

Attachment E210: Air Pollution Control Equipment Supplemental Application Form

Applicant Name: _____
 Unit No(s): _____

DEEP USE ONLY
App. No.: _____

Complete this form in accordance with the instructions (DEEP-NSR-INST-210) to ensure the proper handling of your application. Print or type unless otherwise noted.

Complete this supplemental application form to provide the air pollution control equipment information for all units that are part of this application package.

Questions? Visit the [Air Permitting](#) web page or contact the Air Permitting Engineer of the Day at DEEP.BAM.AirPermits@ct.gov or 860-424-4152.

Part I. Summary Sheet

Unit No.	Unit Description	Control Equipment		Overall Control Efficiency (%)	Pollutant(s) Controlled	*Basis	Stack No.
		No.	Type				

* Submit supporting documentation with this form, e.g., stack test data, manufacturer's guarantees, etc. as Attachment E210(Control Equipment No.).

Check here if additional sheets are necessary, and label and attach them to this sheet.

Part II: Specific Control Equipment

Complete the appropriate subsection for each *distinct* piece of control equipment.

1. Adsorption Device

Control Equipment Number of Adsorption Unit: _____

Unit Number of Unit which Uses Adsorption Unit: _____

Manufacturer and Model Number		
Construction Date		
Adsorbent		<input type="checkbox"/> Activated Charcoal Type: <input type="checkbox"/> Granulated <input type="checkbox"/> Other (specify): <input type="checkbox"/> Powdered
Number of Beds		
Dimensions of Beds <input type="checkbox"/> Check here if additional sheets are necessary, and label and attach them to this sheet.	Bed No. 1	Thickness in direction of gas flow: inches Cross-section area: square inches
	Bed No. 2	Thickness in direction of gas flow: inches Cross-section area: square inches
	Bed No. 3	Thickness in direction of gas flow: inches Cross-section area: square inches
Inlet Gas Temperature		°F
Design Pressure Drop Across Unit		inches H ₂ O
Operating Pressure Drop Range Across Unit		- inches H ₂ O
Gas Flow Rate		scfm
Type of Regeneration		<input type="checkbox"/> Replacement <input type="checkbox"/> Steam <input type="checkbox"/> Other (specify):
Method of Regeneration		<input type="checkbox"/> Alternate use of beds <input type="checkbox"/> Source shut down <input type="checkbox"/> Other (specify): Describe procedures used to ensure that emissions from regeneration process are treated or minimized:
Maximum Operation Time Before Regeneration		
Is Adsorber Equipped with a Break-Through Detector?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Pollutant(s) Controlled		
Collection Efficiency(s) of Adsorber		%
Control Efficiency(s) of Adsorber		%
Overall Control Efficiency(s)		%

2. Afterburner (Incinerator for Air Pollution Control)

Control Equipment Number of Afterburner: _____

Unit Number of Unit which Uses Afterburner: _____

Manufacturer and Model Number					
Construction Date					
Type of Afterburner		<input type="checkbox"/> Thermal <input type="checkbox"/> Catalytic <input type="checkbox"/> Other (specify):			
Combustion Chamber Dimensions	Length	inches			
	Cross-section area	square inches			
Inlet Gas Temperature		°F			
Operating Temperature Range of Chamber		- °F			
Auxiliary Fuel Information					
Fuel Type	% Sulfur by Weight	Higher Heating Value (BTU)	Maximum Hourly Firing Rate	Maximum Annual Fuel Usage	Units (gal or ft³)
Number of Burners					
Burner Maximum Heat Input	Burner No. 1	BTU per hour			
	Burner No. 2	BTU per hour			
	Burner No. 3	BTU per hour			
Catalyst Used		<input type="checkbox"/> Yes <input type="checkbox"/> No			
Catalyst Type					
Catalyst Sampling Interval					
Heat Exchanger Used		<input type="checkbox"/> Yes <input type="checkbox"/> No			
Type of Heat Exchanger					
Heat Recovery					
Reagent Used					
Gas Flow Rate		scfm			
Combustion Chamber Design Residence Time		seconds			
Moisture Content of Exhaust Gas		%			
Heat Recovery		%			
Pollutant(s) Controlled					
Collection Efficiency(s) of Afterburner		%			

2. Afterburner (Incinerator for Air Pollution Control) (continued)

Control Equipment Number of Afterburner: _____

Unit Number of Unit which Uses Afterburner: _____

Control Efficiency(s) of Afterburner	%
Overall Control Efficiency(s)	%

3. Condenser

Control Equipment Number of Condenser: _____

Unit Number of Unit which Uses Condenser: _____

Manufacturer and Model Number	
Construction Date	
Heat Exchange Area	square feet
Coolant Flow Rate	<input type="checkbox"/> Water: gpm <input type="checkbox"/> Air: scfm <input type="checkbox"/> Other (specify):
Gas Flow Rate	scfm
Coolant Temperature	In: °F Out: °F
Gas Temperature	In: °F Out: °F
Pollutant(s) Controlled	
Collection Efficiency(s) of Condenser	%
Control Efficiency(s) of Condenser	%
Overall Control Efficiency(s)	%

4. Electrostatic Precipitator

Control Equipment Number of Electrostatic Precipitator: _____

Unit Number of Unit which Uses Electrostatic Precipitator: _____

Manufacturer and Model Number	
Construction Date	
Collecting Electrode Area	square feet
Gas Flow Rate	scfm
Voltage Across the Precipitator Plates	kV
Resistivity of Pollutants	ohms
Number of Fields in the Precipitator	
Grain Loading	In: grains/scf Out: grains/scf
Pollutant(s) Controlled	
Collection Efficiency(s) of Electrostatic Precipitator	%
Control Efficiency(s) of Electrostatic Precipitator	%
Overall Control Efficiency(s)	%

5. Filter

Control Equipment Number of Filter: _____

Unit Number of Unit which Uses Filter: _____

Manufacturer and Model Number	
Construction Date	
Filtering Material	
Air to Cloth Ratio	square feet
Net Cloth Area	square feet
Number of Bags	
Cleaning Method	<input type="checkbox"/> Shaker <input type="checkbox"/> Reverse Air <input type="checkbox"/> Pulse Air <input type="checkbox"/> Pulse Jet <input type="checkbox"/> Other (specify):
Gas Cooling Method	<input type="checkbox"/> Ductwork Length: ft. Diameter: in. <input type="checkbox"/> Heat Exchanger <input type="checkbox"/> Bleed-in Air <input type="checkbox"/> Water Spray <input type="checkbox"/> Other (specify): <input type="checkbox"/> Not Applicable
Cooling Medium Flow Rate	<input type="checkbox"/> Bleed-in Air: scfm <input type="checkbox"/> Water Spray: gpm
Exhaust Gas Flow Rate	scfm
Inlet Gas Temperature	°F
Inlet Gas Dew Point	°F
Grain Loading	In: grains/scf Out: grains/scf
Design Pressure Drop Across Unit	inches H ₂ O
Operating Pressure Drop Range Across Unit	- inches H ₂ O
Pollutant(s) Controlled	
Collection Efficiency(s) of Filter	%
Control Efficiency(s) of Filter	%
Overall Control Efficiency(s)	%

6. Cyclone

Control Equipment Number of Cyclone: _____

Unit Number of Unit which Uses Cyclone: _____

Manufacturer and Model Number	
Construction Date	
Type of Cyclone	<input type="checkbox"/> Single <input type="checkbox"/> Multiple: Number of Cyclones
Gas Flow Rate	scfm
Grain Loading	In: grains/scf Out: grains/scf
Design Pressure Drop Across Unit	inches H ₂ O
Operating Pressure Drop Range Across Unit	- inches H ₂ O
Pollutant(s) Controlled	
Collection Efficiency(s) of Cyclone	%
Control Efficiency(s) of Cyclone	%
Overall Control Efficiency(s)	%

7. Mist Eliminator

Control Equipment Number of Mist Eliminator: _____

Unit Number of Unit which Uses Mist Eliminator: _____

Manufacturer and Model Number	
Construction Date	
Face Velocity	feet per second <input type="checkbox"/> Vertical Flow <input type="checkbox"/> Horizontal Flow <input type="checkbox"/> Diagonal
Design Pressure Drop Across Unit	inches H ₂ O
Operating Pressure Drop Range Across Unit	- inches H ₂ O
Flow Rate	scfm
Pollutant(s) Controlled	
Collection Efficiency(s) of Mist Eliminator	%
Control Efficiencies of Mist Eliminator	% @ 1 mmHg % @ 5 mmHg % @ 10 mmHg
Overall Control Efficiency(s)	%

8. Scrubber

Control Equipment Number of Scrubber: _____

Unit Number of Unit which Uses Scrubber: _____

Manufacturer and Model Number		
Construction Date		
Type of Scrubber		<input type="checkbox"/> Venturi
		<input type="checkbox"/> Wet Fan
		<input type="checkbox"/> Packed: Packing Material Size: Packed Height: inches
		<input type="checkbox"/> Spray: Number of Nozzles: Nozzle No. 1 Pressure: psig Nozzle No. 2 Pressure: psig Nozzle No. 3 Pressure: psig Nozzle No. 4 Pressure: psig
		<input type="checkbox"/> Other (specify):
Design Pressure Drop Across Unit		inches H ₂ O
Operating Pressure Drop Range Across Unit		- inches H ₂ O
Type of Flow		<input type="checkbox"/> Concurrent <input type="checkbox"/> Countercurrent <input type="checkbox"/> Crossflow
Scrubber Geometry	Length in direction of gas flow	feet
	Cross-sectional area	square inches
Chemical Composition of Scrubbing Liquid		
Scrubbing Liquid/Reagent Flow Rate		gpm
Fresh Liquid Make-Up Rate		gpm
Scrubber Liquid/Reagent Circulation		<input type="checkbox"/> One Pass <input type="checkbox"/> Recirculated
Scrubber Liquid/Reagent pH		
Gas Flow Rate		scfm
Inlet Gas Temperature		°F
Design Outlet Grain Loading		gr/dscf
Pollutant(s) Controlled		
Collection Efficiency(s) of Scrubber		%
Control Efficiency(s) of Scrubber		%
Overall Control Efficiency(s)		%

9. Other Control Equipment for Degreasing Equipment

Name of Control Equipment: _____

Control Equipment Number of Control Equipment: _____

Unit Number of Unit which Uses Control Equipment: _____

Manufacturer and Model Number	
Construction Date	
Method of Control	<input type="checkbox"/> Refrigerator Chiller <input type="checkbox"/> Water Spray <input type="checkbox"/> Other (specify): _____
Pollutant(s) Controlled	
Collection Efficiency(s) of Control Equipment	%
Control Efficiency(s) of Control Equipment	%
Overall Control Efficiency(s)	%

10. Other Type of Control Equipment

Name of Control Equipment: _____

Control Equipment Number of Control Equipment: _____

Unit Number of Unit which Uses Control Equipment: _____

Manufacturer and Model Number	
Construction Date	
Pollutant(s) Controlled	
Collection Efficiency(s) of Control Equipment	%
Control Efficiency(s) of Control Equipment	%
Overall Control Efficiency(s)	%

Part III: Attachments

Please check the attachment being submitted as verification that all applicable attachments have been submitted with this application form. When submitting such documents, please label the documents as indicated in this Part (e.g., Attachment E210(Control Equipment No.), etc.) and be sure to include the applicant's name.

Attachment E210: *Manufacturer Information* - Submit supporting documentation for each piece of air pollution control equipment listed in Part I of this form, e.g., stack test data, manufacturer's guarantees, etc. Label each document in this Attachment referencing the applicable air pollution control equipment number as indicated in Part I of this form using this format: Attachment E210(Control Equipment No.). **REQUIRED**