

## Form Series C Instructions – Pollution Control Devices

Form Series C collects information on the pollution control devices at the stationary source. The permit application is structured around emissions units at the stationary source. Emissions units may have one or more pollution control devices associated with them. Form Series C is to be completed for add-on control devices such as a baghouse for dust collection associated with a crushing or grinding process. Emission units with integrated control systems that must operate as part of the emission unit should not be described in this section.

After the owner/operator has described the individual emission units using Form Series B, complete the applicable pollution control device forms associated with emission units at the stationary source. A number of specific forms have been provided, as well as one form for “other pollution control devices.” The following forms are included in this series:

Form Number	Description	Page Number
<a href="#">C1</a>	Electrostatic Precipitators	<a href="#">3</a>
<a href="#">C2</a>	Wet Scrubbers	<a href="#">4</a>
<a href="#">C3</a>	Baghouses	<a href="#">5</a>
<a href="#">C4</a>	Inertial Separators (multiclone/high efficiency cyclones)	<a href="#">6</a>
<a href="#">C5</a>	Other Pollution Control Devices	<a href="#">7</a>

Note that “not applicable” or “N/A” may be an appropriate response to some of the data elements presented in these forms. However, the intent of standard application forms is to provide a template that prompts the applicant for all of the information necessary to fully describe a stationary source, emission units, control devices etc. Some information that may not be needed to determine specific regulatory applicability will assist the permit drafter to fully understand the stationary source and emission units and will preclude a possible information request at a later date. Information included on other application forms within the current application may be referenced.

The Emission Unit ID Number will be used to identify the control device associated with each emission unit. If there is more than one control device associated with the emission unit add a “-#” to the end of the Emission Unit ID Number where “#” is a number beginning with “1” for the successive control devices.

The owner/operator may indicate in this form that he/she intends to install a new control device at a future point during the permit term. To do so, under the “date installed” field, the owner/operator should enter “future—20XX” to indicate the year in which the device will be installed. If he/she is uncertain of the year, he/she should enter simply “future.” The owner/operator should attempt to complete the other information about the device (e.g., manufacturer, model number, rated efficiency, etc.) to the fullest extent possible at this time in order to minimize the level of permit modification required at the time that the device is installed.

### APPLICABLE AND NON-APPLICABLE REQUIREMENTS

All state and federal standards applicable and non-applicable to each control device at the stationary source must be identified. Additionally, requirements established in the stationary source Permit-to-Operate and current Alaska Title I permits must be identified. Information on Alaska standards can be found here: <http://www.dec.state.ak.us/air/ap/regulati.htm>. Current federal standards can be found here: <http://ecfr.gpoaccess.gov/> and/or through hard copy and other electronic media. As discussed further below, regulations for which the owner/operator would like a permit shield should be identified in the table provided for “Non-Applicable Requirements”.

The Department has provided one table for applicable requirements and one table for non-applicable requirements at the end of each C# form. If space is needed for additional requirements, the Department has provided supplement tables. See *Form C Supplement – Control Device-Specific Applicable Requirements*, and *Form C Supplement – Control Device-Specific Permit Shield Request*.

## Form Series C Instructions – Pollution Control Devices

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### Applicable Requirements

The regulatory applicability for each control device should be identified in the table provided for “Applicable Requirements”, just as was done in the “B” forms for emission units.

- Enter the current Title V operating permit number (if applicable), Permit-to-Operate, or Alaska Title I permit number followed by a dash “-”, and the condition number.
- Enter the applicable requirements. If an applicable requirement is a rule, enter the complete citation (e.g., 18 AAC 50.055(a)(1)).
- Enter the parameter, pollutant, or work practice to which the rule condition applies (e.g., for the rule cited above, visible emissions).
- Enter the limit or standard established by the applicable requirement (e.g., for the rule cited above, “20 percent averaged over any six consecutive minutes”).
- Write “yes” if the control device is currently in compliance with the limit/standard. Write “no” if the control device currently is out of compliance with the limit/standard. If the answer is “out,” the owner/operator **must** attach a compliance schedule for the control device.
- Identify the monitoring, record keeping, and reporting method that is the basis for the compliance determination. If an EPA-granted waiver, exemption, or custom monitoring plan applies, indicate in the space provided and attach a copy of the applicable documentation to this permit application.

### Non-Applicable Requirements

Regulations for which the owner/operator would like a permit shield should be identified in the table provided for “Non-Applicable Requirements”. Complete this table for each control device. The table must be completed and returned even if no shields are requested. If no shields are requested, simply type “NO SHIELD REQUEST” on the first line under “Non Applicable Requirements”.

The “Non-Applicable Requirements” table collects information about specified requirements that are not applicable to the control device at the time of permit issuance. If any of the requirements for which a permit shield is granted becomes applicable during the permit term, the Permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

In this table, the owner/operator will explain the basis for each permit shield request. In the first column, enter the state or federal citation for which the owner/operator is requesting a permit shield. In the second column, explain why the rule does not apply to the emissions unit, and include the citation/basis.

### Reasons for Regulatory Applicability Determination

Owners/operators are required to identify in their permit applications all requirements that are applicable and non-applicable to their operations. In addition, non-applicable regulations for which the owner/operator would like a permit shield must be identified. The purpose for these requirements is three-fold:

- First, the applicable requirements constitute the skeleton of the permit that the Department will write. As such, the full range of applicable requirements must be identified in the permit application so that the Department will have adequate information to structure the permit correctly.
- Second, if the owner/operator identifies all applicable and non-applicable requirements, the Department can grant a permit shield. If the stationary source is in compliance with all of the conditions in the permit, the shield protects the owner/operator from third-party lawsuits.
- Third, permitted stationary sources are required to certify continuous or intermittent compliance with all applicable requirements annually by March 31. The information used to determine compliance will be based on the monitoring required in the permit, which will be established separately for each applicable requirement. Thus, the owner/operator needs to identify all applicable requirements comprehensively and accurately so that the stationary source’s monitoring activities are appropriate.

## Form Series C Instructions – Pollution Control Devices

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### FORM C1 – ELECTROSTATIC PRECIPITATORS

1. Enter the name of the pollution control device as referred to by the owner/operator.
2. Enter the Emission Unit ID Number if there is only one control device associated with the emission unit. If there is more than one control device associated with the emission unit, add a “-#” to the end of the Emission Unit ID Number where “#” is a number beginning with “1” for the successive control devices.
3. Enter the year that the control device was, or will be, installed.
4. Enter the manufacturer of the control device.
5. Enter the model number of the control device.
6. Specify the type of electrostatic precipitator--either wet or dry.
7. Enter the rated collection efficiency, in percent, based on the manufacturer’s guarantee.
8. Enter the date of the most recent source test on the control device.
9. Enter the emission factor (result) of the most recent source test on the control device.
10. Describe any inlet gas pretreatment systems. If the pretreatment systems are separate control devices, fill out the appropriate form.
11. Enter the number of fields in the device.
12. Enter the design criteria for the primary voltage.
13. Enter the design criteria for the secondary voltage.
14. Enter the design criteria for the primary current.
15. Enter the design criteria for the secondary current.
16. Enter the design inlet gas flow rate (acfm).
17. Describe control device operating limits, such as maintenance requirements or other required down time.
18. Is the pollution control device subject to Compliance Assurance Monitoring (CAM) as described under 40 C.F.R Part 64?

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the control device.

See the discussion on Applicable and Non-Applicable Requirements on pages 1 and 2 for instructions on completing the Applicable and Non-Applicable Requirements tables at the end of this form.

## Form Series C Instructions – Pollution Control Devices

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### FORM C2 - WET SCRUBBERS

1. Enter the name of the pollution control device as referred to by the owner/operator.
2. Enter the Emission Unit ID Number if there is only one control device associated with the emission unit. If there is more than one control device associated with the emission unit, add a “-#” to the end of the Emission Unit ID Number where “#” is a number beginning with “1” for the successive control devices.
3. Enter the year that the control device was, or will be, installed.
4. Enter the manufacturer of the control device.
5. Enter the model number of the control device.
6. Specify the type of wet scrubber. Examples include venturi, packed bed, spray tower, etc.
7. Enter the rated collection efficiency, in percent, based on the manufacturer’s guarantee.
8. Enter the date of the most recent source test on the control device.
9. Enter the emission factor (result) of the most recent source test on the control device.
10. Enter the design water flow rate (gal/min).
11. Enter the design water pressure (psig).
12. Enter the design inlet gas flow rate (acfm).
13. Enter the design pressure drop across the scrubber (inches of water column).
14. Describe control device operating limits, such as maintenance requirements or other required down time.
15. Is the pollution control device subject to Compliance Assurance Monitoring (CAM) as described under 40 C.F.R Part 64?

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the control device.

See the discussion on Applicable and Non-Applicable Requirements on pages 1 and 2 for instructions on completing the Applicable and Non-Applicable Requirements tables at the end of this form.

## Form Series C Instructions – Pollution Control Devices

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### FORM C3 - BAGHOUSES

1. Enter the name of the pollution control device as referred to by the owner/operator.
2. Enter the Emission Unit ID Number if there is only one control device associated with the emission unit. If there is more than one control device associated with the emission unit add a “-#” to the end of the Emission Unit ID Number where “#” is a number beginning with “1” for the successive control devices.
3. Enter the year that the control device was, or will be, installed.
4. Enter the manufacturer of the control device.
5. Enter the model number of the control device.
6. Enter the rated collection efficiency, in percent, based on the manufacturer’s guarantee.
7. Enter the date of the most recent source test on the control device.
8. Enter the emission factor (result) of the most recent source test on the control device.
9. Describe the baghouse cleaning mechanism.
10. Specify the frequency with which cleaning is performed.
11. Enter the design inlet gas flow rate (acfm).
12. Enter the design air-to-cloth ratio.
13. Enter the number of individual bags.
14. Enter the design pressure drop across the baghouse, in inches of water.
15. Describe control device operating limits, such as maintenance requirements or other required down time.
16. Is the pollution control device subject to Compliance Assurance Monitoring (CAM) as described under 40 C.F.R Part 64?

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the control device.

See the discussion on Applicable and Non-Applicable Requirements on pages 1 and 2 for instructions on completing the Applicable and Non-Applicable Requirements tables at the end of this form.

## Form Series C Instructions – Pollution Control Devices

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### FORM C4 - INERTIAL SEPARATORS (MULTICLONE\HIGH EFFICIENCY CYCLONES)

1. Enter the name of the pollution control device as referred to by the owner/operator.
2. Enter the Emission Unit ID Number if there is only one control device associated with the emission unit. If there is more than one control device associated with the emission unit add a “-#” to the end of the Emission Unit ID Number where “#” is a number beginning with “1” for the successive control devices.
3. Enter the year that the control device was, or will be, installed.
4. Enter the manufacturer of the control device.
5. Enter the model number of the control device.
6. Enter the rated collection efficiency, in percent, based on the manufacturer’s guarantee.
7. Enter the date of the most recent source test on the control device.
8. Enter the emission factor (result) of the most recent source test on the control device.
9. Enter the individual cyclone diameter(s), in inches.
10. Enter the individual cyclone length(s), in inches or feet (specify).
11. Enter the design inlet gas flow rate (acfm).
12. Enter the design pressure drop across the multiclone, in inches of water column.
13. Describe control device operating limits, such as maintenance requirements or other required down time.
14. Is the pollution control device subject to Compliance Assurance Monitoring (CAM) as described under 40 C.F.R Part 64?

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the control device.

See the discussion on Applicable and Non-Applicable Requirements on pages 1 and 2 for instructions on completing the Applicable and Non-Applicable Requirements tables at the end of this form.

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## Form Series C Instructions – Pollution Control Devices

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### FORM C5 - OTHER POLLUTION CONTROL DEVICES

Complete one form for each control device.

1. Enter the name of the pollution control device as referred to by the owner/operator.
2. Enter the Emission Unit ID Number if there is only one control device associated with the emission unit. If there is more than one control device associated with the emission unit add a “-#” to the end of the Emission Unit ID Number where “#” is a number beginning with “1” for the successive control devices.
3. Enter the year that the control device was, or will be, installed.
4. Enter the manufacturer of the device.
5. Enter the model number of the device.
6. Describe the type of control device, including design parameters.
7. Enter the rated collection or destruction efficiency of the control device, in percent, based on the manufacturer’s guarantee.
8. Enter the date of the most recent source test on the control device.
9. Enter the emission factor (result) of the most recent source test on the control device.
10. Enter the design inlet gas flow rate (acfm).
11. Describe control device operating limits, such as maintenance requirements or other required down time.
12. Is the pollution control device subject to Compliance Assurance Monitoring (CAM) as described under 40 C.F.R Part 64?

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the control device.

See the discussion on Applicable and Non-Applicable Requirements on pages 1 and 2 for instructions on completing the Applicable and Non-Applicable Requirements tables at the end of this form.

**FORM C1**  
**Pollution Control Device Form - Electrostatic Precipitators**

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Permit Number: \_\_\_\_\_

1.	Name	
2.	Emission Unit ID Number	
3.	Date installed	
4.	Manufacturer	
5.	Model number	
6.	Type (wet or dry)	
7.	Rated efficiency (%)	
8.	Date of most recent source test on control device	
9.	Emission factor (result) of most recent source test	
10.	Inlet gas pre-treatment?	
11.	Number of fields	
12.	Design primary voltage	
13.	Design secondary voltage	
14.	Design primary current	
15.	Design secondary current	
16.	Design inlet gas flow rate (acfm)	
17.	Describe control device operating limits	
18.	Control device subject to Compliance Assurance Monitoring (CAM) under 40 C.F.R. Part 64?	

## FORM C1

### Pollution Control Device Form - Electrostatic Precipitators

**Applicable Requirements Specific to Control Device** (*attach additional sheets as needed. Form C Supplement – Control Device-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Determine Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C1**  
Pollution Control Device Form - Electrostatic Precipitators

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**Non-applicable Requirements Specific to Control Device** (*attach additional sheets as needed. Form C Supplement – Control Device-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C2**  
Pollution Control Device Form - Wet Scrubbers

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Permit Number: \_\_\_\_\_

1.	Name	
2.	Emission Unit ID Number	
3.	Date installed	
4.	Manufacturer	
5.	Model number	
6.	Type of scrubber	
7.	Rated efficiency (%)	
8.	Date of most recent source test on control device	
9.	Emission factor (result) of most recent source test	
10.	Design water flow rate (gal/min)	
11.	Design water pressure (psig)	
12.	Design inlet gas flow rate (acfm)	
13.	Design pressure drop (inches of water column)	
14.	Describe control device operating limits	
15.	Control device subject to Compliance Assurance Monitoring (CAM) under 40 C.F.R. Part 64?	

## FORM C2

### Pollution Control Device Form - Wet Scrubbers

**Applicable Requirements Specific to Control Device** (*attach additional sheets as needed. Form C Supplement – Control Device-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Determine Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C2**  
Pollution Control Device Form - Wet Scrubbers

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**Non-applicable Requirements Specific to Control Device** (*attach additional sheets as needed. Form C Supplement – Control Device-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C3**  
Pollution Control Device Form - Baghouses

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Permit Number: \_\_\_\_\_

1.	Name	
2.	Emission Unit ID Number	
3.	Date installed	
4.	Manufacturer	
5.	Model number	
6.	Rated efficiency (%)	
7.	Date of most recent source test on control device	
8.	Emission factor (result) of most recent source test	
9.	Cleaning mechanism	
10.	Cleaning frequency	
11.	Design inlet gas flow rate (acfm)	
12.	Design air-to-cloth ratio	
13.	Number of bags	
14.	Design pressure drop (inches of water column)	
15.	Describe control device operating limits	
16.	Control device subject to Compliance Assurance Monitoring (CAM) under 40 C.F.R. Part 64?	

### FORM C3

#### Pollution Control Device Form - Baghouses

**Applicable Requirements Specific to Control Device** (*attach additional sheets as needed. Form C Supplement – Control Device-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Determine Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C3**  
Pollution Control Device Form - Baghouses

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**Non-applicable Requirements Specific to Control Device** (*attach additional sheets as needed. Form C Supplement – Control Device-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C4**

**Pollution Control Device Form - Inertial Separators (multiclone/high efficiency cyclones)**

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Permit Number: \_\_\_\_\_

1.	Name	
2.	Emission Unit ID Number	
3.	Date installed	
4.	Manufacturer	
5.	Model number	
6.	Rated efficiency (%)	
7.	Date of most recent source test on control device	
8.	Emission factor (result) of most recent source test	
9.	Cyclone(s) diameter (inches or feet)	
10.	Cyclone(s) length (inches or feet)	
11.	Design inlet gas flow rate (acfm)	
12.	Design pressure drop (inches of water column)	
13.	Describe control device operating limits	
14.	Control device subject to Compliance Assurance Monitoring (CAM) under 40 C.F.R. Part 64?	

## FORM C4

### Pollution Control Device Form - Inertial Separators (multiclone/high efficiency cyclones)

**Applicable Requirements Specific to Control Device** (*attach additional sheets as needed. Form C Supplement – Control Device-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Determine Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C4**

**Pollution Control Device Form - Inertial Separators (multiclone/high efficiency cyclones)**

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**Non-applicable Requirements Specific to Control Device (attach additional sheets as needed. Form C Supplement – Control Device-Specific Permit Shield Request):**

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C5**  
Pollution Control Device Form - Other Pollution Control Devices

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Permit Number: \_\_\_\_\_

1.	Name	
2.	Emission Unit ID Number	
3.	Date installed	
4.	Manufacturer	
5.	Model number	
6.	Type of device (describe):	
7.	Rated efficiency (%)	
8.	Date of most recent source test on control device	
9.	Emission factor (result) of most recent source test	
10.	Design inlet gas flow rate (acfm)	
11.	Describe control device operating limits	
12.	Control device subject to Compliance Assurance Monitoring (CAM) under 40 C.F.R. Part 64?	

## FORM C5

### Pollution Control Device Form - Other Pollution Control Devices

**Applicable Requirements Specific to Control Device** (*attach additional sheets as needed. Form C Supplement – Control Device-Specific Applicable Requirements*):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Determine Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C5**  
Pollution Control Device Form - Other Pollution Control Devices

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**Non-applicable Requirements Specific to Control Device** (*attach additional sheets as needed. Form C Supplement – Control Device-Specific Permit Shield Request*):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C SUPPLEMENT**  
Control Device-Specific Applicable Requirements

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Permit Number: \_\_\_\_\_

**Control Device-Specific Applicable Requirements** (*attach additional sheets as needed*):

Page \_\_\_\_\_ of \_\_\_\_\_

Affected Control Device Name and EU ID	Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/Pollutant	Limit/Standard/Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods Used to Determine Compliance

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

**FORM C SUPPLEMENT**  
Control Device-Specific Permit Shield Request

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Permit Number: \_\_\_\_\_

**Non-applicable requirements** (*attach additional sheets as needed*):

Page \_\_\_\_\_ of \_\_\_\_\_

Control Device Name and EU ID	Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]