

GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment

APPLICATION FOR PERMIT TO CONSTRUCT/OPERATE MISCELLANEOUS PROCESS EQUIPMENT/EMISSION CONTROL DEVICES

Before completing this application: This application is intended for use for equipment that is less commonly found in the District of Columbia. Please ensure that there is no other application form, intended specifically for your type of equipment, before using this form. Application options can be found at: <https://doee.dc.gov/service/airpermits>. If you need assistance with identifying proper application forms or have other air quality permitting questions, please call (202) 535-1747 for more information.

I. Facility and Applicant Information

1. _____
Full Legal Name of Applicant/Organization
2. _____
Type of Organization
3. _____
Name of Owner(s) or Principal Partner(s) of Above Organization
4. _____
Mailing Address of Applicant (No., Street, City, State, Zip)
5. _____
Street Address of Facility (if different from Mailing Address)
6. Owner/Responsible Official Name: _____
Owner/Responsible Official Title: _____
Phone No. _____ E-mail: _____
7. Contact Person: _____
Contact Person Title: _____
Phone No. _____ E-mail: _____
8. Type of Project: ☐ New Construction ☐ Renewal
☐ Initial Permitting of Existing Source ☐ Change Owner/Transfer of Existing Permit

Note that replacement of an existing source is considered "New Construction".

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9. For renewal or transfer, provide the existing permit number and expiration date:

10. Describe the facility at which this equipment will be located:

11. Primary industrial codes for the major activity at this location :

SIC: _____ NAICS: _____

II. General Equipment Information

1. Equipment Name/Identification: _____

2. Describe the equipment in detail (attach additional sheets as necessary):

3. Manufacturing Information:

Equipment Order Date

Equipment Manufacture Date
(if available)

Model Number

Serial Number (if available)

4. Date construction/installation of unit began or is planned to begin: _____

Date construction/installation of unit completed (if applicable): _____

5. Fuel Information:

Check the following box if no fuel is used in the unit and skip to question 6. Otherwise, please answer the following questions. Fuel Not Applicable ☐

- a. Primary fuel burned in this unit (if applicable): *Check one:*

☐ Natural Gas ☐ LPG ☐ Diesel Fuel ☐ No. 2 Fuel Oil

☐ Other _____

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Heat input rating on primary fuel (MMBTU/hr): _____

Rated fuel consumption rate (per hour): _____ *Specify units*

Maximum quantity/year: _____ *Specify units*

b. Secondary fuel burned in this unit (if applicable): *Check one:*

☐ Natural Gas ☐ LPG ☐ Diesel Fuel ☐ No. 2 Fuel Oil

☐ Other _____

Heat input rating on secondary fuel (MMBTU/hr): _____

Rated fuel consumption rate (per hour): _____ *Specify units*

Maximum quantity/year: _____ *Specify units*

c. Does the unit simultaneously fire multiple fuels? Yes ☐ No ☐

d. Fuel properties, if applicable:

Maximum Sulfur Content (%): _____ Heat Content (BTU/fuel unit): _____

e. Besides heat input rating, describe any constraints on the amount of fuel that can be used in the unit that are inherent to the design of the equipment or process:

f. Describe any other limits on fuel usage that you wish to have established in the permit. Also explain why you wish to have these limits established:

6. Materials Information:

Describe materials used in the process (type and quantity):

Attach safety data sheets (SDSs) and/or manufacturer product data sheets for the above materials to this application.

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Describe any limits on material usage that you wish to have established in the permit. Also explain why you wish to have these limits established:

Describe products and wastes produced (type and quantity):

Attach safety data sheets (SDSs) and/or product data sheets for the above products.

7. Equipment Operating Schedule (maximum):

Hours/day _____ Days/week _____ Weeks/year _____

Describe any constraints on the operating schedule of the equipment inherent to the ability of the equipment to operate beyond the schedule described above:

Describe any other limits on the operating schedule that you wish to have established in the permit. Also explain why you wish to have these limits established:

8. Exhaust stack information:

Check the following box if all emissions are fugitive and there is no exhaust stack/pipe; then skip to question 9. Otherwise, please answer the following questions. No Stack ☐

Stack height above ground: _____ ft Inner diameter at exit: _____ ft

Exit gas volumetric rate: _____ cfm Gas temperature at exit: _____ °F

Distance of stack from nearest property boundary: _____ ft

Exit gas velocity: _____ ft/s Exit gas moisture content: _____ %

Exit gas volume through stack: _____ acfm

Are multiple pieces of equipment exhausted to this stack? Yes ☐ No ☐

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If yes, list all pieces of equipment so exhausted:

Describe the location and surroundings of the stack outlet:

9. Please attach manufacturer's specifications and process flow diagrams for the equipment with more detailed equipment information, as available from the manufacturer or equipment designer.

III. Emission Control Equipment

Check the following box if there is no emission control equipment; then skip to section IV. Otherwise, please answer the following questions. No Control Equipment ☐

1. What type of control equipment is associated with this installation:
- ☐ Simple Cyclone ☐ Multiclone ☐ Baghouse ☐ Electrostatic Precipitator
- ☐ Carbon Adsorber ☐ Thermal Oxidizer/RTO ☐ Catalytic Oxidizer
- ☐ Venturi Scrubber ☐ Packed Bed/Tower Scrubber ☐ Tray Tower Scrubber
- ☐ Selective Catalytic Reduction (SCR) ☐ Selective Non-Catalytic Reduction (SNCR)
- ☐ Other _____
2. What pollutant(s) are controlled by each control device?
-

3. What is the level of control expected/guaranteed for each pollutant controlled? Please express as a percent control, outlet concentration, or a combination of those, as applicable. Also note the basis for the expected level of control.
-

4. Please provide any other relevant details on the type, model, and operating principles of the control device(s):
-

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5. List any reactants or catalysts used in the control device(s):

6. Please specify appropriate parameters and their operating levels/ranges required to ensure proper operation of the control device(s):

7. Provide recommended monitoring/record keeping frequencies for the parameters specified in question 5 above:

8. Provide recommended maintenance tasks and frequencies required to ensure proper operation of the control device(s):

9. Please attach control device specifications, manufacturer's maintenance and operating recommendations, and any manufacturer's control guarantees to this application.

10. If you do not intend to follow manufacturer's recommendations for any reason, explain any deviations and provide a justification that such deviations from recommendations will not degrade control effectiveness. Provide justification on separate sheets as necessary:

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IV. Emissions

1. Please complete the following “Potential to Emit” table (except as noted below):

Note: It is acceptable to provide calculations in an alternate format as an attachment to this application. Please ensure that any submittal provides sufficient information to allow the application reviewer to reproduce the calculations from the source material. Please also ensure that any alternative submittal provides substantially the same information requested in the following table.

If potential emissions are provided in an attachment, please check the following box: ☐

| Table: Potential to Emit ¹ | | | | | | |
|---------------------------------------|------------------------------|---------------------------------------|-----------------------|---|--|--|
| Pollutant | Emission Factor ² | Units of Emission Factor ³ | Emission Rate (lb/hr) | Maximum Uncontrolled Emissions (Ton/yr) | Emission Control Efficiency ⁴ (%) | Maximum Controlled Potential Emissions (Ton/yr) ⁵ |
| NO _x | | | | | | |
| SO _x | | | | | | |
| VOC | | | | | | |
| CO | | | | | | |
| PM Total ⁶ | | | | | | |
| PM10 (if necessary) ⁷ | | | | | | |
| Total HAPs ⁸ | | | | | | |

¹ “Potential to Emit” is the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is enforceable as a practical matter. Secondary emissions do not count in determining the potential to emit of a stationary source. [20 DCMR § 199]

² The emission factor should reflect the maximum emissions expected from the unit when operating properly.

³ Examples of commonly used units are lb/million BTU of heat input, fuel usage rate, and heat content of the fuel.

⁴ If this information is unknown, or no air pollution control equipment is installed, indicate “Not Applicable or N/A”.

⁵ See Section V.3 of this application for additional requirements if these values exceed certain regulatory thresholds.

⁶ PM Total includes both filterable and condensable particulate matter fractions.

⁷ PM10 (filterable plus condensable) only needs to be reported on this form if PM total maximum controlled potential emissions equals or exceeds 5 tons per year.

⁸ “Total HAPs” references the total amount of hazardous air pollutants. A list of these HAPs can be found at <https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications>. Note that if HAP emissions are substantial, further information will likely be required in order to complete a permit review. In such cases, it is recommended that a list of speciated HAPs be provided preemptively with the original permit application.

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Cite the source(s) and basis of the emission factors:

-
2. Emergency Episode Procedures: How do you intend to comply with the requirements for reduced emissions during an air pollution episode (see 20 DCMR §401)?

Alert: _____

Warning: _____

Emergency: _____

3. Are you requesting any additional special operating limitations, such as limits on your potential to emit, other than those identified in response to questions II.5.f, II.6, and II.7?

Yes ☐ No ☐ If so, please describe:

V. Notes and Required Attachments

1. Please attach a printed copy of any spreadsheet of calculations used in this application. The assigned permit writer may require submittal of the electronic version of the spreadsheet to review calculations.
2. Please attach a copy of the manufacturer's specifications for the unit and any other appropriate supporting documentation, including the basis for manufacturer-specified emission factors.
3. If "Maximum Controlled Potential Emissions" in the table in Condition IV.1 equals or exceeds the following thresholds (without netting), take the actions specified:

| Pollutant | Threshold (tons/year) | Action |
|---|-----------------------|---|
| CO | 100 | Prepare an applicability analysis pursuant to 20 DCMR §204 and, where applicable, a plan to comply. |
| NO _x | 25 | |
| VOC | 25 | |
| SO ₂ | 40 | |
| PM10 | 15 | |
| PM2.5 | 10 | |
| Any other pollutant and associated threshold specified in the definition of “significant” in 20 DCMR §299 | | |

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| Pollutant | Threshold (tons/year) | Action |
|---|-----------------------|--|
| VOC | 5 | Prepare a “Minor New Source Review (NSR) Supplemental Permit Application” found at https://doee.dc.gov/publication/ch2applications |
| NO _x | | |
| SO ₂ | | |
| PM10 | | |
| PM2.5 | | |
| Aggregate of HAPS listed in §112 of the Clean Air Act | | |

4. AQD may require submission of additional information beyond what is requested on this form if needed to evaluate regulatory applicability. If you are aware of complex regulatory issues related to this project, AQD recommends that you proactively attach a regulatory review document to explain your understanding of the applicability of any relevant regulations. This is likely to simplify and thereby hasten review of the application.
5. Deviations from submitted plans and specifications are not permissible without securing formal approval from AQD via an application update request and re-approval, if already approved.
6. Please attach a copy of a recent “Certificate of Clean Hands” which can be obtained at mytax.dc.gov.
7. Please submit the complete application and applicable supporting documentation online at: <https://octo.quickbase.com/db/brqt582ud> or by scanning the QR code below.



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V. Applicant Certification:

I hereby certify, under penalty of D.C. Official Code § 8-101.05e, that I am authorized to submit this application on behalf of the applicant and that the statements contained herein are true and correct to the best of my knowledge. I further certify that all attached information and previously submitted information referenced in this application remains true, correct, and current, to the best of my knowledge.

Authorized Signature:

Owner/Responsible Official Signature

Print Name and Title

Date

Mailing Address of Owner/Responsible Official if Different From I.4 above

Report Fraud, Waste, Abuse, and Mismanagement to the District of Columbia Office of the Inspector General.
Confidential Toll Free Hotline: 1-800-521-1639 or 202-724-TIPS (8477). Email: hotline.oig@dc.gov