiln

		Maximum	Charge Rate During Most	Device**	
Unit ID No.	Amount of Charge (tons/yr)	Capacity of Unit (tons/yr)	Recent Performance Test (lbs/hr)*	Туре	Device ID No.
				Y	
			~		

\*\*If the kiln is equipped with an afterburner operated at a minimum of 760°C (1400°F), with a design residence time of 1 second minimum, enter the control device ID Nos. here: \_\_\_\_\_

#### 30. For Each Group 1 Furnace

				Charge Rate During	Contro	l Device
Unit ID No.	Amount of Charge (tons/yr)	Only Clean Charge (yes/no)	Maximum Capacity of Unit (tons/yr)	Most Recent Performance Test (lbs/hr)*	Туре	Device ID No.

#### 31. For Each Sweat Furnace

			Charge Rate During	Control E	)evice**
Unit ID	Amount of Charge	Maximum Capacity of Unit	Most Recent Performance Test		
No.	(tons/yr)	(tons/yr)	(lbs/hr)*	Туре	Device ID

\* If more than one performance test was conducted to demonstrate operation with different types of charge, please enter the maximum charge rate. If a test on a representative unit was conducted to demonstrate compliance for similar units, please enter the charge rate during the test used to demonstrate compliance for untested units. If no performance test was conducted, it is not necessary to fill out this column.

\*\* If the sweat furnace is equipped with an afterburner operated at a minimum of 1600°F, with a design residence time of 0.8 second minimum, enter the control device ID here: \_\_\_\_\_\_.

#### 32. For Each In-line Fluxer

				Charge Rate	Control	Device
	Amount of	Maximum	Maximum Number of Times the Unit	During Most Recent		
Unit ID	Charge	Capacity of Unit	Can Run in a 24-hr	Performance Test		
No.	(tons/yr)	(tons/yr)	Period	(lbs/hr)*	Туре	Device ID No.

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- 33. For each Secondary Aluminum Processing Unit (SAPU) Using Emissions Averaging (as per section 63.1505(k))
  - a. Complete this table if your facility chose to measure compliance using the *weight of the feed/charge*.

SAPU Unit ID No.	Unit ID Nos. from Questions #30 and #32 making up the SAPU(s)	SAPU Type? N=New E=Existing	Amount of Feed/Charge (tons/year)	Percent Clean Charge (approximate)	5
		0	(,		

b. Complete this table if your facility chose to measure compliance using the *weight of the aluminum produced*.

SAPU Unit ID No.	Unit ID Nos. from Questions #30 and #32 making up the SAPU(s)	SAPU Type? N=New E=Existing	Amount of Aluminum Produced (tons/year)	Percent Clean Charge (approximate)

Set

34. Please complete this table for any *scrap shredder, group 2 furnace, in-line fluxer, dross-only furnace, or rotary dross cooler* present at your facility.

			What Type of	Height of	Disch	arge				Flow Rat	e (SCFM)
Unit ID No.	Type of Equipment	Maximum Capacity* (tons/year)	Control Device, if Any is Used?	Stack or Discharge (ft)	Diameter (ft)	Area (sq. ft.)	Exit Gas Temperature (degrees F)	Latitude**	Longitude**	Maximum	Minimum
	• •										

\* For purposes of this section, "Maximum Capacity" of a unit is defined as the unit's potential to process charge or produce aluminum at its maximum rate on mass/time basis. If your permit limits the throughput or output of the unit, then that permitted amount may be used to calculate the maximum capacity.

\*\* Longitude and Latitude should be specified in degrees to 6 decimal places, e.g. 38.893864,-77.028097. A handheld GPS device or mobile device with GPS capability can be used to determine these values. If coordinates are not known, please provide a scaled site diagram, with a latitude/longitude reference point, indicating stack locations.

## Part F. Emissions and Limits for Subpart RRR Sources and Non-Subpart RRR Sources

Please provide the information below for all equipment at your facility; Use information for this section from 2004 or later, whichever year is representative of normal emissions per ton of production. \_\_\_\_\_ (please specify year)

For purposes of this section, "Maximum Capacity or Maximum Allowable" of a unit is defined as the unit's potential to process charge or produce aluminum at its maximum rate on mass/time basis. If your permit limits the throughput or output of the unit, then that permitted amount may be used to calculate the maximum capacity.

35. a. Please list all <u>regulated pollutant emissions</u> from equipment subject to 40 CFR 63, subpart RRR.

		Emis		nted RRR Po ormance Tes	llutants Based on ts	Control I (from Part C o	List Dates of the	
Unit ID No.	Emissions Unit Name	PM (lbs./ton)	D/F** (grain/ton)	HCl (lbs./ton)	Total Hydrocarbons (THC) (lbs./ton)	Device Type*	Unit ID No.	Applicable Compliance Tests

\* If you comply with subpart RRR requirements for sweat furnaces by controlling your afterburner residence time, enter "AB/RT" in the table.

\*\*Please include dioxin/furan congeners data from Method 23. Use additional lines to break these out, if necessary.

b. Please list <u>all other HAP</u> emissions from equipment <u>subject to 40 CFR 63</u>, <u>subpart RRR</u>. (Please include fugitive emissions.)

Equipment/Process Description	Unit ID No.	List Each Individual HAP	CAS#	Emission Rate (lbs./yr)	Maximum Maximum Allowable (lbs./yr) (lbs./hr)	Emission Factor Type**

c. Please list estimated HAP emissions from collocated sources that are <u>not regulated under 40 CFR 63, subpart RRR</u>. (Please include fugitive emissions.) *Do not include Primary Aluminum Sources*. Gas fired equipment (such as preheater boxes and annealing furnaces, etc.) not regulated under 40 CFR 63, subpart RRR may be combined into a single entry.

Equipment/Process Description	Unit ID No.	List Each Individual HAP*	CAS#	Emission Rate* (lbs./yr)	Maximum Allowable (lbs./yr)	Maximum Allowable (lbs./hr)	Emission Factor Type**

\* Copies of test data reports for your HAP emissions from non-subpart RRR sources are not required. HAP emissions data previously submitted for Primary Aluminum are not required. Please include all others HAP emissions.

## \*\* Emission Factor Type:

- **1**= Emissions calculated based on source test or other emissions measurements.
- **2**= Emissions calculated based on material balance using engineering knowledge of the process.
- **3**= Emissions calculated based on AP-42 or EPA 450/2-90-011 or other EPA emission factor.
- **4**= Emissions calculated by engineering judgement. (Approved by the State agency)
- **5**= Emissions calculated based on a state or local agency emission factor.

# Part G. Detailed Control Device and Emission Release Information for Subpart RRR MACT Sources and Other Collocated Sources Emitting *Hazardous Air Pollutants (HAP)*

36. a. Add-on air pollution control devices (use multiple lines if the same control device is used to control more than one pollutant). *Please provide the information below <u>for subpart RRR MACT sources.</u>* 

			Control Dev	rices			Units Control	
Device Type*	Device ID No.	Pollutant Controlled	Capture Efficiency (if known) (percent)	Control Device Efficiency (if known) (percent)	Overall Efficiency (if known) (percent)	Methods Used for Determining Capture & Control Efficiencies**(a-c)	Type(s) of Unit	Unit ID No.
						r		
				$\mathbf{O}$				

<sup>\*</sup> For example, afterburner, lime coated fabric filter, etc.

\*\* Control & Capture Efficiency

a = Testing (specify method)

b = Manufacturer's Specifications

c = Engineering Estimate

Please provide any additional information concerning the Control Devices:

b. Add-on air pollution control devices (use multiple lines if the same control device is used to control more than one pollutant). (*Do not include Primary Aluminum Sources*)

	<b>I</b>		Control Dev	•		<b>N</b>	Units Control	
Device Type*	Device ID No.	Pollutant Controlled	Capture Efficiency (if known) (percent)	Control Device Efficiency (if known) (percent)	Overall Efficiency (if known) (percent)	Methods Used for Determining Capture & Control Efficiencies**(a-c)	Type(s) of Unit	Unit ID No.
						<u> </u>		

*Please provide the information below for sources <u>not subject to subpart RRR MACT</u>:* 

\* For example, afterburner, lime coated fabric filter, etc.

\*\* Control & Capture Efficiency

a = Testing (specify method)

b = Manufacturer's Specifications

c = Engineering Estimate

Please provide any additional information concerning the Control Devices:

37. a. For each stack/control device exhaust point, please provide the following information, if known, related to the information in Item #36a above. (Subpart RRR MACT Sources.)

Unit	What Control Devices are Vented	Height of stack	Disch	arge Area	Exit Gas Temperature			Flow Rat	e (SCFM)
ID No.	at this Point?	or discharge (ft)	(ft)	(sq. ft.)	(degrees F)	Latitude*	Longitude*	Maximum	Minimum
					A		<i></i>		

\* Longitude and Latitude should be specified in degrees to 6 decimal places, e.g. 38.893864,-77.028097. A handheld GPS device or mobile device with GPS capability can be used to determine these values. If coordinates are not known, please provide a scaled site diagram, with a latitude/longitude reference point, indicating stack locations.

b. For each stack/control device exhaust point, please provide the following information, if known, related to the information in Item #36b above. (Non-Subpart RRR MACT Sources.) *Do not include Primary Aluminum Sources*. If emissions from gas fired equipment were combined in question 35c and discharged through different stacks, please estimate the fraction of the discharge emitted through each stack.

	What Control		Disch	arge	Exit Gas			Flow Rat	e (SCFM)
Unit ID No.	Devices are Vented at this Point?	Height of stack or discharge (ft)	Diameter (ft)	Area (sq. ft.)	Temperature (degrees F)	Latitude*	Longitude*	Maximum	Minimum

\* Longitude and Latitude should be specified in degrees to 6 decimal places, e.g. 38.893864,-77.028097. A handheld GPS device or mobile device with GPS capability can be used to determine these values. If coordinates are not known, please provide a scaled site diagram, with a latitude/longitude reference point, indicating stack locations.

38. a. For each exhaust point/stack <u>not associated with a control device for Subpart RRR MACT Sources</u>, please provide the following information:

	What Process		Disch	arge	Exit Gas			Flow Rate	e (SCFM)
Unit ID No.	Exhausts are Vented at this Point?	Height of Stack or Discharge (ft)	Diameter (ft)	Area (sq. ft.)	Temperature (degrees F)	Latitude*	Longitude*	Maximum	Minimum

\* Longitude and Latitude should be specified in degrees to 6 decimal places, e.g. 38.893864,-77.028097. A handheld GPS device or mobile device with GPS capability can be used to determine these values. If coordinates are not known, please provide a scaled site diagram, indicating stack locations.

b. For each exhaust point/stack <u>not associated with a control device for Non-Subpart RRR MACT Sources</u>, please provide the following information: (*Do not include Primary Aluminum Sources.*)

	What Process		Disch	arge	Exit Gas			Flow Rate	e (SCFM)
Unit ID No.	exhausts are Vented at this point?	Height of Stack or Discharge (ft)	Diameter (ft)	Area (sq. ft.)	Temperature (degrees F)	Latitude*	Longitude*	Maximum	Minimum

\* Longitude and Latitude should be specified in degrees to 6 decimal places, e.g. 38.893864,-77.028097. A handheld GPS device or mobile device with GPS capability can be used to determine these values. If coordinates are not known, please provide a scaled site diagram, indicating stack locations.

39. For each affected source listed in [Section B, above], identify the date(s) of latest NESHAP compliance testing.

Date	Emissio	n Unit	Test Method	Pollutant(s)	Emission Rate
Tested	Unit Type	Unit ID No.	Used	Tested	(Specify Units)

a. For each Group 1 furnace for which a performance test was conducted:

Furnace ID*			
ID of other furnaces for which this test			
was used to determine representative			
emission rates			
Is this furnace operated continuously or			*
batch-by-batch?			
Does the furnace process metal other			
than clean charge?			
How many runs were included in the			
test?			
What was the length of each			
performance test run?			
How many minutes during each run was			
the charging door open?			
What steps were taken during the test to			
minimize air emissions escaping from 🦰			
the furnace doors, etc.?			
What period of time during each run was			
metal tapped from the furnace?	P		
Is this a sidewell (scrapwell) furnace?			
Is this a melting or holding furnace?			

\* Where two or more co-controlled furnaces were tested simultaneously, list all furnace IDs.

#### b. For each side well (scrap well) furnace

Furnace ID			
Was reactive flux used in the sidewell,			
hearth, both, or neither?			
Was the level of molten metal			
maintained above the top of the passage			
between the sidewell and hearth			
continuously?			
Was the level of molten metal			
maintained above the top of the passage			
between the sidewell and hearth during			Y Y
periods of reactive fluxing?			
How was the molten metal level			
monitored?			
5	•		•

## c. For each Group 1 furnace *that is not ducted to a control device*:

Furnace ID		
Is the furnace equipped with a hood or		
other type of enclosure as part of the		
emissions collection system?		
If yes, please describe.		
What steps were taken during the test		
to minimize emissions from the		
furnace doors, etc.?		
Were visible emissions monitored		
during the performance test?		
Were visible emissions observed		
during the performance test?		

## d. For each Group 1 furnace that is *ducted to a control device*:

Furnace ID		
Is the furnace equipped with a capture		
system to limit fugitive emissions?		
If yes, please describe.		
Are visible emissions present during		
charging?		
What, if any, monitoring and		
inspection is conducted to minimize		
leakage from the duct leading to the		
control device?		
What steps were taken during the test		
to minimize air emissions escaping		
from the furnace doors, etc.?		

e. For each thermal chip dryer, scrap dryer/delacquering kiln/decoating kiln, sweat furnace, dross only furnace and rotary dross cooler:

Equipment ID & Type		
Is this unit equipped with a hood or		
other capture devices as part of the		
emissions collection system?		
If yes, please describe.		
Were visible emissions monitored		
during the performance test?		
Were visible emissions observed		
during the performance test?		
Are visible emissions present during		
loading and unloading of the unit?		
What steps were taken during the test		
to minimize air emissions escaping		
from the furnace doors, etc.?		

40. For affected sources at your facility subject to subpart RRR that are ducted to add-on control devices:

a. Are these sources equipped with capture systems designed and installed in accordance with the standard (i. e. sections 3 and 5 of the ACGIH manual)?

b. What design parameters were measured to confirm this?

c. What, if any, modifications to the capture systems of existing sources were made to demonstrate compliance with this standard (e.g. extending hoods, increasing exhaust rate, modifying operating procedures, etc.)?

\_\_\_\_\_

d. Were there any problems that were encountered during the permitting process or operation of your facility due to the way the rule is written in subpart RRR? \_\_\_\_\_\_

#### Part H. Facility Operations

- 41. General Questions for Subpart RRR MACT Sources
  - a. What type of pretreatment (including, but not limited to air drying, centrifugal drying, etc.) takes places to get the charge ready for processing?
  - b. Do you track the amount of aluminum produced as well as the amount of charge?
  - c. Could you develop and report your emission rates in terms of amount of emissions per unit of aluminum produced? If not, what prevents you from doing so?
  - d. How do you ensure that the molten metal in the side well furnace remains above the top of the passage between the side well and the hearth during reactive fluxing (e.g. record in a logbook based on visual observation by operator, level indicator connected to data recorder, float connected to door interlock, etc.)?
- 42. Fluxing for Subpart RRR MACT Sources
  - a. What reactive or halogenated fluxes were used during the representative year used in Part F? Halogenated fluxes are those fluxes containing fluorine, chlorine, and bromine (e.g. a flux containing NaF). Please attach a Material Safety Data Sheet (MSDS) for each flux listed:

Flux Identification	Flux Still in Use? (Yes or No)	Reactive = R Non-reactive = N	Mass Used (lbs./yr)	Furnace or In-line Fluxer ID in which Flux was Used	Purpose (e.g., cover, degassing, demagging, etc.)
	<i>y</i>				

b. What was the total mass of all fluxes (including fluxes that do not contain halogens) used during the representative year used in Part F?

- c. If you have side well (scrap well) furnaces, did you use reactive flux in the side well and the hearth? If so, did you test emissions from both sources? \_\_\_\_\_\_
- d. Do you use different types or quantities of flux for different flux applications? If so, how do the procedures differ?

e. What are your flux rate operating and monitoring procedures?

f. Do you have any hydrogen fluoride emissions data for Subpart RRR MACT Sources? If so, please provide the data reports or other supporting data for the following:

 Maximum tons/yr of hydrogen fluoride emissions
 Pounds of hydrogen fluoride emitted per ton of charge (lbs. HF/ton
charge)
 Maximum lbs./hr of hydrogen fluoride emitted
 What fraction of the fluorine content of the flux used was emitted as
either HF, $F_2$ , or particulate fluoride (%)?

- 43. Alternative controls, monitoring, or operating conditions for Subpart RRR MACT Sources
  - a. Please provide details for any <u>alternative control devices</u> (e.g. control devices other than fabric filters, lime-coated fabric filters, or afterburners), <u>monitoring</u> (including particulate matter or HCl continuous emissions monitors), or <u>operating conditions</u> at this facility for equipment regulated under 40 CFR 63, subpart RRR.

For the control technologies identified in question 43a above, please provide cost information:

	Control	Device		Total Annual	
Unit ID			Total Capital	Operating and Maintenance	Base Year for Operating
No.	Type/Description	Device ID. No.	Investment	Costs	Costs

- b. Have you injected activated carbon or other type of sorbent for HAP control (excluding research efforts)? What barriers do you envision to adding carbon injection to fabric filters for HAP control (check as many as apply)?
  - $\Box$  Cost of activated carbon
  - □ Creates problems with disposal of material collected by baghouse
  - Other (specify): \_\_\_\_\_\_
- c. Do you use catalytic filters for dioxin control (e.g., <a href="http://www.donaldson.com/en/industrialair/literature/051754.pdf">http://www.donaldson.com/en/industrialair/literature/051754.pdf</a>)?
- d. Do you have any plans to install any new higher efficiency rated control devices or have any pending applications to add on any new controls? If so, please specify and include any copies of pending permit applications as requested in Part A, item #16.
- e. Do you have any plans to use any alternative monitoring or operating conditions? If so, please provide details:

44. Pollution prevention for Subpart RRR MACT sources

A. Describe any **procedures**, **work practice standards**, or **materials** used at your facility to prevent or reduce emissions of Hazardous Air Pollutants (HAP). For example, do you use any non-halogenated fluxes or procedures to prevent HAP formation (in contrast to controlling HAP after it is formed)?

## Part I. Startup and Shutdown for Subpart RRR MACT Sources

45. For each startup and shutdown event for which you did not follow your Startup/Shutdown plan or that resulted in an exceedance of any applicable emission limitation during the past 2 years, please provide the requested information in the table below. If this information is contained in periodic and immediate SSM reports (either stand-alone or contained within the periodic excess emissions report) submitted to your permitting authority, you may submit copies of those reports instead. Please provide **any** emissions data during startup or shutdown, if available.

avallable.				
Startup/Shutdown*				
Description of the event, including				
identification of the emissions source or				
sources [unit ID(s)] associated with the startup				
or shutdown				
Was any permit condition exceeded and, if so,				
what permit condition was exceeded?		7		
Was the event covered by any contingency				
plan for controlling emissions during startup or				
shutdown events and, if so, whether the plan				
was followed; if the plan was not followed,				
why not?				
Typical duration of an event				
Actions taken to minimize emissions during				
the event, including the use of any backup				
control systems				
Estimates or measurements, if any, of				
emissions during the event; if you did not have				
the ability to quantify emissions during the				
event, please explain why				
For affected sources ducted to afterburners, did				
any startups or shutdowns take place while the				
afterburner was not operating, or operating				
outside of the operating temperature				
established during the performance test?				
For affected sources ducted to control devices				
and monitored by continuous opacity monitors,				
did opacity exceed 10% during any startup or				
shutdown events?				

List performance test data collected during			
each period of startup or shutdown, the test			
method used for each event; when the testing			
was conducted and why; the test conditions at			
the time of testing; and whether the tests were			
associated with a routine startup or shutdown			

\*<u>Startup</u>: the commencement of operation of an affected source or portion of an affected source for any purpose; <u>Shutdown</u>: the cessation of operation of an affected source or portion of an affected source for any purpose

46. Are there any types of startup or shutdown events that you have been able to eliminate: if so, please describe the type of event and explain how these events were eliminated?

47. Optional: Please recommend a standard that would apply during startup and/or shutdown. Describe the type of event (e.g., defining the beginning and duration of a start-up period and similarly for a shutdown) to which the standard would apply; the recommended standard (this could be an emission limitation, work practice, or operational standard) that would apply during the period; the basis for the recommended standard; why and how the standard would minimize emissions during the event; and how compliance would be determined and/or monitored.

#### J. Miscellaneous Information

48. What specific improvements or rule changes would you like to see that would help your facility with compliance or better rule interpretation?

#### <u>Attachment A</u> Definitions for subpart RRR MACT sources

<u>Afterburner</u> means an air pollution control device that uses controlled flame combustion to convert combustible materials to noncombustible gases; also known as an incinerator or a thermal oxidizer.

<u>Aluminum scrap</u> means fragments of aluminum stock removed during manufacturing (i.e., machining), manufactured aluminum articles or parts rejected or discarded and useful only as material for reprocessing, and waste and discarded material made of aluminum.

<u>Aluminum scrap shredder</u> means a unit that crushes, grinds, or breaks aluminum scrap into a more uniform size prior to processing or charging to a scrap dryer/delacquering kiln/decoating kiln, or furnace. A bale breaker is not an aluminum scrap shredder.

<u>Clean charge</u> means furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/ decoated at 482 °C (900 °F) or higher, and runaround scrap

<u>Cover flux</u> means salt added to the surface of molten aluminum in a group 1 or group 2 furnace, without agitation of the molten aluminum, for the purpose of preventing oxidation.

<u>Dross-only furnace</u> means a furnace, typically of rotary barrel design, dedicated to the reclamation of aluminum from dross formed during melting, holding, fluxing, or alloying operations carried out in other process units. Dross and salt flux are the sole feedstocks to this type of furnace.

<u>Group 1 furnace</u> means a furnace of any design that melts, holds, or processes aluminum that contains paint, lubricants, coatings, or other foreign materials with or without reactive fluxing, or processes clean charge with reactive fluxing.

<u>Group 2 furnace</u> means a furnace of any design that melts, holds, or processes only clean charge and that performs no fluxing or performs fluxing using only nonreactive, non-HAP-containing/non-HAP-generating gases or agents.

<u>In-line fluxer</u> means a device exterior to a furnace, located in a transfer line from a furnace, used to refine (flux) molten aluminum; also known as a flux box, degassing box, or demagging box.

<u>Melting/holding furnace</u>, or melter/holder, means a group 1 furnace that processes only clean charge, performs melting, holding, and fluxing functions, and does not transfer molten aluminum to or from another furnace.

<u>Reactive fluxing</u> means the use of any gas, liquid, or solid flux (other than cover flux) that results in a HAP emission. Argon and nitrogen are not reactive and do not produce HAP.

<u>Rotary dross cooler</u> means a water-cooled rotary barrel device that accelerates cooling of dross.

<u>Runaround scrap</u> means scrap materials generated on-site by aluminum casting, extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations and that do not contain paint or solid coatings. Uncoated/unpainted aluminum chips generated by turning, boring, milling, and similar machining operations may be clean charge if they have been thermally dried or treated by a centrifugal cleaner, but are not considered to be runaround scrap.

<u>Scrap dryer/delacquering kiln/decoating kiln</u> means a unit used primarily to remove various organic contaminants such as oil, paint, lacquer, ink, plastic, and/or rubber from aluminum scrap (including used beverage containers) prior to melting.

<u>Secondary aluminum processing unit (SAPU)</u>: an existing SAPU means all existing group 1 furnaces and all existing in-line fluxers within a secondary aluminum production facility. Each existing group 1 furnace or existing in-line fluxer is considered an emission unit within a secondary aluminum processing unit. A new SAPU means any combination of group 1 furnaces and in-line fluxers which are simultaneously constructed after February 11, 1999. Each of the group 1 furnaces or in-line fluxers within a new SAPU is considered an emission unit within that secondary aluminum processing unit.

<u>Sidewell</u> means an open well adjacent to the hearth of a furnace with connecting arches between the hearth and the open well through which molten aluminum is circulated between the hearth, where heat is applied by burners, and the open well, which is used for charging scrap and solid flux or salt to the furnace, injecting fluxing agents, and skimming dross.

<u>Sweat furnace</u> means a furnace used exclusively to reclaim aluminum from scrap that contains substantial quantities of iron by using heat to separate the low-melting point aluminum from the scrap while the higher melting-point iron remains in solid form.

<u>Thermal chip dryer</u> means a device that uses heat to evaporate water, oil, or oil/water mixtures from unpainted/uncoated aluminum chips.

### <u>Attachment B</u> Section 112(b) List of Hazardous Air Pollutants (HAP)

U.S. Code Title 42, Chapter 85, Subchapter 1, Part A, § 7412

CAS Number	Chemical Name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Ćatechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine Chlorine
79118 532274	Chloroacetic acid
	2-Chloroacetophenone Chlorobenzene
108907 510156	Chlorobenzilate
	Chloroform
67663 107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
95487	o-Cresol
55407	

100004	
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichlorobenzidene
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (I-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane

833069	
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid
7664393	Hydrogen fluoride (Hydrofluoric acid)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
60344	Methyl hydrazine
74884	Methyl iodide (lodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4,4-Methylene bis(2-chloroaniline)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)
101779	4,4-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2-Dichloropropane)
75569	Propylene oxide

75581.2-Propylenimine (2-Methyl aziridine)91225Quinoline91225Quinone100425Styrene oxide17460162.3.7.8-Tetrachlorodibenzo-p-dioxin793451.1.2.2-Tetrachloroethane127184Tetrachloroethylene (Perchloroethylene)7550450Titanium tetrachloride08883Toluene958072.4-Toluene diamine5848492.4-Toluene diisocyanate95534o-Toluidine8001352Toxaphene (chlorinated camphene)1208211.2.4-Trichlorobenzene990051.1.2-Trichlorophenol880622.4.6-Trichlorophenol880622.4.6-Trichlorophenol880622.4.6-Trichlorophenol121448Triethylamine1582098Trifluralin5406412.2.4-Trimethylpentane108054Vinyl acetate593602Vinyl bromide75354O-Xylenes108423p-Xylenes0Antimony Compounds0Artoincom compounds0Cadmium Compounds0Cobalt Compounds<
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0 Cobalt Compounds 0 Coke Oven Emissions 0 Cyanide Compounds <sup>1</sup>
0 Coke Oven Emissions 0 Cyanide Compounds <sup>1</sup>
0 Cyanide Compounds <sup>1</sup>
0 Certain Glycol ethers <sup>2</sup>
0 Lead Compounds
0 Manganese Compounds
0 Mercury Compounds
0 Fine mineral fibers <sup>3</sup>
0 Nickel Compounds
0 Polycyclic Organic Matter <sup>4</sup>
0 Radionuclides (including radon) <sup>5</sup>
0 Selenium Compounds
NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any

unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

 $^1$  XCN where X = H or any other group where a formal dissociation may occur. For example KCN or Ca(CN)\_2.

 $^2$  Includes mono- and di- ethers of ethylene glycol (except for ethylene glycol monobutyl ether (CAS Number 111–76–2), diethylene glycol, and triethylene glycol R–(OCH<sub>2</sub>CH<sub>2</sub>)n–OR where

n = 1, 2, or 3

R = alkyl or aryl groups

R = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH<sub>2</sub>CH)n-OH. Polymers are excluded from the glycol category.

<sup>3</sup> Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
 <sup>4</sup> Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

<sup>5</sup> A type of atom which spontaneously undergoes radioactive decay.

#### <u>Attachment C</u>

#### **Process Flow Diagram Example**

