

SECONDARY NON-FERROUS METALS PROCESSING AREA SOURCE STANDARD DEVELOPMENT QUESTIONNAIRE

I. Instructions

This questionnaire is to be completed for operations that comprise the "**Secondary Non-ferrous Metals**" source category at your facility. This source category includes all processes that are part of secondary non-ferrous metals processing operations such as pretreatment, smelting, refining, casting, removing castings from molds, and casting finishing. By our definition, a secondary non-ferrous metal processing facility is an establishment primarily engaged in recovering non-ferrous metals and alloys from new and used scrap and dross or in producing alloys from purchased refined metals. This industry includes establishments engaged in both the recovery and alloying of precious metals. Plants engaged in the recovery of tin through secondary smelting and refining, as well as by chemical processes are included in this industry. The subject operations are generally conducted under Standard Industrial Classification (SIC) Code 3341, Secondary Smelting and Refining of Non-ferrous Metals or under North American Industry Classification System (NAICS) Code 331492 Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum).

We are requesting information regarding air emissions from your secondary non-ferrous metals processing operations, the use of air pollution control (APC) devices in those operations, and their effectiveness in reducing emissions, particularly of hazardous air pollutants (HAPs). The information requested is described in Sections II and III of this questionnaire. A list of HAPs is included as Attachment 1.

Please satisfy this request as completely as possible from existing information. No additional monitoring or emission testing is required by your company to respond to this request.

If you wish to submit the requested information in a different format (computer microdisk, for example), please contact Iliam Rosario at 919-541-5308 (e-mail rosario.iliam@epa.gov) first to ensure that the EPA can process your information in the format you intend to use. If you have any questions regarding this request, please contact Mr. Rosario.

Return this request along with any additional information to:

Iliam Rosario
USEPA Mailroom (C439-02)
Research Triangle Park, NC 27711

II. General Information

1. Name of facility: _____
2. Mailing address:

3. Street address of plant:

4. Latitude and longitude of the plant, in degrees, minutes, and seconds or UTM coordinates (please specify units used):

5. Names and telephone numbers of contact persons who are able to answer technical questions about this survey:

6. Dunn and Bradstreet number of your facility: _____
7. Enter the appropriate NAICS or SIC codes for your facility and circle code type used:

Primary code	_____	NAICS // SIC
Secondary code	_____	NAICS // SIC
Tertiary code	_____	NAICS // SIC
8. Annual revenue in 2003: \$ _____
9. Total tons of metal processed in 2003: _____ tons/yr

10. Annual operating hours for 2003: _____ hrs/yr
11. Hourly processing capacity (as of December 2003): _____ tons/hr
12. Number of employees at your facility: _____
13. Are you part of a larger corporate entity? **Yes** **No**

If **Yes**: Name of parent company: _____

Number of employees in parent company: _____

If **Yes**, check the statement below that best applies:

___ The facility is fully independent of the parent organization (independent sources of capital, different Boards of Directors, etc.).

___ The parent organization provides some financial support.

___ Operations of the parent organization and this facility are fully integrated (full access to investment capital, same Board of Directors, etc.).

14. Circle the code number(s) for all secondary metal processing operations that apply:

- 1** Pretreatment
- 2** Melting/Smelting
- 3** Refining
- 4** Electrolytic processing
- 5** Chemical processing (e.g., chlorination, precipitation, etc.)
- 6** Other (describe): _____

15. Circle the code number(s) for the type(s) of metal produced and give the percent of the annual total for each type:

- | | | |
|----------|------------------------|---------|
| 1 | Zinc | _____ % |
| 2 | Nickel | _____ % |
| 3 | Gold | _____ % |
| 4 | Silver | _____ % |
| 5 | Brass/Bronze | _____ % |
| 6 | Magnesium | _____ % |
| 7 | Tin | _____ % |
| 8 | Platinum | _____ % |
| 9 | Other (specify): _____ | _____ % |

16. Circle the code number(s) for all types of castings/products that apply:
- 1 Metal powders
 - 2 Ingots or bars (100 lbs or less)
 - 3 Blocks (greater than 100 lbs)
 - 4 Specialty cast shapes
 - 5 Other (specify): _____
17. Circle the code number(s) for all product categories that apply:
- 1 Produce intermediate products (e.g., metal bars or ingots)
 - 2 Produce final products
18. Circle the code number(s) for all product markets that apply:
- 1 Products are sold in the market
 - 2 Products are used captively

Please complete the process-specific questionnaires in Section III. Record the total number of labor hours required to complete the entire questionnaire. You may report the hours per each of the following categories or simply report the total number of hours in the following table.

Item	Technical Person Hours	Management Person Hours	Clerical Person Hours
Review instructions			
Search data sources			
Complete and review information			
Transmit information to EPA			
TOTAL LABOR BURDEN			

III. Secondary Non-ferrous Metal Processing Operations, Use of Air Pollution Control Equipment, and Air Emission Data.

A. Processing Information

Use Tables 1 through 7 to describe all secondary non-ferrous metal processing equipment and processes at your facility. Give information that is representative of the capacity of the individual items of equipment or processes, not your current production rate. You may use one table to describe a number of equipment items or processes if they are identical.

Provide an identification number for each process. Also, give the identification numbers of the air pollution control (APC) devices that service the process operations (see Section C below, Air Pollution Control Devices). If no device is used, report "None".

B. Pollution Prevention

In Tables 1 through 7, identify any emission reduction (pollution prevention) measures used in your operations. Such measures consist of process variations or procedures that have been demonstrated to reduce air emissions.

C. Air Pollution Control Devices

Use Tables A through D to describe all APC devices used to service secondary non-ferrous metal processing equipment or processes. Provide an identification number for each device, and also give the identification numbers of the processes serviced by the device (see Section A above, Processing Information).

D. Application of Control Devices

In all tables, assign an identification number or description to each piece of equipment, process, and APC device so that each APC device can be associated with the equipment and processes it serves. The number or description can be chosen for your convenience.

NOTE: You may use flow diagrams to show the relationship between processes and APC devices if you wish.

E. Permit Conditions

Provide either a summary of air emission conditions to which you are subject or a copy of your air permit.

F. Emission tests

Enclose summary data from emission tests conducted on all secondary non-ferrous metal processing operations and APC devices. Include:

- (1) emission rates measured,
- (2) the test method or procedure used,
- (3) information on actual production or processing rates and on process conditions at the time the measurements were made, and
- (4) a statement that any APC devices (if present) were operating normally during the test, or if not, what the abnormal operating conditions were.

Regarding item (3), refer to the cover letter that accompanied this request if you have concerns about protecting the confidentiality of production information.

G. Emission Collection Inventories

For each fabric filter/cartridge collector, report the amount of material collected and the amount of material processed, produced, or treated over any recent time period for which the data are available. Also, report the results of any direct analyses of the materials collected, but not TCLP data.

H. Tables

Tables 1 through 7 below apply to processes and equipment; Tables A through D apply to air pollution control devices. Each table should represent a unique process or piece of equipment. If you have two identical processes, you can complete a single table and indicate that the table represents two identical processes.

NOTE: No new information need be developed for this survey. If the information requested is not known, simply state "Not known".

1. Scrap Specification and Inspection

Use copies of Table 1 to describe each unique scrap specification and inspection operation.

2. Pretreatment

Use copies of Table 2 to describe each unique pretreatment process.

3. Furnaces

Use copies of Table 3 to describe each unique furnace.

4. Pouring and Cooling Lines

Use copies of Table 4 to describe each unique pouring/cooling line.

5. Casting Removal Operations

Use copies of Table 5 to describe each unique casting removal operation.

6. Finishing Operations

Use copies of Table 6 to describe each unique finishing operation.

7. Non-melting Secondary Non-ferrous Metals Processing Operations

Use copies of Table 7 to describe each unique non-melting secondary non-ferrous metals processing operations.

8. Fabric Filters (baghouses)/Cartridge Collectors

Complete a copy of Table A for each unique fabric filter/cartridge dust collector system used that services operations described in Tables 2 through 7.

9. Wet Scrubbers

Complete a copy of Table B for each unique wet scrubber system that services secondary non-ferrous metal processing operations.

10. Thermal Air Pollution Control Devices

Complete a copy of Table C for each unique unit that processes emissions from secondary non-ferrous metal processing operations by a thermal method such as incineration, thermal/catalytic oxidation, and afterburning.

11. Other APC Devices

For each device other than those listed in Sections 8 through 10 above that services secondary non-ferrous metal processing operations, provide a similar description, including relevant design and operating data, using copies of Table D.

ABBREVIATIONS AND ACRONYMS

acf	Actual cubic feet
acfm	Actual cubic feet per minute
APC device	Air pollution control device
°F	Degrees Fahrenheit
fpm	Feet per minute
gr/dscf	Grains per dry standard cubic foot
HAPs	Hazardous air pollutants
lbs	Pounds mass
lbs/hr	Pounds mass per hour
sq.ft.	Square feet
TCLP	Toxicity characteristic leaching procedure

TABLE 1. SCRAP SPECIFICATION AND INSPECTION

1. Please provide a copy of your written scrap specifications and scrap management plan.

2. Give a brief description of the type of material processed (e.g., turnings, jewelry, photographic waste materials, ingots, electrical and electronics scrap, etc.):

3. What grades of scrap are used (e.g., according to the codes and descriptions of non-ferrous scrap by the Institute of Scrap Recycling Industries or similar information) ?

4. Circle the appropriate frequency of scrap inspections:

- 0** Do not inspect incoming shipments
- 1** Greater than 0 but less than 10% of each incoming scrap shipment
- 2** Greater than or equal to 10% but less than 50% of each incoming scrap shipment
- 3** Greater than or equal to 50% but less than 90% of each incoming scrap shipment
- 4** Greater than or equal to 90% to 100% of each incoming scrap shipment

5. Circle all applicable code numbers for reasons why a scrap shipment would be rejected:

- 1** Visible oils or grease
- 2** Visible painted parts
- 3** Visible plastic parts
- 4** Visible lead components
- 5** Visible automotive scrap/components
- 6** Visible dripping liquids
- 7** Visible mercury switches
- 8** Other (describe): _____

TABLE 2. PRETREATMENT

1. Facility ID number (**EPA will code this response**): _____

2. Number of identical pretreatment stations described: _____
(Enter "1" if unique process, "2" if data represents two identical processes, etc.)

3. Pretreatment station ID number(s) or description: _____

4. Circle the code number for the type of pretreatment operation:
 - 1** Sorting
 - 2** Crushing
 - 3** Shredding
 - 4** Screening
 - 5** Furnace sweating
 - 6** Leaching (e.g., sodium carbonate leaching for secondary zinc processing)
 - 7** Degreasing
 - 8** Preheating
 - 9** Other (describe): _____

5. Circle the code numbers for the type of air pollution control device and the type of fume capture system used:
APC device ID no.: _____ Fume capture system:

0 No device is used	0 None
1 Fabric/cartridge filter	1 Side-draft or canopy hood
2 Wet scrubber	2 Close-fitting hood or direct process vent
3 Other: _____	3 Other: _____

6. Describe any work practices or other measures that reduce emissions from pretreatment operations.

7. Have air emission tests been conducted on these pretreatment operations?
 - 0** No
 - 1** Yes **[Enclose summary measurement data.]**

8. Additional comments and information: _____

TABLE 3. FURNACE DATA

1. Facility ID number (**EPA will code this response**): _____
2. Number of identical furnaces described: _____
(Enter "1" if unique process, "2" if data represents two identical processes, etc.)
3. Furnace ID number(s) or description: _____
4. Circle the code number for furnace application:

1	Melting	2	Holding
----------	---------	----------	---------
5. Circle the code number for furnace type:

1	Blast
2	Electric arc
3	Electric induction
4	Reverberatory
5	Crucible
6	Kettle
7	Muffle
8	Retort
9	Rotary Kiln
10	Other (describe): _____
6. Circle the code number(s) for furnace description, if applicable:

Blast:	1 Afterburning used
	2 No afterburning
	3 Above charge gas takeoff
	4 Below charge takeoff
	5 Cold blast
	6 Recuperative hot blast
	7 Nonrecuperative hot blast
Electric induction:	8 Coreless
	9 Channel
7. Circle the code number(s) for the fuel or energy source used for this furnace:

1	AC electric
2	DC electric
3	Natural gas-fired
4	Coke or coal
5	Other (specify): _____

8. Melting capacity of furnace, if applicable: _____ tons per hour
9. Holding capacity of furnace, if applicable: _____ tons
10. Circle the code number(s) for the type(s) of metals charged to the furnace and give the percent of the annual total for each type:
- | | | |
|----------|------------------------|---------|
| 1 | Zinc | _____ % |
| 2 | Nickel | _____ % |
| 3 | Gold | _____ % |
| 4 | Silver | _____ % |
| 5 | Brass/Bronze | _____ % |
| 6 | Magnesium | _____ % |
| 7 | Tin | _____ % |
| 8 | Platinum | _____ % |
| 9 | Other (specify): _____ | _____ % |
11. Circle the code number(s) for materials added for smelting:
- | | |
|----------|--|
| 1 | Lime |
| 2 | Fluxing materials (e.g., magnesium chloride, calcium chloride, etc.) |
| 3 | Inhibitive gases |
| 4 | Alloying agents (describe): _____ |
| 5 | Other (describe): _____ |
12. Circle the code which describes how molten material is transferred to molds for casting:
- | | |
|----------|-------------------------|
| 1 | Hand ladling |
| 2 | Pumping |
| 3 | Tilt pouring |
| 4 | Other (describe): _____ |
13. Circle the code number(s) for the type(s) of metals produced by the furnace and give the percent of the annual total for each type:
- | | | |
|----------|------------------------|---------|
| 1 | Zinc | _____ % |
| 2 | Nickel | _____ % |
| 3 | Gold | _____ % |
| 4 | Silver | _____ % |
| 5 | Brass/Bronze | _____ % |
| 6 | Magnesium | _____ % |
| 7 | Tin | _____ % |
| 8 | Platinum | _____ % |
| 9 | Other (specify): _____ | _____ % |

For charging, melting, and tapping operations associated with this furnace, circle the code numbers for the types of air pollution control devices and fume capture systems used.

14. **Charging:**

APC device ID no.: _____

Fume capture system:

- 0 No device is used
- 1 Fabric/cartridge filter
- 2 Wet scrubber
- 3 Other: _____

- 0 None
- 1 Side-draft or canopy hood
- 2 Close-fitting hood or direct process vent
- 3 Other: _____

15. **Melting:**

APC device ID no.: _____

Fume capture system:

- 0 No device is used
- 1 Fabric/cartridge filter
- 2 Wet scrubber
- 3 Other: _____

- 0 None
- 1 Side-draft or canopy hood
- 2 Close-fitting hood or direct process vent
- 3 Other: _____

16. **Tapping:**

APC device ID no.: _____

Fume capture system:

- 0 No device is used
- 1 Fabric/cartridge filter
- 2 Wet scrubber
- 3 Other: _____

- 0 None
- 1 Side-draft or canopy hood
- 2 Close-fitting hood or direct process vent
- 3 Other: _____

17. Describe any work practices or other measures that reduce furnace operation emissions.

18. Have air emission tests have been conducted on this furnace?

- 0 No
- 1 Yes **[Enclose summary measurement data and processing rate information.]**

19. Additional comments and information: _____

TABLE 4. POURING AND COOLING LINE DATA

1. Facility ID number (**EPA will code this response**): _____
2. Number of identical lines described in this table: _____
(Enter "1" if unique line, "2" if data represents two identical lines, etc.)
3. Line ID number(s) or description: _____
4. Circle the code number for the configuration of the pouring station:
 - 1 Automated conveyor
 - 2 Pallet line
 - 3 Floor (stationary) mold
 - 4 Other (describe): _____
5. Capacity **per line** in terms of metal poured: _____ tons per hour
6. Circle the code number for the type of mold system:
 - 1 Permanent mold
 - 2 Sand mold, not chemically treated
 - 3 Chemically bonded sand
 - 4 Centrifugal mold
 - 5 Other (describe): _____
7. If sand system, the sand/metal ratio: _____
8. If chemically bonded sand is used, include MSDS for each chemical binder material used, and report the annual amount of each chemical binder material used in 2003:

Name of Binder System 1 (describe): _____

Quantity of Material A: _____ tons per year

Quantity of Material B: _____ tons per year

Quantity of Catalyst: _____ tons per year

Name of Binder System 2 (describe): _____

Quantity of Material A: _____ tons per year

Quantity of Material B: _____ tons per year

Quantity of Catalyst: _____ tons per year

Circle the code number(s) for the type(s) of metal poured and give the percent of the annual total for each type:

- | | | |
|----------|------------------------|---------|
| 1 | Zinc | _____ % |
| 2 | Nickel | _____ % |
| 3 | Gold | _____ % |
| 4 | Silver | _____ % |
| 5 | Brass/Bronze | _____ % |
| 6 | Magnesium | _____ % |
| 7 | Tin | _____ % |
| 8 | Platinum | _____ % |
| 9 | Other (specify): _____ | _____ % |

For the pouring and cooling sections of the line, circle the code numbers for the types of APC devices and fume capture systems used.

10. Pouring:

APC device ID no.: _____ Fume capture system:

- | | | | |
|----------|-------------------------|----------|---|
| 0 | No device is used | 0 | None |
| 1 | Fabric/cartridge filter | 1 | Side-draft or canopy hood |
| 2 | Wet scrubber | 2 | Close-fitting hood or direct process vent |
| 3 | Other: _____ | 3 | Other: _____ |

11. Cooling:

APC device ID no.: _____ Fume capture system:

- | | | | |
|----------|-------------------------|----------|---|
| 0 | No device is used | 0 | None |
| 1 | Fabric/cartridge filter | 1 | Side-draft or canopy hood |
| 2 | Wet scrubber | 2 | Close-fitting hood or direct process vent |
| 3 | Other: _____ | 3 | Other: _____ |

12. Describe any emission reduction systems or procedures used.

13. Have air emission tests been conducted on this line?

- 0** No
- 1** Yes **[Enclose summary measurement data and metal pouring rate information.]**

14. Additional comments and information: _____

TABLE 5. CASTING REMOVAL DATA

1. Facility ID number (**EPA will code this response**): _____
2. Number of identical systems described in this table: _____
(Enter "1" if unique system, "2" if data represents two identical systems, etc.)
3. System ID number(s) or description: _____
4. Identify the pouring and cooling lines in the "Pouring and Cooling Data" section that feed this system:

5. Circle the code number for the system type:
 - 1 Shaker deck or table
 - 2 Rotary separator
 - 3 Vibratory conveyor
 - 4 High-frequency vibration
 - 5 Mechanical
 - 6 Manual
 - 7 Other (describe): _____
6. Circle the code number for the type of APC device used:
APC device ID no.: _____ Fume capture system:

<ol style="list-style-type: none"> 0 No device is used 1 Fabric/cartridge filter 2 Wet scrubber 3 Other: _____ 	<ol style="list-style-type: none"> 0 None 1 Side-draft or canopy hood 2 Close-fitting hood or direct process vent 3 Other: _____
--	--
7. Describe any emission reduction systems or procedures used.

8. Have air emission tests been conducted on this system?
 - 0 No
 - 1 Yes [**Enclose summary measurement data.**]
9. Additional comments and information: _____

TABLE 6. FINISHING DATA

1. Facility ID number (**EPA will code this response**): _____
2. Number of identical treatment stations described in this table: _____
(Enter "1" if unique system, "2" if data represents two identical systems, etc.)
3. Process ID number(s) or description: _____
4. Circle the code number for the finishing process used:
 - 1 Cutoff
 - 2 Grinding
 - 3 Shot blasting
 - 4 Grit blasting
 - 5 Coating (e.g., painting or varnishing)
 - 6 Other (describe): _____
5. Casting processing capacity per process: _____ tons per hour
6. If coating, circle the code number for the application method:
 - 1 Spray
 - 2 Dip
 - 3 Roll
 - 4 Flow
 - 5 Other (describe): _____
7. If coating, circle the code number for the type of coating material used:
 - 1 Organic solvent-borne liquid
 - 2 Water-borne liquid
 - 3 Powder
 - 4 Other (describe): _____
8. Circle the code number for the type of APC device used:
 APC device ID no.: _____ Fume capture system:

<ol style="list-style-type: none"> 0 No device is used 1 Fabric/cartridge filter 2 Wet scrubber 3 Other: _____ 	<ol style="list-style-type: none"> 0 None 1 Side-draft or canopy hood 2 Close-fitting hood or direct process vent 3 Other: _____
--	--

Identify materials that contain HAPs. Give the rate **per process** at which these materials are consumed at full operating capacity and annual quantity used in 2003.

9. Material	10. Annual quantity used in 2003 (tons)	11. Maximum consumption rate (lb/hr)	12. Actual consumption rate (lb/hr)	13. Known HAPs	14. Concentration in material (%)

15. Describe any emission reduction systems or procedures used.

16. Have air emission tests been conducted on this process?

0 No

1 Yes **[Enclose summary measurement data and relevant processing rate information.]**

17. Additional comments and information: _____

TABLE 7. NON-MELTING SECONDARY NON-FERROUS METALS PROCESSING OPERATIONS

1. Facility ID number (**EPA will code this response**): _____
2. Number of identical process units described in this table: _____
(Enter "1" if unique process unit, "2" if data represents two identical process units, etc.)
3. Process unit ID number(s) or description: _____
4. Circle the code number(s) for the type of process(es) conducted in this unit:
 - 1 Electrolysis
 - 2 Precipitation
 - 3 Dissolution
 - 4 Gas-phase volatilization
 - 5 Chlorination followed by electrorefining
 - 6 Neutralization
 - 7 Other (describe): _____
5. Circle the code number for the type of metal processed/recovered in this unit:
 - 1 Zinc
 - 2 Nickel
 - 3 Gold
 - 4 Silver
 - 5 Brass/Bronze
 - 6 Magnesium
 - 7 Tin
 - 8 Platinum
 - 9 Other (specify): _____
6. If process conducted in a tank please provide:

Tank capacity: _____ gallons

Tank description: (Circle all that apply)

 - 1 covered tank
 - 2 uncovered tank
 - 3 stirred, mixed, or agitated liquid
 - 4 quiescent liquid
7. Specify the processing mode:

1	Continuous	2	Batch
---	------------	---	-------

8. Process rate capacity: _____ tons per hour

9. Average actual process rate in 2003: _____ tons per hour

Identify all materials that contain HAPs in the following table for all non-melting secondary non-ferrous metals processing operations indicated in Question 2 above. Give the rate **per process** at which these materials are consumed at full operating capacity and annual quantity used in 2003.

8. Material	9. Annual quantity used in 2003 (tons)	10. Maximum consumption rate (lb/hr)	11. Actual consumption rate (lb/hr)	12. Known HAPs	13. Concentration in material (%)

14. Circle the code number for the type of air pollution control device and the type of fume capture system used:

APC device ID no.: _____

Fume capture system: _____

0 No device is used

0 None

1 Fabric/cartridge filter

1 Side-draft or canopy hood

2 PM wet scrubber (venturi)

2 Close-fitting hood or direct process vent

3 Chemical absorption scrubber

3 Other: _____

4 Carbon adsorption

5 Incinerator

6 Condenser

7 Other: _____

15. Describe any additional emission reduction systems or procedures used.

16. Have air emission tests been conducted on this process unit?

0 No

1 Yes **[Enclose summary measurement data and relevant processing rate information.]**

17. Additional comments and information: _____

TABLE A. FABRIC FILTER/CARTRIDGE COLLECTOR DESCRIPTION

1. Facility ID number (**EPA will code this response**): _____
2. Device description and ID number: _____
3. Year installed/rebuilt: _____ / _____
4. Design collection efficiency and/or outlet concentration:
 _____ percent/ _____ gr/dscf
5. Circle the code number for device type:
 1 Fabric filter **2** Cartridge collector
6. Circle the code number for pressure mode of operation:
 1 Positive pressure **2** Negative pressure
7. Circle the code number for bag cleaning method:
 1 Pulse jet
 2 Shaker
 3 Reverse air
 4 Other (describe): _____
8. Circle the code number for bag cleaning mode:
 1 On line **2** Off line
9. Cloth type: _____
10. Number of compartments: _____
11. Gas inlet temperature: _____ °F
12. Gas flow rate: _____ acfm
13. Gross filtering area: _____ sq.ft.
14. Net filtering area: _____ sq.ft.
15. Air to cloth ratio: _____ fpm

16. Referring to the processes described in Tables 1 through 7, identify each process served by this device.

If furnaces are served, distinguish between charging, melting, and tapping operations. Similarly, if pretreatment lines, pouring and cooling lines, casting removal processes, finishing processes, or other non-melting secondary non-ferrous metals processing operations are served, identify the operations serviced.

Table No.	Process ID/Description	Operation

17. Amount of particulate matter collected by this device:

- A. Tons of dust material collected: _____ tons
- B. Time period for which dust material was collected: _____ hours of operation
- C. Amount of metal or material processed or treated: _____ tons

18. Has this material been analyzed?

- 0** No **1** Yes **[Enclose analysis (but not TCLP data).]**

19. Have emission tests been conducted on this device?

- 0** No
- 1** Yes **[Enclose summary measurement data and relevant processing rate information.]**

20. Additional comments and information: _____

TABLE B. WET SCRUBBER DESCRIPTION

1. Facility ID number (**EPA will code this response**): _____
2. Device description and ID number: _____
3. Year installed/rebuilt: _____ / _____
4. Design collection efficiency and/or outlet concentration:
_____ percent/ _____ gr/dscf
5. Basis for efficiency (particulate matter, gas): _____
6. Circle the code number for scrubber type:
 - 1 Venturi
 - 2 Sieve tray
 - 3 Vertical packed bed
 - 4 Horizontal packed bed
 - 5 Other (specify): _____
7. Circle the code number for pressure mode of operation:
 - 1 Positive pressure
 - 2 Negative pressure
8. Gas flow rate: _____ acfm
9. Gas inlet temperature: _____ °F
10. Pressure drop: _____ inches water column
11. Liquid to gas ratio: _____ gallons per 1,000 acf

12. Referring to the processes described in Tables 1 through 7, identify each process served by this device. If furnaces are served, distinguish between charging, melting, and tapping operations. Similarly, if pretreatment lines, pouring and cooling lines, casting removal processes, finishing processes, or other non-melting secondary non-ferrous metals processing operations are served, identify the operations serviced.

Table No.	Process ID/Description	Operation

13. Have emission tests been conducted on this device?

0 No

1 Yes **[Enclose summary measurement data and relevant processing rate information.]**

14. Additional comments and information: _____

TABLE C. THERMAL AIR POLLUTION CONTROL DEVICE DESCRIPTION

1. Facility ID number (**EPA will code this response**): _____
2. Device description and ID number: _____
3. Design efficiency for this application: _____ percent
4. Basis for efficiency (for example: carbon monoxide destruction, volatile organic compound destruction):

5. Excess air: _____ percent
6. Residence time: _____ seconds
[Residence time is equal to the volume of the combustion chamber divided by the gas volumetric flow rate at combustion conditions.]
7. Combustion temperature: _____ °F
8. Other relevant design and operating data: _____

9. Referring to the processes described in Tables 1 through 7, identify each process served by this device. If furnaces are served, distinguish between charging, melting, and tapping operations. Similarly, if pretreatment lines, pouring and cooling lines, casting removal processes, finishing processes, or other non-melting secondary non-ferrous metals processing operations are served, identify the operations serviced.

Table No.	Process ID/Description	Operation

10. Have emission tests been conducted on this device?

0 No

1 Yes **[Enclose summary measurement data and relevant processing rate information.]**

11. Additional comments and information: _____

TABLE D. OTHER APC DEVICE DESCRIPTION

1. Facility ID number (**EPA will code this response**): _____
2. Device description and ID number: _____
3. Design efficiency for this application: _____ percent
4. Basis for efficiency: _____
5. Relevant design and operating data: _____

6. Referring to the processes described in Tables 1 through 7, identify each process served by this device. If furnaces are served, distinguish between charging, melting, and tapping operations. Similarly, if pretreatment lines, pouring and cooling lines, casting removal processes, finishing processes, or other non-melting secondary non-ferrous metals processing operations are served, identify the operations serviced.

Table No.	Process ID/Description	Operation

7. Have emission tests been conducted on this device?
 - 0** No
 - 1** Yes **[Enclose summary measurement data and relevant processing rate information.]**

8. Additional comments and information: _____

