# 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

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):

b. Title:

c. Telephone number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ext.

d. Fax number:

e. E-mail:

I certify that this facility is permanently closed or is not subject to the National Emission Standards for

Hazardous Air Pollutants for Secondary Aluminum Production as defined in 40 CFR part 63, subpart RRR.

(Print Name) (Title) (Signature of Responsible Official) (Date)

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.

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)1 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.

\_\_\_ ≤ 50

\_\_\_ 51-100

\_\_\_ 101-500

\_\_\_ 501-750

\_\_\_ 751-1000

\_\_\_ >1000

10. Is the legal owner a small entity as defined by the Regulatory Flexibility Act?
 (CHECK one) \_\_\_ Yes\_\_\_ 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: [*http://www.sba.gov/contractingopportunities/officials/size/table/index.html*](http://www.sba.gov/contractingopportunities/officials/size/table/index.html)

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

11. Federal and State rule/permit coverage. (*CHECK all that apply to this facility).*

|  |
| --- |
| \_\_\_ Subpart RRR (Secondary Aluminum)\_\_\_\_ Diecasting Operations\_\_\_\_ Foundry\_\_\_\_ Extruder |
| \_\_\_ Subpart LL (Primary Aluminum)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Other *(SPECIFY rule name and subpart)*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Other *(SPECIFY rule name and subpart)*New Source Performance Standards (NSPS)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(SPECIFY rule name and subpart)* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(SPECIFY rule name and subpart)*Title V \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(SPECIFY the basis for your Title V permit)* State Air Toxics: |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(SPECIFY rule name and subpart)*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(SPECIFY rule name and subpart)*Other MACT (e.g., Metal Coil Surface Coatings MACT): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |
| Other MACT: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (SPECIFY *emission unit and rule)*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |

12. Representative Facility Production Hours:

 a. Hours/day: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b. Days/week: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 c. Weeks/year: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 d. Total production hours per year (a x b x c) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. Total amount of aluminum produced in 2009. If 2009 is not representative of normal operations, please provide information for a representative year (2004 or later) and specify the year.

 Year

 Tons of aluminum produced

1. 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)***

□ 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:*

17. Regulated Equipment List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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\*\* |  |  |  |
|  |  | Group 1 Furnace-Handling other than clean charge\*\* |  |  |  |
|  |  | Group 2 Furnace\*\* |  |  |  |
|  |  | In-line Fluxer  |  |  |  |
|  |  | Dross-only Furnace |  |  |  |
|  |  | Rotary Dross Cooler |  |  |  |
|  |  | Sweat Furnace |  |  |  |

\* 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 Each Scrap Shredder

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 |
| Type | Device ID No. |
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19. For Each Thermal Chip Dryer

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| --- | --- | --- | --- | --- |
| Unit IDNo. | Amount of Chips Charged (tons/yr) | Maximum Capacity of Unit(tons chips/yr) | Charge Rate During Most Recent Performance Test (lbs/hr)\* | Control Device |
| Type | DeviceID No. |
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*\* 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.*

20. For Each Scrap Dryer/Delacquering Kiln/Decoating Kiln

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unit IDNo. | Amount of Charge (tons/yr) | Maximum Capacity of Unit(tons/yr) | Charge Rate During Most Recent Performance Test (lbs/hr)\* | Control Device\*\* |
| Type | DeviceID No. |
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\*\*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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unit ID No. | Amount of Dross Charged (tons/yr) | Maximum Capacity of Unit(tons dross/yr) | Charge Rate During Most Recent Performance Test (lbs/hr)\* | Control Device |
| Type | DeviceID No. |
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22. For Each Rotary Dross Cooler

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| --- | --- | --- | --- | --- |
| Unit ID No. | Amount of Dross Charged (tons/yr) | Maximum Capacity of Unit(tons dross/yr) | Charge Rate During Most Recent Performance Test (lbs/hr)\* | Control Device |
| Type | DeviceID No. |
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*\* 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.*

23. For Each Group 1 Furnace

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Unit ID No. | Amount of Charge(tons/yr) | Only Clean Charge (yes/no) | Maximum Capacity of Unit(tons/yr) | Charge Rate During Most Recent Performance Test (lbs/hr)\* | Control Device |
| Type | Device ID No. |
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24. For Each Group 2 Furnace

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| --- | --- | --- | --- | --- |
| 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 |
| Type | Device ID No. |
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25. For Each In-line Fluxer

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

26. For Each Sweat Furnace

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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\*\* |
| Type | Device ID No. |
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*\* 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 EachSecondary 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 UnitID No. | Unit Nos. from Questions #23 and #25 making up the SAPU(s) | SAPU Type?N=NewE=Existing | Amount of Feed/Charge (tons/year) | Percent Clean Charge (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=NewE=Existing | Amount of Aluminum Produced (tons/year) | Percent Clean Charge (approximate) |
|  |  |  |  |  |
|  |  |  |  |  |

# Part E. Charge Rates and Controls Used for Area 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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| UnitID No. | Amount of Chips Charged(tons/yr) | Maximum Capacity of Unit (tons/yr) | Charge Rate During Most Recent Performance Test (lbs/hr)\* | Control Device |
| Type | Device ID No. |
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*\* 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.*

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unit ID No. | Amount of Charge (tons/yr) | MaximumCapacity of Unit (tons/yr) | Charge Rate During Most Recent Performance Test (lbs/hr)\* | Control Device\*\* |
| Type | Device ID No. |
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\*\*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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Unit IDNo. | Amount of Charge (tons/yr) | Only Clean Charge (yes/no) | Maximum Capacity of Unit (tons/yr) | Charge Rate During Most Recent Performance Test (lbs/hr)\* | Control Device |
| Type | Device ID No. |
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*\* 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.*

31. For Each Sweat Furnace

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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\*\* |
| Type | Device ID |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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*\* 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

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

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

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

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

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.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UnitID No. | **Type of Equipment** | **Maximum Capacity\* (tons/year)** | What Type of Control Device, if Any is Used? | Height of Stack or Discharge (ft) | Discharge | Exit Gas Temperature (degrees F) | Latitude\*\* | Longitude\*\* | Flow Rate (SCFM) |
| Diameter (ft) | Area (sq. ft.) | Maximum | Minimum |
|   |  |  |   |  |  |  |  |  |  |  |  |
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*\* 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 regulated pollutant emissions from equipment subject to 40 CFR 63, subpart RRR.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| UnitID No. | Emissions Unit Name | Emissions of Regulated RRR Pollutants Based on Performance Tests | Control Device(from Part C or D above) | List Dates of the Applicable Compliance Tests  |
| PM(lbs./ton) | D/F\*\*(grain/ton) | HCl (lbs./ton) | Total Hydrocarbons (THC) (lbs./ton) | Device Type\* | UnitID No. |
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\* 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 all other HAP emissions from equipment subject to 40 CFR 63, subpart RRR. (Please include fugitive emissions.)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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\*\*** |
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c. Please list estimated HAP emissions from collocated sources that are not regulated under 40 CFR 63, subpart RRR. (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\*\*** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |

***\* 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)***

*Use information for this section from 2004 or later, whichever year is representative of normal emissions per ton of production. \_\_\_\_\_\_\_\_\_ (please specify year)*

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 for subpart RRR MACT sources.*

|  |  |
| --- | --- |
| Control Devices | UnitsControlled |
| Device Type\* | DeviceID 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 | UnitID No. |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

\* 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)*

*Please provide the information below for sources not subject to subpart RRR MACT:*

|  |  |
| --- | --- |
| Control Devices | UnitsControlled |
| Device Type\* | DeviceID 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 | UnitID No. |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

\* 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.)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| UnitID No. | What Control Devices are Vented at this Point?  | Height of stack or discharge (ft) | Discharge | Exit Gas Temperature (degrees F) | Latitude\* | Longitude\* | Flow Rate (SCFM) |
| Diameter (ft) | Area (sq. ft.) | 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.

 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.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| UnitID No. | What Control Devices are Vented at this Point?  | Height of stack or discharge (ft) | Discharge | Exit Gas Temperature (degrees F) | Latitude\* | Longitude\* | Flow Rate (SCFM) |
| Diameter (ft) | Area (sq. ft.) | 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 not associated with a control device for Subpart RRR MACT Sources, please provide the following information:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| UnitID No. | What Process Exhausts are Vented at this Point? | Height of Stack or Discharge (ft) | Discharge | Exit Gas Temperature (degrees F) | Latitude\* | Longitude\* | Flow Rate (SCFM) |
| Diameter (ft) | Area (sq. ft.) | 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 not associated with a control device for Non-Subpart RRR MACT Sources, please provide the following information: *(Do not include Primary Aluminum Sources.)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| UnitID No. | What Process exhausts are Vented at this point? | Height of Stack or Discharge (ft) | Discharge | Exit Gas Temperature (degrees F) | Latitude\* | Longitude\* | Flow Rate (SCFM) |
| Diameter (ft) | Area (sq. ft.) | 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 Tested | Emission Unit | Test Method Used | Pollutant(s) Tested | Emission Rate (Specify Units) |
| Unit Type | Unit ID No. |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

1. 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? |  |  |  |  |
| 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.

1. 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 periods of reactive fluxing? |  |  |  |  |
| How was the molten metal level monitored? |  |  |  |  |

1. 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? |  |  |  |  |

1. 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.? |  |  |  |  |

1. 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.) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |
|  |  |  |  |  |  |

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, F2, or particulate fluoride (%)?

43. Alternative controls, monitoring, or operating conditions for Subpart RRR MACT Sources

a. Please provide details for any **alternative control devices** (e.g. control devices other than fabric filters, lime-coated fabric filters, or afterburners), **monitoring** (including particulate matter or HCl continuous emissions monitors), or **operating conditions** 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:

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

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)?

 □ 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., <http://www.donaldson.com/en/industrialair/literature/051754.pdf>)?

 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.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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? |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |

\*Startup: the commencement of operation of an affected source or portion of an affected source for any purpose; Shutdown: 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?

**Attachment A**

**Definitions for subpart RRR MACT sources**

Afterburner 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.

Aluminum scrap 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.

Aluminum scrap shredder 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.

Clean charge 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

Cover flux 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.

Dross-only furnace 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.

Group 1 furnace 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.

Group 2 furnace 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.

In-line fluxer 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.

Melting/holding furnace, 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.

Reactive fluxing 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.

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

Runaround scrap 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.

Scrap dryer/delacquering kiln/decoating kiln 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.

Secondary aluminum processing unit (SAPU): 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.

Sidewell 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.

Sweat furnace 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.

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

**Attachment B**

### 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  | Catechol |
| 133904  | Chloramben |
| 57749  | Chlordane |
| 7782505  | Chlorine |
| 79118  | Chloroacetic acid |
| 532274  | 2-Chloroacetophenone |
| 108907  | Chlorobenzene |
| 510156  | Chlorobenzilate |
| 67663  | Chloroform |
| 107302  | Chloromethyl methyl ether |
| 126998  | Chloroprene |
| 1319773  | Cresols/Cresylic acid (isomers and mixture) |
| 95487  | o-Cresol |
| 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 (l-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 |
| 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 (Iodomethane) |
| 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 |
| 75558  | 1,2-Propylenimine (2-Methyl aziridine) |
| 91225  | Quinoline |
| 106514  | Quinone |
| 100425  | Styrene |
| 96093  | Styrene oxide |
| 1746016  | 2,3,7,8-Tetrachlorodibenzo-p-dioxin |
| 79345  | 1,1,2,2-Tetrachloroethane |
| 127184  | Tetrachloroethylene (Perchloroethylene) |
| 7550450  | Titanium tetrachloride |
| 108883  | Toluene |
| 95807  | 2,4-Toluene diamine |
| 584849  | 2,4-Toluene diisocyanate |
| 95534  | o-Toluidine |
| 8001352  | Toxaphene (chlorinated camphene) |
| 120821  | 1,2,4-Trichlorobenzene |
| 79005  | 1,1,2-Trichloroethane |
| 79016  | Trichloroethylene |
| 95954  | 2,4,5-Trichlorophenol |
| 88062  | 2,4,6-Trichlorophenol |
| 121448  | Triethylamine |
| 1582098  | Trifluralin |
| 540841  | 2,2,4-Trimethylpentane |
| 108054  | Vinyl acetate |
| 593602  | Vinyl bromide |
| 75014  | Vinyl chloride |
| 75354  | Vinylidene chloride (1,1-Dichloroethylene) |
| 1330207  | Xylenes (isomers and mixture) |
| 95476  | o-Xylenes |
| 108383  | m-Xylenes |
| 106423  | p-Xylenes |
| 0  | Antimony Compounds |
| 0  | Arsenic Compounds (inorganic including arsine) |
| 0  | Beryllium Compounds |
| 0  | Cadmium Compounds |
| 0  | Chromium Compounds |
| 0  | Cobalt Compounds |
| 0  | Coke Oven Emissions |
| 0  | Cyanide Compounds 1 |
| 0  | Certain Glycol ethers 2 |
| 0  | Lead Compounds |
| 0  | Manganese Compounds |
| 0  | Mercury Compounds |
| 0  | Fine mineral fibers 3 |
| 0  | Nickel Compounds |
| 0  | Polycyclic Organic Matter 4 |
| 0  | Radionuclides (including radon) 5 |
| 0  | Selenium Compounds |
| 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–(OCH2CH2)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–(OCH2CH)n–OH. Polymers are excluded from the glycol category. |
| 3 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. |
| 4 Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C. |
| 5 A type of atom which spontaneously undergoes radioactive decay. |

**Attachment C**

**Process Flow Diagram Example**

SAMPLE