



OAQ PROCESS INFORMATION APPLICATION
PI-11: Foundry, Smelting & Die Cast Operations
 State Form 52551 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
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NOTES:

- The purpose of this form is to obtain detailed information about foundry, smelting and die cast operations. Complete one form for each process unit (or group of identical units).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Foundry, Smelting & Die Cast Processes

Part A identifies processes that are related foundries, smelting, and die casting and additional forms that may be needed.

| 1. Process | Use the form listed for the specified processes. Check all that apply. |
|--|--|
| a. Raw Material Storage and Handling | This form is included for raw materials unloading / storage: <input type="checkbox"/> PI-03 <input type="checkbox"/> N/A |
| b. Non-Metallic Mineral Processing (<i>crushing and sizing of raw materials</i>) | This form is included for the raw materials processing: <input type="checkbox"/> PI-18 <input type="checkbox"/> N/A |
| c. Ground Material Storage and Handling | This form is included for the raw mills storage / handling: <input type="checkbox"/> PI-03 <input type="checkbox"/> N/A |
| d. Pre-heater / Pre-calciner | This form is included for the pre-heater: <input type="checkbox"/> PI-02 <input type="checkbox"/> N/A |
| e. Fuel Type for pre-heater / pre-calciner (<i>if other than Natural Gas</i>) | Submit form if fuel other than Natural Gas used in the preheater: <input type="checkbox"/> PI-02F <input type="checkbox"/> N/A |
| f. Furnace | These forms are included for the furnace: <input type="checkbox"/> PI-02A <input type="checkbox"/> N/A <input type="checkbox"/> PI-02B <input type="checkbox"/> N/A <input type="checkbox"/> PI-02G <input type="checkbox"/> N/A <input type="checkbox"/> PI-02H <input type="checkbox"/> N/A |
| g. Fuel Type for Kiln (<i>if other than Natural Gas</i>) | Submit form if fuel other than Natural Gas used in the kiln: <input type="checkbox"/> PI-02F <input type="checkbox"/> N/A |
| h. Non-Metallic Mineral Processing (<i>crushing and sizing of clinker</i>) | This form is included for processing: <input type="checkbox"/> PI-18 <input type="checkbox"/> N/A |
| i. Shot Blasting | This form is included for shot blasting: <input type="checkbox"/> PI-23 <input type="checkbox"/> N/A |
| j. Grinding | This form is included for grinding: <input type="checkbox"/> PI-18 <input type="checkbox"/> N/A |
| k. Painting | This form is included for painting: <input type="checkbox"/> PI-19 <input type="checkbox"/> N/A |
| l. Sand Reclamation | This form is included for the incineration process: <input type="checkbox"/> PI-02 <input type="checkbox"/> N/A <i>If the sand reclamation is not an incineration process, explain the process:</i> |
| m. Other process(es) | This form is included for (<i>specify process</i>): <input type="checkbox"/> <input type="checkbox"/> N/A |

PART D – Sand Handling Information

Part D identifies all the components associated with the sand handling. Use additional forms as necessary.

15. Does your process include sand handling? Yes *If yes, complete the rest of this section.*
 No *If no, proceed to the next section.*

| 16. Unit ID | 17. Installation Date | 18. Sand Throughput Rate (tons of sand per hour) |
|-------------|-----------------------|--|
| | | |
| | | |
| | | |

This following section identifies all emission factors used to calculate air emissions from sand handling.

| 19. Air Pollutant: | 20. Emission Factor | | 21. Source of Emission Factor <i>(If not using AP-42, include calculations)</i> |
|---|---------------------|-------|--|
| | value | units | |
| Particulate Matter (PM) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter less than 10µm (PM ₁₀) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter less than 2.5µm (PM _{2.5}) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Other <i>(specify):</i> | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |

22. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- None
- Baghouse / Fabric Filter – *Attach CE-02.*
- Electrostatic Precipitator – *Attach CE-04.*
- Reduction – *Attach CE-09*
- Cyclone – *Attach CE-03.*
- Absorption / Wet Collector / Scrubber – *Attach CE-05.*
- Other *(specify):* _____ – *Attach CE-10.*

23. Control Techniques: *Identify all control techniques used for this unit.*

24. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

This space is intentionally left blank.

PART E – Mold Making Process Information

Part E identifies all process components associated with Mold Making. Use additional sheets as necessary.

25. Does your production process include a process for making sand molds? Yes *If yes, complete the rest of this section.*
 No *If no, proceed to the next section.*

26. Number of Mold Making Process Lines:

| 27. Unit ID | 28. Installation Date | 29. Capacity <i>(tons sand per hr)</i> | 30. Type of Binder <i>(for mold making)</i> | 31. Amount of Binder Used <i>(lb of binder per lb of sand)</i> | 32. % VOC in Binder <i>(include MSDS)</i> |
|-------------|-----------------------|---|--|---|--|
| | | | | | |

This following section identifies all emission factors used to calculate air emissions from Mold Making.

| 33. Air Pollutant: | 34. Emission Factor | | 35. Source of Emission Factor <i>(If not using AP-42, include calculations)</i> | | |
|---|---------------------|-------|--|--------------------------------|------------------------------|
| | value | units | | | |
| Carbon Monoxide (CO) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Lead (Pb) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Nitrogen Oxides (NO _x) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Particulate Matter (PM) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Particulate Matter less than 10µm (PM ₁₀) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Particulate Matter less than 2.5µm (PM _{2.5}) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Sulfur Dioxide (SO ₂) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Volatile Organic Compounds (VOC) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Hazardous Air Pollutants (HAP) <i>(specify):</i> | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Other <i>(specify):</i> | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |

36. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- | | |
|---|--|
| <input type="checkbox"/> None | <input type="checkbox"/> Cyclone – Attach CE-03. |
| <input type="checkbox"/> Baghouse / Fabric Filter – Attach CE-02. | <input type="checkbox"/> Absorption / Wet Collector / Scrubber – Attach CE-05. |
| <input type="checkbox"/> Electrostatic Precipitator – Attach CE-04. | <input type="checkbox"/> Adsorber – Attach CE-07. |
| <input type="checkbox"/> Oxidizer / Incinerator – Attach CE-06. | <input type="checkbox"/> Reduction – Attach CE-09. |
| <input type="checkbox"/> Condenser – Attach CE-08. | |
| <input type="checkbox"/> Other <i>(specify):</i> | – Attach CE-10. |

37. Control Techniques: *Identify all control techniques used for this unit.*

38. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

PART F – Core Mixing Process Information

Part F identifies the process components associated with Core Mixing. Use additional sheets as necessary.

39. Does your production process include a core-mixing process? Yes *If yes, complete the rest of this section.*
 No *If no, proceed to the next section.*

40. Number of Core Mixing Process Lines:

| 41. Core Mixer Unit ID | 42. Installation Date | 43. Core Mixer Capacity <i>(tons sand per hour)</i> | 44. Type of Binder <i>(for core making)</i> | 45. Amount of Binder Used <i>(lb of binder per lb of sand)</i> | 46. % VOC in Binder <i>(include MSDS)</i> |
|------------------------|-----------------------|--|--|---|--|
| | | | | | |

This following section identifies all emission factors used to calculate air emissions from the Core Mixer.

| 47. Air Pollutant: | 48. Emission Factor | | 49. Source of Emission Factor <i>(If not using AP-42, include calculations)</i> |
|---|---------------------|-------|--|
| | value | units | |
| Carbon Monoxide (CO) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Lead (Pb) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Nitrogen Oxides (NO _x) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter (PM) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter less than 10µm (PM ₁₀) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter less than 2.5µm (PM _{2.5}) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Sulfur Dioxide (SO ₂) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Volatile Organic Compounds (VOC) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Worst Case HAP <i>(specify):</i> | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Other <i>(specify):</i> | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |

50. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- None
- Baghouse / Fabric Filter – *Attach CE-02.*
- Electrostatic Precipitator – *Attach CE-04.*
- Oxidizer / Incinerator – *Attach CE-06.*
- Condenser – *Attach CE-08.*
- Other *(specify):* _____
- Cyclone – *Attach CE-03.*
- Absorption / Wet Collector / Scrubber – *Attach CE-05.*
- Adsorber – *Attach CE-07.*
- Reduction – *Attach CE-09.*
- _____ – *Attach CE-10.*

51. Control Techniques: *Identify all control techniques used for this unit.*

52. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

PART G – Core Making Process Information

Part G identifies the process components associated with the Core Machine. Use additional sheets as necessary.

53. Does your production process include a core-making process?

- Yes *If yes, complete the rest of this section.*
 No *If no, proceed to the next section.*

| 54. Core Machine Unit ID | 55. Installation Date | 56. Type of Core Making Process | 57. Core Making Capacity <i>(tons of cores per hour)</i> | 58. Type of Catalyst <i>(for core making)</i> | 59. Amount of Catalyst Used <i>(lb of catalyst per lb of sand)</i> | 60. % VOC in Catalyst <i>(include MSDS)</i> |
|--------------------------|-----------------------|---------------------------------|---|--|---|--|
| | | | | | | |

This following section identifies all emission factors used to calculate air emissions from the Core Machine.

| 61. Air Pollutant: | 62. Emission Factor | | 63. Source of Emission Factor <i>(If not using AP-42, include calculations)</i> |
|---|---------------------|-------|--|
| | value | units | |
| Carbon Monoxide (CO) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Lead (Pb) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Nitrogen Oxides (NO _x) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter (PM) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter less than 10µm (PM ₁₀) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter less than 2.5µm (PM _{2.5}) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Sulfur Dioxide (SO ₂) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Volatile Organic Compounds (VOC) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Worst Case HAP <i>(specify):</i> | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Other <i>(specify):</i> | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |

64. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- | | |
|--|---|
| <input type="checkbox"/> None <input type="checkbox"/> Baghouse / Fabric Filter – <i>Attach CE-02.</i> <input type="checkbox"/> Electrostatic Precipitator – <i>Attach CE-04.</i> <input type="checkbox"/> Oxidizer / Incinerator – <i>Attach CE-06.</i> <input type="checkbox"/> Condenser – <i>Attach CE-08.</i> <input type="checkbox"/> Other <i>(specify):</i> | <input type="checkbox"/> Cyclone – <i>Attach CE-03.</i> <input type="checkbox"/> Absorption / Wet Collector / Scrubber – <i>Attach CE-05.</i> <input type="checkbox"/> Adsorber – <i>Attach CE-07.</i> <input type="checkbox"/> Reduction – <i>Attach CE-09.</i> <div style="text-align: right;"><i>– Attach CE-10.</i></div> |
|--|---|

65. Control Techniques: *Identify all control techniques used for this unit.*

66. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

PART H – Core Dip Tank Information

Part H identifies the process components associated with the Core Dip Tank. Use additional sheets as necessary.

67. Does your production process include a core-dip tank?

- Yes *If yes, complete the rest of this section.*
 No *If no, proceed to the next section.*

| 68. Dip Tank Unit ID | 69. Installation Date | 70. Dip Tank Capacity <i>(specify units)</i> | 71. Amount of Core Wash Used <i>(lb of core wash per lb of sand)</i> | 72. % VOC in Core Wash <i>(include MSDS)</i> | 73. Core Oven ID <i>(use Form PI-02 to describe this unit)</i> |
|----------------------|-----------------------|---|---|---|---|
| | | | | | |

This following section identifies all emission factors used to calculate air emissions from the Core Dip Tank.

| 74. Air Pollutant: | 75. Emission Factor | | 76. Source of Emission Factor <i>(If not using AP-42, include calculations)</i> |
|---|---------------------|-------|--|
| | value | units | |
| Carbon Monoxide (CO) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Lead (Pb) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Nitrogen Oxides (NO _x) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter (PM) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter less than 10µm (PM ₁₀) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Particulate Matter less than 2.5µm (PM _{2.5}) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Sulfur Dioxide (SO ₂) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Volatile Organic Compounds (VOC) | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Worst Case HAP <i>(specify):</i> | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |
| Other <i>(specify):</i> | | | <input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A |

77. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- | | |
|--|---|
| <input type="checkbox"/> None <input type="checkbox"/> Baghouse / Fabric Filter – <i>Attach CE-02.</i> <input type="checkbox"/> Electrostatic Precipitator – <i>Attach CE-04.</i> <input type="checkbox"/> Oxidizer / Incinerator – <i>Attach CE-06.</i> <input type="checkbox"/> Condenser – <i>Attach CE-08.</i> <input type="checkbox"/> Other <i>(specify):</i> | <input type="checkbox"/> Cyclone – <i>Attach CE-03.</i> <input type="checkbox"/> Absorption / Wet Collector / Scrubber – <i>Attach CE-05.</i> <input type="checkbox"/> Adsorber – <i>Attach CE-07.</i> <input type="checkbox"/> Reduction – <i>Attach CE-09.</i> <div style="text-align: right;"><i>– Attach CE-10.</i></div> |
|--|---|

78. Control Techniques: *Identify all control techniques used for this unit.*

79. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

PART I – Refining, Inoculation & Magnesium Treatment & Alloying Information

Part I identifies any additives to the process to change the properties of the metals. Use additional sheets as necessary.

80. Does your production process use a REFINING procedure? Yes *If yes, provide the information about flux.*
 No *If no, proceed to the section about inoculation.*

| 81. Flux type | 82. Flux amount <i>(lb flux per lb metal)</i> | 83. Frequency of process <i>(% of time refining is used)</i> |
|---------------|--|---|
| | | |
| | | |
| | | |
| | | |

84. Does your production process use an INOCULATION procedure? Yes *If yes, provide the information about the inoculants.*
 No *If no, proceed to the section about magnesium treatment.*

| 85. Inoculant type | 86. Inoculant amount <i>(lb inoculant per lb metal)</i> | 87. Frequency of process <i>(% of time inoculant is used)</i> |
|--------------------|--|--|
| | | |
| | | |
| | | |
| | | |

88. Does your production process use a MAGNESIUM (Mg) TREATMENT procedure? Yes *If yes, provide the information about magnesium treatment.*
 No *If no, proceed to the section about Dross Cooling.*

89. Location of Magnesium Treatment Process Furnace Other *(specify):*

| 90. Unit Where Magnesium Process Occurs | 91. Unit ID | 92. Installation Date | 93. Magnesium amount <i>(lb Mg per lb metal)</i> |
|---|-------------|-----------------------|---|
| | | | |
| | | | |
| | | | |
| | | | |

94. Does your production process use DROSS COOLING? Yes *If yes, complete the rest of this section.*
 No *If no, proceed to the next section.*

| 95. Type of Dross Cooling: | 96. Dross usage <i>(tons dross/hr)</i> | 97. Unit ID | 98. Installation Date | 99. Number of Coolers / Vats | 100. Volume of each Cooler / Vat |
|--|---|-------------|-----------------------|------------------------------|----------------------------------|
| <input type="checkbox"/> Dross Coolers <input type="checkbox"/> Open Vats | | | | | |
| <input type="checkbox"/> Dross Coolers <input type="checkbox"/> Open Vats | | | | | |
| <input type="checkbox"/> Dross Coolers <input type="checkbox"/> Open Vats | | | | | |
| <input type="checkbox"/> Dross Coolers <input type="checkbox"/> Open Vats | | | | | |

PART J – Pouring/Casting, Cooling and Shakeout Details

Part J identifies the Pouring/Casting, Cooling, and Shakeout process lines. Use additional sheets as necessary.

| 101. Line / Unit ID | 102. Installation Date | 103. Capacity | | 104. VOC emitted (lb per hour, lb per cast) | 105. PM emitted (lb per hour, lb per cast) | 106. HAP emitted (lb per hour, lb per cast) |
|---------------------|------------------------|------------------------|-------------------------|--|---|--|
| | | (tons of metal per hr) | (tons of sand per hour) | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| 107. Air Pollutant: | 108. Emission Factor | | 109. Source of Emission Factor (If not using AP-42, include calculations) | | |
|---|----------------------|-------|--|--------------------------------|------------------------------|
| | value | units | | | |
| Carbon Monoxide (CO) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Lead (Pb) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Nitrogen Oxides (NO _x) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Particulate Matter (PM) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Particulate Matter less than 10µm (PM ₁₀) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Particulate Matter less than 2.5µm (PM _{2.5}) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Sulfur Dioxide (SO ₂) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Volatile Organic Compounds (VOC) | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Worst Case HAP (specify): | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |
| Other (specify): | | | <input type="checkbox"/> AP-42 | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |

110. Add-On Control Technology: Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").

- None
- Baghouse / Fabric Filter – Attach CE-02.
- Electrostatic Precipitator – Attach CE-04.
- Oxidizer / Incinerator – Attach CE-06.
- Condenser – Attach CE-08.
- Other (specify): _____ – Attach CE-10.
- Cyclone – Attach CE-03.
- Absorption / Wet Collector / Scrubber – Attach CE-05.
- Adsorber – Attach CE-07.
- Reduction – Attach CE-09.

111. Control Techniques: Identify all control techniques used for this unit.

112. Process Limitations / Additional Information: Identify any acceptable process limitations. Attach additional information if necessary.

PART K: Federal Rule Applicability

Part K identifies any federal rules that apply to the process.

| | | | |
|---|--|--|---------------------|
| 113. Is a New Source Performance Standard (NSPS) applicable to this source? <i>If yes, identify the affected emission units and attach a completed FED-01 for each rule that applies.</i> | | <input type="checkbox"/> Yes <input type="checkbox"/> No | 114. Unit ID |
| <input type="checkbox"/> 40 CFR Part 60, Subpart L | Secondary Lead Smelters | | |
| <input type="checkbox"/> 40 CFR Part 60, Subpart M | Brass and Bronze Production Plants | | |
| <input type="checkbox"/> 40 CFR Part 60, Subpart LL | Metallic Mineral Processing Plants | | |
| <input type="checkbox"/> 40 CFR Part 60, Subpart OOO | Non-Metallic Mineral Processing Plants | | |
| <input type="checkbox"/> 40 CFR Part 60, Subpart UUU | Calciners and Dryers in Mineral Industries | | |
| 115. Is a National Emission Standard for Hazardous Air Pollutants (NESHAP) applicable to this source? <i>If yes, identify the affected emission units and attach a completed FED-01 for each rule that applies.</i> | | <input type="checkbox"/> Yes <input type="checkbox"/> No | 116. Unit ID |
| <input type="checkbox"/> 40 CFR Part 63, Subpart EEEE | Iron and Steel Foundries | | |
| <input type="checkbox"/> 40 CFR Part 63, Subpart MMMM | Miscellaneous Metal Parts and Products | | |
| <input type="checkbox"/> 40 CFR Part 63, Subpart RRR | Secondary Aluminum | | |
| <input type="checkbox"/> 40 CFR Part 63, Subpart X | Secondary Lead Smelter | | |

117. Non-Applicability Determination: Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.