CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH
PUBLIC HEALTH SERVICES
AIR MANAGEMENT SERVICES

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SYNTHETIC MINOR OPERATING PERMIT APPLICATION

FOR OFFICIAL USE ONLY

City OP #: _____

Reviewed By: _____

Date: _____

Comments:
_____
_____

Section 1: General Information

1.1 Application Type

Type of permit for which application is made:

☐ Initial ☐ Synthetic Minor

☐ Renewal ☐ Natural Minor

☐ Modification ☐ Other: _____

1.2 Plant Information

a) Tax ID: _____ b) Firm Name: _____

c) Plant ID: _____ d) Plant Name: _____

e) Plant Address: _____

f) Permit Contact: _____ g) Telephone Number: _____

h) SIC Code: _____ i) Description of SIC Code: _____

j) County: Philadelphia k) Municipality: Philadelphia

l) UTM Zone: 18 UTM North: _____ UTM East: _____

m) Method of Obtaining UTM: _____

1.3 Mailing Information

Name: _____ Title: _____

Address: _____ Phone: _____

Email: _____

1.4 Certification of Truth, Accuracy and Completeness

This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.

Subject to the penalties of Title 18 Pa. C.S. Section 4904 and 35 P.S. Section 4009 (b) (2), I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.

(Signed) _____ Date _____/_____/_____

Name (Typed) _____ Title: _____

Please read instructions carefully before completing this application.

Section 2: Site Information

2.1 Facility Type

Can this facility be considered a: Natural Minor Facility ☐ OR Synthetic Minor Facility ☐

Natural Minor Facility: If this box is checked, please skip Sections 2.2 through 2.4 and go to Section 3.

Synthetic Minor Facility: If this box is checked, go on to Section 2.2.

IMPORTANT: Note that all Synthetic Minor Facilities must be able to meet the proposed restrictions and/or limitations immediately upon the submission of this application. By signing the Certification of Compliance in Section 10 of this application, the facility for which a Synthetic Minor Status is proposed will be deemed a Synthetic Minor Facility according to the restrictions and/or limitations proposed upon receipt of the application by the AMS, unless AMS determines that the facility is unable to meet the Synthetic Minor requirements at a later date.

2.2 Synthetic Minor Facility Information (To be completed by all facilities seeking Synthetic Minor Status)

Synthetic Minor Status for this facility can be taken at the (check one) : Source Level ☐ OR Site Level ☐

If limitations and/or restrictions can be taken at the site level (for all sources within this facility), complete the following questions, otherwise please go on to Section 3.

Synthetic Minor Status for the Entire Site is achievable through the following (Please check all that apply):

☐ Restriction on hours of operation → Hours of Operation in a year: _____

☐ Restriction of Production Rate → Proposed Production Rate: _____ Units: _____

☐ Type of Fuel → Type of Fuel: _____

% Sulfur: _____ %Ash: _____

BTU Content: _____ Units: _____

☐ Fuel usage restriction → Fuel Type: _____

Maximum Throughput: _____ Units: _____

☐ Control Device → Type of Control Device: _____

Control Device Component ID: _____

Control Efficiency: _____

☐ Emissions Limitation → Pollutant Type: _____

Emission Rate: _____ Unit: _____

Note: If this section is completed, the applicant can omit Sections 4.5, 4.6, and 4.7 for all sources within this permit application.

2.3 Compliance Method for the Site (For Synthetic Minor Facilities only)

Complete this section only if limitations and/or restrictions were proposed in Section 2.2.

a) Explain how you would demonstrate compliance with the restrictions and/or limitations listed in Section 2.2:

_____

_____

_____

_____

_____

_____

_____

_____

_____

b) Describe what is to be reported in the compliance report: _____

_____

_____

_____

_____

_____

_____

c) Reporting start date: _____

d) Indicate the frequency for submitting compliance report as explained above: _____

_____

2.4 Potential Emission Estimates for the Site (For Synthetic Minor Applications only)

Provide the estimated potential emission for the site BEFORE and AFTER utilizing the proposed restrictions and/or limitations. Duplicate this page as necessary. Complete this section only if limitations and/or restrictions were proposed in Section 2.2.

Pollutant or CAS No.	Potential Emission BEFORE taking limitations (TPY)	Potential Emission AFTER taking limitations (TPY)

*** Provide all supporting calculation methods as an attachment at the end of this application.**

Section 3: Site Inventory

3.1 Site Inventory

Give a complete listing of all air pollution sources, control equipment, emission points, and fuel material locations within this site. Duplicate this page as necessary.

Component ID	Company Designation	Unit Type

Section 4: Source Information

(Complete this section for each source in this site. Duplicate this Section as needed)

4.1 General Source Information

a) Component ID: _____ b) Company Designation: _____

c) Source Type (check one): ☐ Combustion ☐ Incinerator ☐ Process

d) IP or OL #: _____

e) Manufacturer: _____ f) Model Number: _____

g) Source Description: _____

h) Installation Date: _____

i) Exhaust Temperature: _____ Units _____ j) Exhaust %Moisture: _____ Exhaust Flow Vol: _____ ACFM

Incinerators: Complete the following additional information

a) Incinerator Capacity: _____ Lbs/Hr b) Prim Burner Cap: _____ Units _____

c) Exhaust %CO_2: _____ d) 2nd Burner Cap: _____ Units _____

e) Inc. Class: _____

f) Waste Type: _____ g) Waste BTU/lb: _____

4.2 Exhaust System Components

Explain how the exhaust components are configured:

From Component Type	From Component ID	To Component Type	To Component ID	Percent Flow	Begin Date	End Date

4.3 Source Classification Code (SCC) Listing for Standard Operation

Please DO NOT place restrictions and/or limitations here. Complete the table by giving information as if no restrictions and/or limitations are proposed. Proposed restrictions and/or limitations should be given in Section 4.5.

Process	Associated SCC	Max Throughput Rate	Firing Sequence

4.4 Source Standard Fuel Physical Characteristics

Please DO NOT place restrictions and/or limitations here. Complete the table by giving information as if no restrictions and/or limitations are proposed. Proposed restrictions and/or limitations should be given in Section 4.5.

SCC/Fuel Burned	FML	% Sulfur	% Ash	BTU Content (Units)

* FML = Fuel Material Location

4.5 Limitations on Source Operation (Optional) (Not to be completed by Natural Minor Sources)

Complete this section only if you wish to accept a limitation and/or restriction for this source. DO NOT complete this section if a restriction and/or limitation was taken previously at the Site Level (Section 2.2)

a) Maximum Hours of Source Operation Per Year: _____

b) Maximum Throughput Rate : _____ Units/Time: _____

c) Emission Limitation: _____ Units/Time: _____ Pollutant: _____

If this emission limit is derived from an existing operating permit, check this box: ☐

d) Control Device Efficiency: _____ Control Device Component ID _____

e) If restriction and/or limitation is proposed for a specific type of fuel, complete the table below:

Fuel	Hours/Day	Days/Week	Days/Year	Hours/Year

4.6 Compliance Method for this Source

Complete this section only if limitations and/or restrictions were proposed in Section 4.5.

a) Explain how you would demonstrate compliance with the above restrictions and/or limitations: _____

_____

_____

_____

_____

b) Describe what is to be reported in the compliance report: _____

_____

_____

_____

c) Reporting start date: _____

d) Indicate the frequency for submitting compliance report as explained above: _____

4.7 Source Potential to Emit (For Synthetic Minor Sources only)

Give Potential Emission estimate for all air pollutants emitted at this source. Calculations for the Potential Emissions Estimate here should have included the restrictions and/or limitations proposed in Section 4.5, if applicable.

Pollutant or CAS Number	Fuel /SCC	Emission/Activity Allowable per Unit	Calc. Method	Max. Capacity	Total Hours	Emission in TPY

Section 5: Control Device Information (Duplicate this Section as needed)

5.1 General Control Device Information

a) Control Device Component ID: _____ b) Company Designation: _____

c) Type: _____

d) Pressure Drop in H20: _____ e) Capture Efficiency: _____

f) Scrubber Flow Rate (GPM): _____

g) Manufacturer: _____ h) Model Number: _____

i) Installation Date: _____

j) Used By Sources: _____

_____

_____

k) Control Efficiency Estimates for this control device:

Pollutant or CAS Number	Efficiency Estimated	Basis for Efficiency Estimate

Section 6: Stack/Flue Information (Duplicate this section as needed)

6.1 General Stack Information

a) Component ID: _____ b) Stack Name: _____ c) Discharge Type: _____

d) Diameter (Ft): _____ Height (Ft): _____ Base Elevation (Ft): _____

e) Exhaust Temperature: _____ Units: _____ Exhaust %Moisture: _____ Exhaust Velocity: _____ Ft/Sec

f) Exhaust Volume: _____ ACFM Exhaust Volume: _____ SCFM

g) Distance to Nearest Property Line (Ft):
_____

h) Weather Cap?: ☐ Yes ☐ No

i) Used By Sources: _____

a) Component ID: _____ b) Stack Name: _____ c) Discharge Type: _____

d) Diameter (Ft): _____ Height (Ft): _____ Base Elevation (Ft): _____

e) Exhaust Temperature: _____ Units: _____ Exhaust %Moisture: _____ Exhaust Velocity: _____ Ft/Sec

f) Exhaust Volume: _____ ACFM Exhaust Volume: _____ SCFM

g) Distance to Nearest Property Line (Ft):
_____

h) Weather Cap?: ☐ Yes ☐ No

i) Used By Sources: _____

a) Component ID: _____ b) Stack Name: _____ c) Discharge Type: _____

d) Diameter (Ft): _____ Height (Ft): _____ Base Elevation (Ft): _____

e) Exhaust Temperature: _____ Units: _____ Exhaust %Moisture: _____ Exhaust Velocity: _____ Ft/Sec

f) Exhaust Volume: _____ ACFM Exhaust Volume: _____ SCFM

g) Distance to Nearest Property Line (Ft):
_____

h) Weather Cap?: ☐ Yes ☐ No

i) Used By Sources: _____

Section 7: Fuel Material Location (FML) Information (Optional)

7.1 Fuel Material Location Information

a) Component ID: _____ b) Name: _____

c) Capacity: _____ Units: _____

d) Fuel: _____

e) Maximum Fuel Physical Characteristics: If fuel is coal, what is the moisture content? _____

%Ash: _____ %Sulfur: _____ BTU: _____ Units: _____

f) Used By Sources: _____

_____

a) Component ID: _____ b) Name: _____

c) Capacity: _____ Units: _____

d) Fuel: _____

e) Maximum Fuel Physical Characteristics: If fuel is coal, what is the moisture content? _____

%Ash: _____ %Sulfur: _____ BTU: _____ Units: _____

f) Used By Sources: _____

_____

a) Component ID: _____ b) Name: _____

c) Capacity: _____ Units: _____

d) Fuel: _____

e) Maximum Fuel Physical Characteristics: If fuel is coal, what is the moisture content? _____

%Ash: _____ %Sulfur: _____ BTU: _____ Units: _____

f) Used By Sources: _____

_____

Section 8: Alternative Operating Scenario (Optional)

(Duplicate this Section for each source participated in this alternative scenarios)

8.1 General Information

a) Alternative Operating Scenario Name or ID Number: _____

b) Source Component ID: _____ c) Source Name: _____

d) Source Type (check one): ☐ Combustion ☐ Incinerator ☐ Process

e) Give a brief description of this alternative scenario stating how it is different from the standard operation:

_____

_____

_____

_____

_____

_____

_____

8.2 Operational Flexibility Request

Check all that apply...

☐ Alternative exhaust system component configuration.
If this box is checked, complete Sections 8.3 and 8.7

☐ Alternative type of fuel usage replacing or in addition to an existing fuel in standard operation.
If this box is checked, complete Sections 8.4 and/or 8.5 and 8.7

☐ Alternative process method replacing or in addition to a process SCC existing in standard operation.
If this box is checked, complete Section 8.6 and 8.7

8.3 Exhaust System Components

Specify the complete exhaust system component configuration for this alternative operating scenario.

From Component Type	From Component ID	To Component Type	To Component ID	Percent Flow	Begin Date	End Date

8.4 Source Classification Code (SCC) Listing for Alternative Operation

Give a complete listing of all fuels burned, processes, or waste incinerated for this alternative operating scenario.

Process	Associated SCC	Max Throughput Rate	Firing Sequence

8.5 Alternative Fuel Physical Characteristics

Give a complete listing of all fuels physical characteristics for this alternative operating scenario.

SCC/Fuel Burned	FML	% Sulfur	% Ash	BTU Content (Units)

8.6 Alternate Process/Product Description

a) Briefly describe the change(s) in raw materials and/or process methods used in this operating scenario, if applicable.

_____

_____

_____

_____

_____

b) Provide and briefly describe the process SCC associated with this alternative operating scenario.

Process SCC: _____ SCC Description: _____

c) Alternative Product(s): _____

8.7 Source Potential to Emit

Give Potential Emission estimate for all air pollutants emitted at this source for this operating scenario.

Pollutant or CAS Number	Fuel	Emission/Activity Allowable per Unit	Calc. Method	Max. Capacity	Total Hours	Emission in TPY

Section 9: Certification of Compliance for Synthetic Minor Source

In order for this synthetic minor facility to avoid the Title V operating permit requirements, the applicant must agree to be bound by the emissions limitations and/or restrictions contained in this application. In addition, the applicant must agree that these emission limitations are enforceable by AMS, the Environmental Protection Agency, and the citizens.

9.1 Schedule for Compliance Certification Submission

a) Frequency of submittal: _____

b) Beginning Date: _____/_____/_____

9.2 Certification of Compliance (for Synthetic Minor Facility only)

I certify and agree under the penalty of 18 Pa. CS 4904 and 35 PS 4009 (b) (2) that the sources covered by this application agree to implement the emission limitations and other requirements contained in this application and in all plan approvals and operating permits previously issued to the sources. I further certify and agree that the emission limitations and other requirements contained in this application and all plan approvals and operating permits issued to the sources covered by the application are enforceable by AMS, the Environmental Protection Agency (EPA), and the citizens.

(Signed) _____ Date _____/_____/_____

Name (Typed) _____