



# ALLEGHENY COUNTY HEALTH DEPARTMENT

## AIR QUALITY PERMIT APPLICATION FORM

SECTION 1. PERMIT DESCRIPTION					
Check Type of Permit:			This permit application is for a:	FOR ACHD USE ONLY	
	Installation	Operating			
Initial			Major Source	Permit Number: _____	
New Construction				Minor Source	Completeness: _____
Major Modification			Synthetic Minor Source (See Section 10)		Administration: _____
Minor Modification				Amount enclosed:	Engineering: _____
Reactivation			\$ _____		Assigned to: _____
Temp.Source/Multi.Loc					
New Permit					
Renewal					
Adm. Permit Amend.					
Other (Explain Below)					
Brief Description of Permit Application/Source:					
SECTION 2. APPLICANT INFORMATION					
Applicant Type Code		Applicant Name or Registered Fictitious Name			FOR ACHD USE ONLY
First Name		M. I.	Last Name		
Title		Relationship of Applicant to Permitted Activity. See instructions for appropriate code.			
Mailing Address (Street # and Name or P. O. Box #, Box #, RR #, RD #)					
City		State	Zip Code + Extension		
Telephone		FAX		E-mail	
SECTION 3. SITE INFORMATION					
Facility Site Name				Federal Tax Identification Number	
Address (Street #, Street Prefix, Street Name, Street Type, Street Suffix) <b>*P. O. BOX # IS NOT ACCEPTABLE*</b>					
Municipality			State	Zip Code + Extension	
Telephone (Day)		Telephone (Eve.)			FAX

**SECTION 3. (cont.)**

**MAP LOCATION:** Please provide the Universal Transverse Mercator (UTM) coordinates or the exact latitude and longitude of the plant. UTM coordinates are preferable to latitude and longitude and can be determined from US Geological Survey 7.5 Minute 1:24,000 scale maps.

Attach a drawing of your source showing all emission points. Number each stack S001, S002, S003, etc., and number each fugitive emission location F001, F002, etc. Identify roads as paved or unpaved, marking all parking lots (see Form E). Identify the plant boundary on the map. Include local roads and other necessary identifiers that will allow the Department to locate your source on County-wide maps.

UTM North \_\_\_\_\_ Or Latitude \_\_\_\_\_ Degrees \_\_\_\_\_ Minutes \_\_\_\_\_ Seconds NORTH

UTM East \_\_\_\_\_ Or Longitude \_\_\_\_\_ Degrees \_\_\_\_\_ Minutes \_\_\_\_\_ Seconds WEST

PLANT PROPERTY \_\_\_\_\_ Acres or \_\_\_\_\_ Square feet

BUILDING AREA \_\_\_\_\_ Acres or \_\_\_\_\_ Square feet

**GIVE TRAVEL DIRECTIONS FROM DOWNTOWN PITTSBURGH:**

**DESCRIPTION OF BUSINESS**

GIVE A BRIEF DESCRIPTION OF BUSINESS OR ACTIVITY CARRIED OUT AT THIS LOCATION:

PRINCIPAL PRODUCT(S):

APPROXIMATE NUMBER OF EMPLOYEES: \_\_\_\_\_

If employment is seasonal, give the typical peak employment and indicate what season.

**STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE FOR THIS LOCATION:**

If there is more than one activity at this location, provide the Standard Industrial Code (SIC) for the principal activity, and other SIC codes in descending order of importance.

Primary SIC Code: \_\_\_\_\_ Primary activity: \_\_\_\_\_

Secondary SIC Code: \_\_\_\_\_ Secondary activity: \_\_\_\_\_

Tertiary SIC Code: \_\_\_\_\_ Tertiary activity: \_\_\_\_\_

**SECTION 4. ENVIRONMENTAL CONTACT**

First Name	M. I.	Last Name
Title		
Telephone	FAX	
Mailing Address (Street # and Name or P. O. Box #, Box #, RR #, RD #)		
City	State	Zip Code + Extension
E-mail		

**SECTION 5: APPLICABLE REQUIREMENTS**

In this section, briefly describe all applicable federal, state, or local air rules or requirements pertaining to the facility or any part of the facility.

"Applicable requirements" can come from any of the following:

- (i.) Regulations that have been promulgated or approved by the EPA under the Clean Air Act or the regulations adopted under the Clean Air Act through rulemaking at the time of issuance but have future-effective compliance dates.
- (ii.) A regulation under Allegheny County Article XXI (Air Pollution Control), including those incorporated by reference.
- (iii.) A term or condition of any installation or operating permits issued pursuant to the County air quality regulations.
- (iv.) A standard or other requirement under Section 111 of the Clean Air Act, including subsection (d).
- (v.) A standard or other requirement under Section 112 of the Clean Air Act (42 U.S.C.A. 7412), including any requirement concerning accident prevention under subsection (r) (7).
- (vi.) A standard or other requirement of the acid rain program under Title IV of the Clean Air Act (42 U.S.C.A. 7641 - 7651o) or the regulations promulgated under the Clean Air Act.
- (vii.) Requirements established under Section 504(b) or Section 114(a)(3) of the Clean Air Act (42 U.S.C.A. 7414(a)(3)).
- (viii.) A standard or other requirement governing solid waste incineration, under Section 129 of the Clean Air Act (42 U.S.C.A. 7429).
- (ix.) A standard or other requirement for consumer and commercial products, under Section 183(e) of the Clean Air Act (42 U.S.C.A. 7511b(e)).
- (x.) A standard or other requirement for tank vessels, under Section 183(f) of the Clean Air Act (42 U.S.C.A. 7511b).
- (xi.) A standard or other requirement of the program to control air pollution from outer continental shelf sources, under Section 328 of the Clean Air Act (42 U.S.C.A. 7627).
- (xii.) A standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Clean Air Act (42 U.S.C.A. 7671-7671q), unless the Administrator of the EPA has determined that such requirements need not be contained in a Title V permit.
- (xiii.) A national ambient air quality standard or increment or visibility requirement under Title I, Part C of the Clean Air Act (42 U.S.C.A. 7470-77491), but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the CAA (42 U.S.C.A. 7661d).

Include any regulations that are final, but may require controls to be put on, or lower emission rates to come into effect in the future. Be as specific as necessary. For example, if you have boilers rated at 10, 70, and 100 MMBtu, then for sulfur dioxide emissions list Article XXI 2104.03 a.1, 2, and 3. When you complete the Forms for specific operations, you will be requested to repeat those requirements unique to that unit. Include general emission requirements, such as 2104.04, odor emissions, if they apply.

If there are any limitations on source operation affecting emissions or any work practice standards, provide details in this section. Include supporting documents, if necessary. If the facility is claiming any exemptions to a part of an applicable requirements stated above or any other requirements, clearly identify what section. Copy this page as needed, and attach these additional pages to this section.

An example of how Section 5.A might be completed:

<u>Emission Regulation</u>	<u>Description</u>
Art. XXI 2104.02.a.2	<b>PM</b> 0.40 #/10 <sup>6</sup> BTU
Art. XXI 2104.03.a.1	<b>SO<sub>2</sub></b> 1.0 #/10 <sup>6</sup> BTU
Art. XXI 2104.01.a	<b>Opacity</b> 20% for ≤3 min./hr. or 60% at no time
Art. XXI 2105.06.d.1	Low <b>NOx</b> Burners w/overfire air

List and summarize all applicable federal, state, or local air rules or requirements pertaining to the facility or any part of the facility. Also describe any regulated work practice standards that affect air emissions. Include any regulations that are in place, but have delayed deadlines for compliance. (COPY THIS PAGE AS NEEDED)

REGULATION	DESCRIPTION
_____	_____
_____	_____
_____	_____

**SECTION 6: METHOD OF DEMONSTRATING COMPLIANCE**

List the method of demonstrating compliance with each of the emission standards (these may become conditions of the Operating Permit):

**A. Compliance Method/ Monitoring Devices:**

EMISSION UNIT #	POLLUTANT	REFERENCE TEST METHOD OR COMPLIANCE METHOD OR MONITORING DEVICE	FREQUENCY / DURATION OF SAMPLING

Attach any details that would further explain the method of compliance.

**B. Record keeping and Reporting:**

1. List what parameter will be recorded and the frequency of recording:

PARAMETER	FREQUENCY

2. Describe what is to be reported and the frequency of reporting? (Reports must be submitted at least every six (6) months)

DESCRIPTION	FREQUENCY

3. Beginning reporting date: \_\_ / \_\_ / \_\_

COPY THIS PAGE AS NEEDED

**SECTION 7: COMPLIANCE PLAN**

A source may apply for and receive an Operating Permit if one or more emission units are out of compliance with a regulation, provided that an adequate plan is in place to bring the unit(s) into compliance.

**A. \_\_** 1. At the time of this permit application is your source in compliance with all applicable requirements, and do you expect your source to remain in compliance with these requirements during the permit duration (with the exception noted in item C)?

Yes  No

2. Will your source be in compliance with all applicable requirements scheduled to take effect during the term of the permit, and will they be met by the applicable deadline?

Yes  No

**B. \_\_** If you checked "No" for any question in Part A, please attach information identifying the requirement(s) and emission units for which compliance is not achieved, briefly describe how compliance will be achieved with the applicable requirement(s), and provide a detailed Schedule of Compliance (i.e., a schedule of remedial measures, including an enforceable sequence of actions with milestones and projected compliance dates). Title this portion of the document "Schedule M: Compliance Information". Indicate the frequency for submittal of progress reports (at least every six (6) months) and the starting date for submittal of progress reports.

**C. \_\_** Do you have scheduled shutdown of control equipment for maintenance while the emission units are still operating?

Yes  No

If yes, attach a description of the equipment that will be taken out of service, what pollutants and emission sources are affected, the schedule and duration of the shutdown, and what actions will be taken to minimize emissions.

**SECTION 8: OTHER PERMITS**

Do you own or are you related to any other permitted company in Pennsylvania?

Yes  No

If so, please list the company names:

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**SECTION 9: COMPLIANCE CERTIFICATION**

You are required to submit a certificate of compliance with all applicable requirements and a method of determining compliance with those requirements (CEMS, monitoring, tests, record keeping and other reporting). Compliance certifications are to be submitted at least on an annual basis. Please answer the following:

Schedule for Submission of Compliance Certification during the term of the permit:

\_\_\_ We will submit a Compliance Certification annually at the same time as the submittal of the annual administrative fee. OR

\_\_\_ Beginning on: \_\_\_ / \_\_\_ / \_\_\_

**CERTIFICATION OF COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS**

A "responsible official" must sign this certification. Applications without original signed certifications or necessary corporate authorizations will be returned as incomplete.

Except for the requirements identified in Section 7 for which compliance is not yet achieved, I hereby certify that, based on information and belief formed after reasonable inquiry, the source identified in this application is in compliance with all applicable air requirements.

\_\_\_\_\_  
**Signature of Responsible Official**

\_\_\_\_\_  
**Name and Title of Signer (Print or Type)**

\_\_\_\_\_  
**Mailing Address (Street # and Name or P. O. Box #, RR #, RD #, Box #)**

\_\_\_\_\_  
**City, State, and Zip Code + Extension**

Date: \_\_\_ / \_\_\_ / \_\_\_

**SECTION 10: SYNTHETIC MINOR**

A Major source may, at its option, choose to place limits on its operation or emissions in order to become a "Synthetic Minor" source, and not be subject to the additional requirements of a Major source. These limits will become permit restrictions and will be federally enforceable.

Does this application include any requested restrictions?  
 Yes  No

If so, have these restrictions caused this site to go below Major source thresholds and become a Synthetic Minor?  
 Yes  No

Is this facility requesting to become a Synthetic Minor source?  
 Yes  No  
(Please check the box on the top of page 1 as well.)

Be sure to include on each source information sheets, Forms A, B, and C, a complete description of the limitations that make this source a Synthetic Minor. Attach extra pages, if needed.

**SECTION 11: INFORMATION FOR INSTALLATION PERMITS**

Is this a new Major source or Major Modification for any criteria pollutant which is in or impacting a non-attainment area?  
 Yes  No

If yes, list below for which pollutant(s).

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Attach all required documents required under Article XXI, sections 2102.05 and 2102.06.

Is this a new Major source or Major Modification for any criteria pollutant which is in or impacting an attainment area or unclassified area?  
 Yes  No

If yes, list below for which pollutant(s).

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Attach all required documents required under Article XXI, sections 2102.05 and 2102.07.

A source applying for a Minor Installation Permit may request public review at this time.

Are you requesting public review for a Minor Installation Permit?  
 Yes  No

## SECTION 12: ALTERNATIVE OPERATING SCENARIOS

This permit allows for certain flexibility in operations. Please note the explanation of this section in the instructions. While filling out your permit application, consider all the different operating scenarios you might want to operate under during the 5-year term of your permit. This may include a change in inks or solvents, operating schedules, or other expected departures from operations that cannot be adequately described in the main body of the permit application.

Do you seek approval of any alternative operating scenario?

Yes  No

If "Yes": Complete Form N to provide complete information for each alternative operating scenario to be employed at this location. Duplicate pages as needed.

Please note that there may be additional reporting requirements for alternative scenarios.

## SECTION 13: ADDITIONAL SUBMITTALS

A form must be submitted for each process, boiler, incinerator, etc., as indicated below. Provide the numbers of each type of unit below, and submit the designated form for each unit. Also, identify each criteria pollutant and other regulated pollutant emitted by this source (facility). See Article XXI, definition of hazardous air pollutant and section 2101.10. Include also other pollutants not regulated, but with known emission rates. Provide the total below, and submit an emissions summary for each pollutant. List below all attachments made for this application. All applicable forms must be attached to each copy of the application.

- Number of Processes - Submit one Form A for each process. Number each P001, P002, etc.
- Number of Boilers - Submit one Form B for each boiler. Number each B001, B002, etc.
- Number of Incinerators - Submit Form C for each incinerator. Number each I001, I002, etc.
- Number of storage tanks - Submit one Form D for each tank or group of tanks. Number each D001, D002, etc.
- Dry bulk materials storage and handling - Submit Form E.
- Roads and vehicles - Submit Form F.
- Miscellaneous fugitive emissions - Submit Form G.
- Number of Form F: Roads and Vehicles.
- Number of Form G: Miscellaneous Fugitive Emissions.
- Number of Form K: One Emissions Summary Form for Each Pollutant.
- Number of Form M: One Form M for each.
- Number of Form N: One Form N for each scenario.

Are map(s)/drawing(s) attached?  Yes  No

Are required documents attached pertaining to an Installation Permit?  Yes  No

Are other comments/notes attached?  Yes  No

Is a **Best Available Control Technology (BACT) analysis attached for installations?**  Yes  No

Is a **Compliance Assurance Monitoring (CAM) Plan** (40 CFR Part 64) attached? (applicable to Title V Operating Permit Renewals.)  Yes  No

**SECTION 14: ANNUAL APPLICATION / ADMINISTRATION FEE CALCULATION**

**INSTALLATION PERMIT APPLICATION** - Check all that pertain to this application:

If this source is applicable to more than one category listed below, it is subject to the **highest** of the applicable fees, not to the total.

- A  Prevention of Significant Deterioration (\$22,700)
- B  Involving ACHD Development of a MACT Standard (\$8,000)
- C  Major new source or Major Modification (\$8,000)
- D  Any source subject to an existing NSPS, NESHAP, or MACT (\$1,700)
- E  Any other Installation Permit (\$1,000)
- F  Modification to an existing Installation Permit (\$300)

**Installation Permit Fee** \$ \_\_\_\_\_

**Note:** An administrative fee of \$750.00 will be billed to the source, beginning 30 days after the Installation Permit is approved, and annually on the anniversary of the approval thereafter, until a complete Operating Permit Application has been submitted to the Department.

**OPERATING PERMIT APPLICATION** - Check all that pertain to this application:

- A. **Base fee** (Minor or Synthetic Minor Source - \$375.00 / Major Source - \$750.00): \$ \_\_\_\_\_
- B. **Hazardous Air Pollutant Source fee** - (Major Source only - if any "hazardous air pollutants" (see §2101.10) are listed on Form K, add \$375.00) +\$ \_\_\_\_\_
- C. **Acid Rain Source fee** (Major Source only - if any "acid rain" regulations are listed in Section 5, - add \$375.00) +\$ \_\_\_\_\_
- D. **Adjusted Base fee** - Add A., B., and C.: =\$ \_\_\_\_\_
- E. **Noncomplying Source fee** (if "No" is checked in Section 7 Part A) Add 50% of the "Adjusted Base fee" from line D. above: +\$ \_\_\_\_\_
- F. **Total Fee Due** - Add D. and E.: =\$ \_\_\_\_\_

*Checks are to be made payable to the "ACHD Air Pollution Control Fund."*

All sources that apply for Operating Permits will be required to pay an annual administrative fee equal to the Operating Permit Application Fee. Major sources are also required to pay annual emissions fees. These are to be paid at the scheduled submittal of the annual emissions inventory.

**SECTION 14. BILLING CONTACT**

First Name	M. I.	Last Name
Title		
Telephone	FAX	
Mailing Address (Street # and Name or P. O. Box #, Box #, RR #, RD #):		
City	State	Zip Code + Extension
E-mail		

**SECTION 15: SIGNATURES AND CERTIFICATION**

**CERTIFICATION OF COMPLETED APPLICATION**

**CERTIFICATION {for corporate applicants: Attach Certificate of Corporate Authority}**

Subject to the penalties of Title 18 Pa. C.S. Section 4904 relating to unsworn falsification to authorities, I certify that I have the authority to submit this Permit Application on behalf of the applicant named herein and that the information provided in this Application is true and correct to the best of my knowledge and information.

**Signature of Preparer of Form (if different than applicant).**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name – Print or Type

\_\_\_\_\_  
Title – Print or Type

\_\_\_\_\_  
Mailing Address – Print or Type

\_\_\_\_\_  
City, State, and Zip Code + Extension – Print or Type

( ) \_\_\_\_\_  
Day Phone Number

( ) \_\_\_\_\_  
Fax Phone Number

**Signature**

**Name, Mailing Address, and Phone# - Print or Type**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

{For corporations:

Certificate of Corporate Authority must be completed, by the Corporate Secretary, and attached}

**CERTIFICATE OF CORPORATE AUTHORITY**

I, \_\_\_\_\_, certify that I am the Secretary of the corporation named above; that \_\_\_\_\_, who has signed this document on behalf of the corporation was then \_\_\_\_\_ of the said corporation; and that I know his/her signature and his/her signature is genuine; and that said Agreement was fully signed, sealed, and attested for and in behalf of said corporation by authority of its governing body.

ATTESTED TO BY: \_\_\_\_\_ DATE: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

{Signature}

NAME:

{Print or type}

TITLE: SECRETARY

[AFFIX CORPORATE SEAL]

**PERMIT APPLICATION FORM A  
PROCESS OPERATIONS**

**PLANT NAME AND LOCATION:** \_\_\_\_\_

**PART I - DESCRIPTION OF PROCESS** (MAKE A COPY OF SCHEDULE A FOR EACH PROCESS.)

Company Identification or Description: \_\_\_\_\_  
Installer: \_\_\_\_\_ Installation Date: \_\_\_\_\_  
Contractor (if operated by another): \_\_\_\_\_  
Design \_\_\_ Charging or \_\_\_ Production rate (specify units): \_\_\_\_\_  
Total Annual Production (specify units normally used): \_\_\_\_\_  
Raw Materials: \_\_\_\_\_  
Materials Produced: \_\_\_\_\_  
Process Operation Units: (1.) \_\_\_\_\_  
(Name and Previous County (2.) \_\_\_\_\_  
Permit Number, if any) (3.) \_\_\_\_\_  
(4.) \_\_\_\_\_  
(5.) \_\_\_\_\_  
(6.) \_\_\_\_\_

**Diagram of Process Flow:** Attach a separate sheet with a drawing of a flow diagram of this process, labeling each segment listed under Process Operation Segments. Label product intake points and product discharge points for each segment. Label emissions discharge points and the location of emissions control devices.

**PART II - PROCESS OPERATION SCHEDULE**

A. Normal schedule: (Provide information for last year. If a new unit, please estimate)  
Hours/day \_\_\_\_\_ Days/week \_\_\_\_\_ Weeks/year \_\_\_\_\_ Hours/year \_\_\_\_\_  
Start time \_\_\_\_:\_\_\_\_ End time \_\_\_\_:\_\_\_\_  
Seasonal: Periods correspond to seasons instead of calendar quarters. The first season is split to include December, January, and February of the calendar year reported.  
Percent of Annual Production  
December, January, & February \_\_\_\_\_ June, July, & August \_\_\_\_\_  
March, April, & May \_\_\_\_\_ September, October, & November \_\_\_\_\_

B. Requested limits: (Limitations on operating hours are optional.) Choose One:  
\_\_\_ 8760 hours (no limitations) or  
\_\_\_ I/We request the following limitation -- **This may become a federally enforceable permit condition:** Describe how this can be enforced: either list an operating schedule or downtime (e.g. only operate 8:00 to 4:00) or an operating hour reporting requirement.  
\_\_\_\_\_ Total days x \_\_\_\_\_ Hours/day = \_\_\_\_\_ Hours/year

**PART III - FUELS**

A. Normal operation (Provide information for last year. If a new unit, please estimate)

____ Year ____ or ____ Estimate	Primary	Secondary	Other	Other
Type:	_____	_____	_____	_____
Max Amount/hour	_____	_____	_____	_____
Sulfur Content (% wt):	_____	_____	_____	_____
Ash Content (% wt):	_____	_____	_____	_____
BTU Rating (specify units)	_____	_____	_____	_____
Annual Fuel Consumption	_____	_____	_____	_____
Seasonal Fuel Consumption (%):				
December, January, and February	_____	_____	_____	_____
March, April, and May	_____	_____	_____	_____
June, July, and August	_____	_____	_____	_____
September, October, and November	_____	_____	_____	_____

Fuel Mixing: If more than one fuel is used, explain usage, stating whether it is burned separately, mixed in a fixed ratio of \_\_:\_\_ (give units such as BTU, mmcf, gallons per ton, etc.), mixed in a variable ratio of \_\_:\_\_ to \_\_:\_\_, determined by \_\_ (give reason).

B. Requested limits (limitations on operations are optional, but may allow a Major source to be exempted from some requirements) **These may become permit conditions.** Please check one:

- Full use of any fuel or combination at any time (no limitations)
- The following limitations on types of fuels or the combination of fuels are requested (describe how compliance with this method will be demonstrated)

**PART IV - OTHER LIMITATIONS**

Identify any other requested limitations, such as on production rates or materials use. Describe how compliance with these restrictions will be demonstrated. **These limitations may become permit conditions.**

**PART V - APPLICABLE REQUIREMENTS**

Describe all applicable requirements affecting air emissions for this unit.

<u>Regulation #</u>	<u>Requirements</u>
_____	_____
_____	_____
_____	_____

**PART VI - EMISSION CONTROLS**

Complete the following applicable sections for each pollution control device. Attach additional sheets to provide sufficient information and engineering calculations to support the control device performance.

On the space to the left of each device, number the device(s) by the order in which they process the waste stream(s). Fill out the requested information, then complete the table for efficiencies by pollutant for each device.

Percent Capture \_\_\_\_\_ % (not control efficiency)  
Gas flow through control units \_\_\_\_\_ @ \_\_\_\_\_ °F

**BAGHOUSE (fabric collector)**

Manufacturer's Name and Model \_\_\_\_\_  
Type of bag material \_\_\_\_\_  
Total filter cloth area \_\_\_\_\_ sq. ft., air to cloth ratio \_\_\_\_\_  
Bag cleaning method: \_\_\_\_\_, cycle \_\_\_\_\_ min  
Pressure Drop: clean \_\_\_\_\_ "H<sub>2</sub>O, dirty \_\_\_\_\_ "H<sub>2</sub>O

<u>Pollutant</u>	<u>Efficiency (%)</u>	<u>Basis for Efficiency</u>	<u>Outlet Grain Loading</u>
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**ELECTROSTATIC PRECIPITATOR**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ Single Stage, \_\_\_ Two Stage, \_\_\_ Plate, \_\_\_ Tube  
Total collecting area: \_\_\_\_\_ sq. ft., cleaning cycle \_\_\_\_\_ min.  
Gas Velocity: \_\_\_\_\_ ft./sec. corona power \_\_\_\_\_ kw  
Bulk resistivity of dust: \_\_\_\_\_ ohm-cm Moisture content of gases: \_\_\_\_\_ vol. %

<u>Pollutant</u>	<u>Efficiency (%)</u>	<u>Basis for Efficiency</u>	<u>Outlet Grain Loading</u>
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**CYCLONE (dry gas only)**

Manufacturer's Name and Model: \_\_\_\_\_  
Gas Inlet: width \_\_\_\_\_ ft., height \_\_\_\_\_ ft.  
Diameter: gas outlet \_\_\_\_\_ ft., cyclone cylinder (s) \_\_\_\_\_ ft.  
Length of cyclone: \_\_\_\_\_ ft., no. of cylinder(s) \_\_\_\_\_ Pressure Drop \_\_\_\_\_ "H<sub>2</sub>O

<u>Pollutant</u>	<u>Efficiency (%)</u>	<u>Basis for Efficiency</u>	<u>Outlet Grain Loading</u>
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**PART VI - EMISSION CONTROLS (CONTINUED)**

**CONDENSER**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: surface \_\_\_\_\_, contact \_\_\_\_\_  
Heat transfer area: \_\_\_\_\_ sq. ft., max process pressure \_\_\_\_\_ psia  
Heat duty: \_\_\_\_\_ BTU/hr. Coolant temp: inlet \_\_\_\_\_ °F outlet \_\_\_\_\_ °F  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Concentration (ppm)

**WET COLLECTOR**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ venturi, \_\_\_ cyclone, \_\_\_ spray chamber, \_\_\_ packed bed  
Entrainment/separator: type \_\_\_\_\_, bed depth \_\_\_\_\_  
Type & construction of chemicals added to the scrubbing liquid:  
  
Pressure drop \_\_\_\_\_ "H<sub>2</sub>O  
Scrubbing liquid: flow rate \_\_\_\_\_ gpm, inlet temp. \_\_\_\_\_ °F, outlet temp. \_\_\_\_\_ °F  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Concentration (ppm)

**AFTERBURNER**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ direct flame, \_\_\_ catalytic  
If catalytic: inlet temp. \_\_\_\_\_ °F, outlet temp. \_\_\_\_\_ °F, catalyst life \_\_\_\_\_  
If direct flame: internal volume \_\_\_\_\_ cu. ft., average temp. \_\_\_\_\_ °F  
Residence time at average temp. \_\_\_\_\_ sec  
Auxiliary fuel: max. rating \_\_\_\_\_ BTU/hr. set point \_\_\_\_\_ °F, \_\_\_\_\_ BTU/hr.  
Size of Chamber \_\_\_\_\_ cu. ft., flow rate \_\_\_\_\_  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Grain Loading (gn./cu. ft.)

**ADSORPTION EQUIPMENT**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ Continuous, \_\_\_ Fixed bed  
Adsorbing material: \_\_\_\_\_, Bed depth \_\_\_\_\_ in., Flow area \_\_\_\_\_ sq. ft.  
Breakthrough (breakpoint) time: \_\_\_\_\_, Pressure Drop: \_\_\_\_\_ "H<sub>2</sub>O  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Concentration (ppm)

**PART VI - EMISSION CONTROLS (CONTINUED)**

**OTHER TYPES** Name and describe. Attach complete details.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**FUGITIVE DUST CONTROLS:** Describe below or attach a complete explanation of all controls of fugitive emissions not discussed in Form E - Roads or Form F - Storage Piles.

**PART VII - STACK DATA**

Stack data must be provided for each flue, duct, pipe, stack, chimney or conduit (stacks) at which collected emissions are vented to open air through a restricted opening.

Stack Identification: \_\_\_\_\_  
UTM East \_\_\_\_\_ UTM North \_\_\_\_\_ or  
Longitude \_\_\_\_\_ Latitude \_\_\_\_\_

Most important stacks have been located on topographic or air navigation charts. If you know the UTM coordinates or latitude and longitude, provide this information. If there is a number of stacks close together, a common location may be used

Stack Height: \_\_\_\_\_ ft. Ground level elevation \_\_\_\_\_ ft. Diameter \_\_\_\_\_ ft.  
Material Outer: \_\_\_\_\_ lining: \_\_\_\_\_  
Exit temperature (°F): \_\_\_\_\_ Exit Velocity: \_\_\_\_\_ f/s.  
Exhaust Rate: \_\_\_\_\_ (ACFM) % Moisture: \_\_\_\_\_  
Nearest building to stack:  
distance \_\_\_\_\_ ft. height \_\_\_\_\_ ft. length \_\_\_\_\_ ft. width \_\_\_\_\_ ft.

**Processes Sharing Stack:** If more than one process shares a stack, list them and estimate relative contribution of each.

Description \_\_\_\_\_  
Contribution to emissions from stack \_\_\_\_\_ %  
Description \_\_\_\_\_  
Contribution to emissions from stack \_\_\_\_\_ %  
Description \_\_\_\_\_  
Contribution to emissions from stack \_\_\_\_\_ %  
Description \_\_\_\_\_

**PART VIII - REMARKS**

**Attach calculations and reference all emission factors for Allowable, Potential to Emit, and Actual Emissions to this sheet. Reference all emission factors and efficiencies of control equipment.**

**PART IX - EMISSIONS**

**PART 9a: EMISSIONS -- SHORT TERM LB/HR (POUNDS PER HOUR) OR OTHER \_\_\_\_\_**

Pollutant	PM	PM10	SO <sub>2</sub>	CO	NO <sub>x</sub>	VOC	LEAD	
Allowable								
Maximum Potential								
Actual or Estimated								

Pollutant								
Allowable								
Maximum Potential								
Actual or Estimated								

**PART 9b: EMISSIONS -- ANNUAL TPY (TONS PER YEAR)**

Pollutant	PM	PM10	SO <sub>2</sub>	CO	NO <sub>x</sub>	VOC	LEAD	
Allowable								
Maximum Potential								
Actual or Estimated								

Pollutant								
Allowable								
Maximum Potential								
Actual or Estimated								

**PART IX - EMISSIONS (CONTINUED)**

List all known pollutants, including, but not limited to those found under Article XXI section 2101.20 in the definition of Hazardous Air Pollutants.

Transfer this information to the summary emissions sheets.

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**PERMIT APPLICATION FORM B**  
**FUEL BURNING OR COMBUSTION EQUIPMENT**

**PLANT NAME AND LOCATION:** \_\_\_\_\_

Schedule B requires information on boilers, heaters, and other combustion units. Complete one form for each unit, making copies of this form as needed.

**PART I - DESCRIPTION OF COMBUSTION UNIT** (MAKE A COPY OF SCHEDULE B FOR EACH UNIT)

Company Identification or Description: \_\_\_\_\_

Unit Make: \_\_\_\_\_ Unit Model: \_\_\_\_\_

Description of Unit and Type of Firing (e.g. spreader stoker, traveling grate, etc.) \_\_\_\_\_

Installer: \_\_\_\_\_ Installation Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Contractor (if operated by another): \_\_\_\_\_

Installation Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Your Identification: \_\_\_\_\_

Previous County Air Pollution Permit Number (if any): \_\_\_\_\_

Rated Capacity (BTU/hr) \_\_\_\_\_ Maximum Capacity (BTU/hr): \_\_\_\_\_

Normal Use (BTU/hr) \_\_\_\_\_

Percent of Heat Used for:

Power Generation \_\_\_\_\_ % process \_\_\_\_\_ % space heating \_\_\_\_\_ % (Annual average)

**PART II - OPERATION SCHEDULE**

A. Normal schedule: (Provide information for last year. If a new unit, please estimate)

Hours/day \_\_\_\_\_ Days/week \_\_\_\_\_ Weeks/year \_\_\_\_\_ Hours/year \_\_\_\_\_

Start time \_\_\_\_:\_\_\_\_ End time \_\_\_\_:\_\_\_\_

Seasonal: (Periods correspond to seasons instead of calendar quarters. The first season is split to include December, January, and February of the calendar year reported.)

Percent of Annual Production

December, January, & February \_\_\_\_\_ June, July, & August \_\_\_\_\_

March, April, & May \_\_\_\_\_ September, October, & November \_\_\_\_\_

B. Requested limits: (limitations on operating hours are optional) Choose One:

\_\_\_ 8760 hours (no limitations) or

\_\_\_ I/We request the following limitation -- **This may become a federally enforceable permit condition:** Describe how this can be enforced: Either list an operating schedule or downtime (e.g. only operate 8:00 to 4:00) or an operating hour reporting requirement.

\_\_\_\_\_ Total days x \_\_\_\_\_ Hours/day = \_\_\_\_\_ Hours/year

**PART III - FUELS**

A. Normal operation (Provide information for last year. If a new unit, please estimate)

____ Year _____ or _____ Estimate	Primary	Secondary	Other	Other
Type:	_____	_____	_____	_____
Max Amount/hour	_____	_____	_____	_____
Sulfur Content (% wt):	_____	_____	_____	_____
Ash Content (% wt):	_____	_____	_____	_____
BTU Rating (specify units)	_____	_____	_____	_____
Annual Fuel Consumption	_____	_____	_____	_____
Seasonal Fuel Consumption (%):				
December, January & February	_____	_____	_____	_____
March, April, and May	_____	_____	_____	_____
June, July, and August	_____	_____	_____	_____
September, October, & November	_____	_____	_____	_____

Fuel Mixing: If more than one fuel is used, explain usage, stating whether it is burned separately, mixed in a fixed ratio of \_\_\_:\_\_\_ (give units such as BTU, mmcf, gallons per ton, etc.), mixed in a variable ratio of \_\_\_:\_\_\_ to \_\_\_:\_\_\_, determined by \_\_\_ (give reason).

B. Requested limits (limitations on operations are optional, but may allow a Major source to be exempted from some requirements) **These may become permit conditions.** Please check one:

- Full use of any fuel or combination at any time (no limitations) OR
- The following limitations on types of fuels or the combination of fuels (describe how compliance with this method will be demonstrated):

**PART IV - OTHER LIMITATIONS**

Identify any other requested limitations, such as on production rates or materials use. Describe how compliance with these restrictions will be demonstrated. **These limitations may become permit conditions.**

**PART V - APPLICABLE REQUIREMENTS**

Describe all applicable air requirements for this source.

<u>Regulation #</u>	<u>Requirements</u>
_____	_____
_____	_____
_____	_____

**PART VI - EMISSION CONTROLS**

Complete the following applicable sections for each pollution control device. Attach additional sheets to provide sufficient information and engineering calculations to support the control device performance.

On the space to the left of each device, number the device(s) by the order in which they process the waste stream(s). Fill out the requested information, then complete the table for efficiencies by pollutant for each device.

Percent Capture \_\_\_\_\_ % (not control efficiency)  
Gas flow through control units \_\_\_\_\_ @ \_\_\_\_\_ °F

**BAGHOUSE (fabric collector)**

Manufacturer's Name and Model: \_\_\_\_\_

Type of bag material: \_\_\_\_\_

Total filter cloth area: \_\_\_\_\_ sq. ft. air to cloth ratio \_\_\_\_\_

Bag cleaning method: \_\_\_\_\_ cycle \_\_\_\_\_ minute(s)

Pressure Drop: clean \_\_\_\_\_ "H<sub>2</sub>O, dirty \_\_\_\_\_ "H<sub>2</sub>O

<u>Pollutant</u>	<u>Efficiency (%)</u>	<u>Basis for Efficiency</u>	<u>Outlet Grain Loading</u>
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**ELECTROSTATIC PRECIPITATOR**

Manufacturer's Name and Model: \_\_\_\_\_

Type: \_\_\_ single stage, \_\_\_ two stage, \_\_\_ plate, \_\_\_ tube

Total collecting area: \_\_\_\_\_ sq. ft. cleaning cycle \_\_\_\_\_ min

Gas Velocity: \_\_\_\_\_ ft./sec. corona power \_\_\_\_\_ kw

Bulk resistivity of Dust: \_\_\_\_\_ ohm-cm Moisture content of gases \_\_\_\_\_ vol. %

<u>Pollutant</u>	<u>Efficiency (%)</u>	<u>Basis for Efficiency</u>	<u>Outlet Grain Loading</u>
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**CYCLONE (dry gas only)**

Manufacturer's Name and Model: \_\_\_\_\_

Gas Inlet: width \_\_\_\_\_ ft., height \_\_\_\_\_ ft.

Diameter: gas outlet \_\_\_\_\_ ft., cyclone cylinder (s) \_\_\_\_\_ ft.

Length of cyclone: \_\_\_\_\_ ft., no. of cylinder(s) \_\_\_\_\_ Pressure Drop \_\_\_\_\_ "H<sub>2</sub>O

<u>Pollutant</u>	<u>Efficiency (%)</u>	<u>Basis for Efficiency</u>	<u>Outlet Grain Loading</u>
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**PART VI - EMISSION CONTROLS (CONTINUED)**

**CONDENSER**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: surface \_\_\_\_\_, contact \_\_\_\_\_  
Heat transfer area: \_\_\_\_\_ sq. ft., max process pressure \_\_\_\_\_ psia  
Heat duty: \_\_\_\_\_ BTU/hr. Coolant temp: inlet \_\_\_\_\_ °F outlet \_\_\_\_\_ °F  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Concentration (ppm)

**WET COLLECTOR**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ venturi, \_\_\_ cyclone, \_\_\_ spray chamber, \_\_\_ packed bed  
Entrainment/separator: type \_\_\_\_\_, bed depth: \_\_\_\_\_  
Type & construction of chemicals added to the scrubbing liquid:  
  
Pressure drop \_\_\_\_\_ "H<sub>2</sub>O  
Scrubbing liquid: flow rate \_\_\_\_\_ gpm, inlet temp. \_\_\_\_\_ °F, outlet temp. \_\_\_\_\_ °F  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Concentration (ppm)

**AFTERBURNER**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ direct flame, \_\_\_ catalytic  
If catalytic: inlet temp. \_\_\_\_\_ °F, outlet temp. \_\_\_\_\_ °F, catalyst life \_\_\_\_\_  
If direct flame: Internal volume \_\_\_\_\_ cu. ft., average temp. \_\_\_\_\_ °F  
Residence time at average temp. \_\_\_\_\_ sec  
Auxiliary fuel: max. rating \_\_\_\_\_ BTU/hr. set point \_\_\_\_\_ °F, \_\_\_\_\_ BTU/hr.  
Size of Chamber \_\_\_\_\_ cu. ft. flow rate \_\_\_\_\_  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Grain Loading (gn./cu. ft.)

**ADSORPTION EQUIPMENT**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ continuous, \_\_\_ fixed bed  
Adsorbing material: \_\_\_\_\_ bed depth \_\_\_\_\_ in., flow area \_\_\_\_\_ sq. ft.  
Breakthrough (breakpoint) time: \_\_\_\_\_ Pressure drop: \_\_\_\_\_ "H<sub>2</sub>O  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Concentration (ppm)

**PART VI - EMISSION CONTROLS (CONTINUED)**

**OTHER TYPES:** Name and describe. Attach complete details.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**FUGITIVE DUST CONTROLS:** Describe below or attach a complete explanation of all controls of fugitive emissions not discussed in Form E - Roads or Form F - Storage Piles.

**PART VII - STACK DATA**

Stack data must be provided for each flue, duct, pipe, stack, chimney or conduit (stacks) at which collected emissions are vented to open air through a restricted opening.

Stack Identification: \_\_\_\_\_  
UTM East \_\_\_\_\_ UTM North \_\_\_\_\_ or  
Longitude \_\_\_\_\_ Latitude \_\_\_\_\_

Most important stacks have been located on topographic or air navigation charts. If you know the UTM coordinates or latitude and longitude, provide this information. If there is a number of stacks close together, a common location may be used

Stack Height: \_\_\_\_\_ ft. Ground level elevation \_\_\_\_\_ ft. Diameter \_\_\_\_\_ ft.  
Material Outer: \_\_\_\_\_ Lining: \_\_\_\_\_  
Exit temperature (F): \_\_\_\_\_ Exit Velocity: \_\_\_\_\_ (f/s).  
Exhaust rate: \_\_\_\_\_ (ACFM) % Moisture: \_\_\_\_\_  
Nearest building to stack:  
Distance \_\_\_\_\_ ft. height \_\_\_\_\_ ft. length \_\_\_\_\_ ft. width \_\_\_\_\_ ft.

**Processes Sharing Stack:** If more than one process shares a stack, list them and estimate relative contribution of each.

Description \_\_\_\_\_  
Contribution to emissions from stack \_\_\_\_\_ %  
Description \_\_\_\_\_  
Contribution to emissions from stack \_\_\_\_\_ %  
Description \_\_\_\_\_  
Contribution to emissions from stack \_\_\_\_\_ %  
Description \_\_\_\_\_

**PART VIII - REMARKS**

**Attach calculations and reference all emission factors for Allowable, Potential to Emit, and Actual Emissions to this sheet. Reference all emission factors and efficiencies of control equipment.**

**PART IX - EMISSIONS**

**PART 9a: EMISSIONS -- SHORT TERM LB/HR (POUNDS PER HOUR) OR OTHER \_\_\_\_\_**

Pollutant	Particulate	PM10	SO2	CO	NO <sub>x</sub>	VOC	LEAD	
Allowable								
Maximum Potential								
Actual or Estimated								

Pollutant								
Allowable								
Maximum Potential								
Actual or Estimated								

**PART 9b: EMISSIONS -- ANNUAL TPY (TONS PER YEAR)**

Pollutant	Particulate	PM10	SO2	CO	NO <sub>x</sub>	VOC	LEAD	
Allowable								
Maximum Potential								
Actual or Estimated								

Pollutant								
Allowable								
Maximum Potential								
Actual or Estimated								

**PART IX - EMISSIONS (CONTINUED)**

List all known pollutants, including, but not limited to those found under Article XXI section 2101.20 in the definition of Hazardous Air Pollutants.

Transfer this information to the summary emissions sheets.

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**PERMIT APPLICATION FORM C  
SOLID WASTE INCINERATOR**

**PLANT NAME AND LOCATION:** \_\_\_\_\_

Schedule C requires information on incinerators. Complete one form for each unit, making copies of this form as needed. Do not use this form for afterburners used as control devices.

**PART I - DESCRIPTION OF COMBUSTION UNIT** (MAKE A COPY OF SCHEDULE C FOR EACH UNIT)

Company Identification or Description: \_\_\_\_\_

Unit Make: \_\_\_\_\_ Model and Class: \_\_\_\_\_

American Incinerator Association Class of Waste \_\_\_\_\_ @ \_\_\_\_\_ BTU/lb as fired

Daily Amount Waste \_\_\_\_\_ Lbs. ( ) Estimated, ( ) Actual

Installer: \_\_\_\_\_ Installation Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Contractor (if operated by another): \_\_\_\_\_

Installation Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Your Identification: \_\_\_\_\_

Previous County Air Pollution Permit Number (if any): \_\_\_\_\_

Primary Combustion Chamber:	Length	_____ ft. _____ in.	Grate Area	_____ sq. ft.
	Width	_____ ft. _____ in.	Burner capacity	_____ BTU/hr
	Height	_____ ft. _____ in.	Hearth area	_____ sq. ft.
	Volume	_____ cu. ft.	Heat release	_____ BTU/hr/cu ft
Secondary Combustion Chamber:	Length	_____ ft. _____ in.	Smallest Area	_____ sq. ft.
	Width	_____ ft. _____ in.	Burner capacity	_____ BTU/hr
	Height	_____ ft. _____ in.	Max velocity	_____ ft/sec
	Volume	_____ cu. ft.		
	Flue Gas Flow	_____ acfm @ _____ °F	_____ %	_____ % excess air

**Attach a flow diagram of all waste and fuel streams**

**PART II - OPERATION SCHEDULE**

A. Normal schedule: (Provide information for last year. If a new unit, please estimate)

Hours/day \_\_\_\_\_ Days/week \_\_\_\_\_ Weeks/year \_\_\_\_\_ Hours/year \_\_\_\_\_

Start time \_\_\_\_:\_\_\_\_ End time \_\_\_\_:\_\_\_\_

Seasonal: (Periods correspond to seasons instead of calendar quarters. The first season is split to include December, January, and February of the calendar year reported.)

Percent of Annual Production

December, January, & February \_\_\_\_\_ June, July, & August \_\_\_\_\_

March, April, & May \_\_\_\_\_ September, October, & November \_\_\_\_\_

B. Requested limits: (limitations on operating hours are optional) Choose One:

8760 hours (no limitations) or

I/We request the following limitation – **This may become a federally enforceable permit condition:** Describe how this can be enforced: Either list an operating schedule or downtime (e.g. only operate 8:00 to 4:00) or an operating hour reporting requirement.

\_\_\_\_\_ Total days x \_\_\_\_\_ Hours/day = \_\_\_\_\_ Hours/year

**PART III - FUELS**

A. Normal operation (Provide information for last year. If a new unit, please estimate)

_____ Year _____ or _____ Estimate	Primary	Secondary	Other	Other
Type:	_____	_____	_____	_____
Max amount/hour	_____	_____	_____	_____
Sulfur content (% wt):	_____	_____	_____	_____
Ash content (% wt):	_____	_____	_____	_____
BTU Rating (specify units)	_____	_____	_____	_____
Annual Fuel Consumption	_____	_____	_____	_____
Seasonal Fuel Consumption (%):				
December, January and February	_____	_____	_____	_____
March, April, and May	_____	_____	_____	_____
June, July, and August	_____	_____	_____	_____
September, October, and November	_____	_____	_____	_____

Fuel Mixing: If more than one fuel is used, explain usage, stating whether it is burned separately, mixed in a fixed ratio of \_\_\_:\_\_\_ (give units such as BTU, mmcf, gallons per ton, etc.), mixed in a variable ratio of \_\_\_:\_\_\_ to \_\_\_:\_\_\_, determined by \_\_\_ (give reason).

B. Requested limits (limitations on operations are optional, but may allow a Major source to be exempted from some requirements) **These may become permit conditions.** Please check one:

Full use of any fuel or combination at any time (no limitations) OR

The following limitations on individual fuels or the combination of fuels (describe how compliance with this method will be demonstrated):

**PART IV - OTHER LIMITATIONS**

Identify any other requested limitations, such as on production rates or materials use. Describe how compliance with these restrictions will be demonstrated. **These limitations may become permit conditions.**

**PART V - APPLICABLE REQUIREMENTS**

Describe all applicable air requirements for this source.

<u>Regulation #</u>	<u>Requirements</u>
_____	_____
_____	_____
_____	_____

**PART VI - EMISSION CONTROLS**

Complete the following applicable sections for each pollution control device. Attach additional sheets to provide sufficient information and engineering calculations to support the control device performance.

On the space to the left of each device, number the device(s) by the order in which they process the waste stream(s). Fill out the requested information, then complete the table for efficiencies by pollutant for each device.

Percent Capture \_\_\_\_\_ % (not control efficiency)  
 Gas flow through control units \_\_\_\_\_ @ \_\_\_\_\_ °F

**BAGHOUSE (fabric collector)**

Manufacturer's Name and Model: \_\_\_\_\_  
 Type of bag material: \_\_\_\_\_  
 Total filter cloth area: \_\_\_\_\_ sq. ft. air to cloth ratio \_\_\_\_\_  
 Bag cleaning method: \_\_\_\_\_ cycle \_\_\_\_\_ min  
 Pressure Drop: clean \_\_\_\_\_ "H<sub>2</sub>O, dirty \_\_\_\_\_ "H<sub>2</sub>O

			<u>Outlet Grain Loading Corr. To 7% O<sub>2</sub></u> (gn/cu. ft)
<u>Pollutant</u>	<u>Efficiency (%)</u>	<u>Basis for Efficiency</u>	

**ELECTROSTATIC PRECIPITATOR**

Manufacturer's Name and Model: \_\_\_\_\_  
 Type: \_\_\_ single stage, \_\_\_ two stage, \_\_\_ plate, \_\_\_ tube  
 Total collecting area: \_\_\_\_\_ sq. ft. cleaning cycle \_\_\_\_\_ min  
 Gas Velocity: \_\_\_\_\_ ft./sec. corona power \_\_\_\_\_ kw  
 Bulk resistivity of Dust: \_\_\_\_\_ ohm-cm Moisture Content of gases \_\_\_\_\_ vol. %

			<u>Outlet Grain Loading Corr. To 7% O<sub>2</sub></u> (gn/cu. ft)
<u>Pollutant</u>	<u>Efficiency (%)</u>	<u>Basis for Efficiency</u>	

**CYCLONE (dry gas only)**

Manufacturer's Name and Model: \_\_\_\_\_  
 Gas inlet: width \_\_\_\_\_ ft., height \_\_\_\_\_ ft.  
 Diameter: gas outlet \_\_\_\_\_ ft., cyclone cylinder (s) \_\_\_\_\_ ft.  
 Length of cyclone: \_\_\_\_\_ ft., no. of cylinder(s) \_\_\_\_\_ Pressure Drop \_\_\_\_\_ "H<sub>2</sub>O

			<u>Outlet Grain Loading Corr. To 7% O<sub>2</sub></u> (gn/cu. ft)
<u>Pollutant</u>	<u>Efficiency (%)</u>	<u>Basis for Efficiency</u>	

**PART VI - EMISSION CONTROLS (CONTINUED)**

**CONDENSER**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: surface \_\_\_\_\_, contact \_\_\_\_\_  
Heat transfer area: \_\_\_\_\_ sq. ft., Max process pressure \_\_\_\_\_ psia  
Heat duty: \_\_\_\_\_ BTU/hr. Coolant temp: inlet \_\_\_\_\_ °F, outlet \_\_\_\_\_ °F  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Concentration (ppm)

**WET COLLECTOR**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ venturi, \_\_\_ cyclone, \_\_\_ spray chamber, \_\_\_ packed bed  
Entrainment/separators: type \_\_\_\_\_, bed depth: \_\_\_\_\_  
Type & construction of chemicals added to the scrubbing liquid: \_\_\_\_\_  
Pressure drop \_\_\_\_\_ "H<sub>2</sub>O  
Scrubbing liquid: flow rate \_\_\_\_\_ gpm, inlet temp. \_\_\_\_\_ °F, outlet temp. \_\_\_\_\_ °F  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Concentration (ppm)

**AFTERBURNER**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ direct flame, \_\_\_ catalytic  
If catalytic: inlet temp. \_\_\_\_\_ °F, outlet temp. \_\_\_\_\_ °F, catalyst life \_\_\_\_\_  
If direct flame: internal volume \_\_\_\_\_ cu. ft., average temp. \_\_\_\_\_ °F  
Residence time at average temp. \_\_\_\_\_ sec  
Auxiliary fuel: max. rating \_\_\_\_\_ BTU/hr. set point \_\_\_\_\_ °F, \_\_\_\_\_ BTU/hr.  
Size of Chamber \_\_\_\_\_ cu. ft. flow rate \_\_\_\_\_  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Grain Loading Corr. To 7% O<sub>2</sub> (gn/cu. ft)

**ADSORPTION EQUIPMENT**

Manufacturer's Name and Model: \_\_\_\_\_  
Type: \_\_\_ continuous, \_\_\_ fixed bed  
Adsorbing material: \_\_\_\_\_ bed depth \_\_\_\_\_ in., flow area \_\_\_\_\_ sq. ft.  
Breakthrough (breakpoint) time: \_\_\_\_\_ Pressure drop: \_\_\_\_\_ "H<sub>2</sub>O  
Pollutant                      Efficiency (%)                      Basis for Efficiency                      Outlet Concentration (ppm)

**PART VI - EMISSION CONTROLS (CONTINUED)**

**OTHER TYPES** Name and describe. Attach complete details.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**FUGITIVE DUST CONTROLS:** Describe below or attach a complete explanation of all controls of fugitive emissions not discussed in Form E - Roads or Form F - Storage Piles.

**PART VII - STACK DATA**

Stack data must be provided for each flue, duct, pipe, stack, chimney or conduit (stacks) at which collected emissions are vented to open air through a restricted opening.

Stack Identification: \_\_\_\_\_  
UTM East \_\_\_\_\_ UTM North \_\_\_\_\_ or  
Longitude \_\_\_\_\_ Latitude \_\_\_\_\_

Most important stacks have been located on topographic or air navigation charts. If you know the UTM coordinates or latitude and longitude, provide this information. If there is a number of stacks close together, a common location may be used

Stack Height: \_\_\_\_\_ Ft. Ground level elevation \_\_\_\_\_ Ft. Diameter \_\_\_\_\_ Ft.  
Material Outer: \_\_\_\_\_ Lining: \_\_\_\_\_  
Exit temperature (F): \_\_\_\_\_ Exit Velocity: \_\_\_\_\_ (f/s)  
Exhaust Rate: \_\_\_\_\_ (ACFM) % Moisture: \_\_\_\_\_  
Nearest building to stack:  
distance \_\_\_\_\_ ft. height \_\_\_\_\_ ft. length \_\_\_\_\_ ft. width \_\_\_\_\_ Ft.

**Processes Sharing Stack:** If more than one process shares a stack, list them and estimate relative contribution of each.

Description \_\_\_\_\_  
Contribution to emissions from stack \_\_\_\_\_ %  
Description \_\_\_\_\_  
Contribution to emissions from stack \_\_\_\_\_ %  
Description \_\_\_\_\_  
Contribution to emissions from stack \_\_\_\_\_ %  
Description \_\_\_\_\_

**PART VIII - REMARKS**

**Attach calculations and reference all emission factors for Allowable, Potential to Emit, and Actual Emissions to this sheet. Reference all emission factors and efficiencies of control equipment.**

**PART IX - EMISSIONS**

**PART 9a: EMISSIONS -- SHORT TERM LB/HR (POUNDS PER HOUR) OR OTHER \_\_\_\_\_**

Pollutant	PM	PM10	SO <sub>2</sub>	CO	NO <sub>x</sub>	VOC	LEAD	
Allowable								
Maximum Potential								
Actual or Estimated								

Pollutant								
Allowable								
Maximum Potential								
Actual or Estimated								

**PART 9b: EMISSIONS -- ANNUAL TPY (TONS PER YEAR)**

Pollutant	PM	PM10	SO <sub>2</sub>	CO	NO <sub>x</sub>	VOC	LEAD	
Allowable								
Maximum Potential								
Actual or Estimated								

Pollutant								
Allowable								
Maximum Potential								
Actual or Estimated								

**PART IX - EMISSIONS (CONTINUED)**

List all known pollutants, including, but not limited to those found under Article XXI section 2101.20 in the definition of Hazardous Air Pollutants.

Transfer this information to the summary emissions sheets.

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**PERMIT APPLICATION FORM D**  
**STORAGE TANKS**

Tanks situated at a common location in the facility and storing the same materials, or vented through a common control device may be grouped together for reporting purposes if the emissions from individual tanks are small. A diagram should be attached showing the locations of grouped tanks. A separate listing should be provided for Part I for each tank. Part II and estimates of emissions should be for the group. Emissions from liquid or gas storage tanks that condense to form solids in ambient air should be included in emissions estimates as particulate TSP and/or PM10.

**PART I - DESCRIPTION OF STORAGE TANKS** (MAKE A COPY OF SCHEDULE E FOR EACH STORAGE TANK)

Company Identification or Description: \_\_\_\_\_  
 Installer: \_\_\_\_\_ Installation Date: \_\_\_ / \_\_\_ / \_\_\_  
 Prior Allegheny County Air Pollution Permit No. \_\_\_\_\_  
 Capacity \_\_\_\_\_ (specify units) Age: \_\_\_\_\_ (years)  
 Diameter \_\_\_\_\_ (ft) Height \_\_\_\_\_ (ft)  
 Paint Color \_\_\_\_\_ Loading Type \_\_\_\_\_

**Materials Normally Used**

Common Name \_\_\_\_\_ Chemical Name \_\_\_\_\_  
 Chemical Abstract Service # \_\_\_\_\_ Liquid Molecular Weight \_\_\_\_\_  
 Vapor Pressure \_\_\_\_\_ psia at \_\_\_\_\_ (temperature)

**Type of tank (check appropriate spaces):**

Underground \_\_\_\_\_ Pressure Tank \_\_\_\_\_ Surface \_\_\_\_\_

If the tank is a surface tank:

\_\_\_\_\_ No Roof  
 \_\_\_\_\_ Fixed Roof  
     Roof Paint Color \_\_\_\_\_ Shell Paint Color \_\_\_\_\_  
     Paint Condition \_\_\_\_\_ Average Vapor Space Height \_\_\_\_\_ (ft)  
     Pressure Relief Valve Setting: \_\_\_\_\_ Pressure \_\_\_\_\_ psia  
     Vacuum \_\_\_\_\_  
     Vapor Recovery System (Description) \_\_\_\_\_  
     Control Efficiency \_\_\_\_\_ %  
     Gas Blanketing System Gas \_\_\_\_\_ Amt Used \_\_\_\_\_  
 \_\_\_\_\_ Floating Roof (specify internal or external floating roof.)  
     \_\_\_\_\_ External Floating Roof  
         Primary Seal Type \_\_\_\_\_  
         Secondary Seal Type \_\_\_\_\_  
     \_\_\_\_\_ Internal Floating Roof  
         Primary Seal Type \_\_\_\_\_  
         Deck Construction Type \_\_\_\_\_  
         Tank Construction Type \_\_\_\_\_

**PART II - OPERATING SCHEDULE**

Throughput (specify units):

Annual \_\_\_\_\_ Daily \_\_\_\_\_

Maximum turnovers per year: \_\_\_\_\_

Seasonal: Periods correspond to seasons instead of calendar quarters. The first season is split to include December, January, and February.

Seasonal Percentage of Total Throughput:

December, January, & February \_\_\_\_\_ %    June, July, & August \_\_\_\_\_ %  
 March, April, & May \_\_\_\_\_ %    September, October, & November \_\_\_\_\_ %

Dates tank is not normally in use: from \_\_\_\_\_ / \_\_\_\_ / \_\_\_\_ TO \_\_\_\_\_ / \_\_\_\_ / \_\_\_\_

**PART III - CONTROL DEVICES**

Describe any control devices, including any gas blanketing system noted above.

**PART IV - EMISSIONS - ANNUAL TPY**

Pollutant	PM	PM10	SO <sub>2</sub>	CO	NO <sub>x</sub>	VOC	LEAD	
Allowable								
Maximum Potential								
Actual or Estimated								

Pollutant								
Allowable								
Maximum Potential								
Actual or Estimated								

List all known pollutants, including, but not limited to those found under Article XXI section 2101.20 in the definition of Hazardous Air Pollutants.

Transfer this information to the summary emissions sheets.

**PERMIT APPLICATION FORM E  
 DRY BULK MATERIALS STORAGE AND HANDLING**

This form reports particulate emissions from wind erosion of bulk materials stockpiles, from additions and retrievals of material, and from stockpile maintenance. It includes materials stored under cover and in silos. Storage piles including hazardous materials such as lead compounds or asbestos should be reported here. A separate form should be prepared for each stockpile. Mining, excavation, crushing, and other materials processing should be treated as processes and reported on Form A.

**PART I - DESCRIPTION OF STORAGE PILE** (MAKE A COPY OF SCHEDULE E FOR EACH STORAGE PILE)

Open and enclosed stockpiles of raw materials, intermediate products, and finished products should be reported. Include silos in reporting types of stockpile covering.

**Company Identification or Description:** \_\_\_\_\_

UTM East: \_\_\_\_\_ UTM North: \_\_\_\_\_ (center of pile)

Type of Material Stored (Generic Name): \_\_\_\_\_

Major Chemical Components (list, with percentages of each):

Moisture Content: \_\_\_\_\_ % Silt Content: \_\_\_\_\_ %

Height of Pile (give units): \_\_\_\_\_

Uncovered: \_\_\_\_\_ acres or \_\_\_\_\_ square feet

If covered or enclosed:

Type of cover: \_\_\_\_\_

Estimated Control Efficiency: \_\_\_\_\_ %

**PART II - STORAGE PILE TRANSFERS**

For the purpose of this schedule, stockpile transfers include either adding material onto a pile and removal of material from a pile. This schedule does not include loading or unloading from barges, rail cars or other transport, or transportation and marketing of dry materials, which should be reported as processes on Form A.

Normal Inventory: \_\_\_\_\_ (Tons)

Estimated	Additions (tons)	Retrievals
December, January, and February	_____	_____
March, April, and May	_____	_____
June, July, and August	_____	_____
September, October, and November	_____	_____
Annual storage losses (tons)	_____	_____

**PART III - EQUIPMENT**

Immobile equipment or equipment that is dedicated to the particular stockpile should be reported as fixed or dedicated units. Mobile equipment or equipment that may be moved to another area of the plant should be reported as transient or mobile units. This may include bulldozers, backhoes, or other large, mobile equipment that works on or around a stockpile. Percent utilization is the percentage of operating time (hours divided by annual hours) that equipment is in operation on the storage pile.

Fixed or Dedicated Units

	<u>Name</u>	<u>Size (Capacity)</u>	<u>% Utilization</u>
(1.)	_____	_____	_____
(2.)	_____	_____	_____
(3.)	_____	_____	_____
(4.)	_____	_____	_____
(5.)	_____	_____	_____
(6.)	_____	_____	_____

Transient or Mobile Units

	<u>Name</u>	<u>Size (Capacity)</u>	<u>% Utilization</u>
(1.)	_____	_____	_____
(2.)	_____	_____	_____
(3.)	_____	_____	_____
(4.)	_____	_____	_____
(5.)	_____	_____	_____
(6.)	_____	_____	_____

**PART IV - DUST CONTROL MEASURES (describe):**

**PART V - EMISSION ESTIMATES**

**A. Wind Erosion**

	<b>PM10</b>		<b>TSP</b>	
	<u>Lb./hr.</u>	<u>TPY</u>	<u>Lb./hr.</u>	<u>TPY</u>
Uncontrolled	_____	_____	_____	_____
Controlled	_____	_____	_____	_____

**B. Stockpile Activity (Storage and Retrieval)**

	<b>PM10</b>		<b>TSP</b>	
	<u>Lb./hr.</u>	<u>TPY</u>	<u>Lb./hr.</u>	<u>TPY</u>
Uncontrolled	_____	_____	_____	_____
Controlled	_____	_____	_____	_____

**C. Stockpile Activity Maintenance**

	<b>PM10</b>		<b>TSP</b>	
	<u>Lb./hr.</u>	<u>TPY</u>	<u>Lb./hr.</u>	<u>TPY</u>
Uncontrolled	_____	_____	_____	_____
Controlled	_____	_____	_____	_____

Attach calculations and reference all emission factors for Allowable, Potential to Emit, and Actual emissions for this sheet. Reference all emission factors and efficiencies of control equipment.

**PERMIT APPLICATION FORM F  
ROADS AND VEHICLES**

This form covers fugitive emissions from vehicles and vehicle travel on paved and unpaved roads and parking lots within the plant property. Plants with only normal business traffic of light duty vehicles and paved parking lots with capacity less than one hundred cars are not required to submit Form F.

**PART I - ROADS**

Paved Roads: \_\_\_\_\_ (miles)      Unpaved Roads: \_\_\_\_\_ (miles)  
 Parking Lots (area): \_\_\_\_\_ (specify units)

**PART II - VEHICLES**

**Light-Duty Gasoline Vehicles (LDGV)** \_\_\_\_\_ (average weekly number)

Estimated Total Vehicle Miles Traveled	_____	_____
Seasonal Usage (%)	<u>Paved Areas</u>	Unpaved Areas
December, January, and February	_____	_____
March, April, and May	_____	_____
June, July, and August	_____	_____
September, October, and November	_____	_____
Annual Storage Losses (tons)	_____	_____

**Heavy-Duty Gasoline Vehicles (HDGV)** Estimated Annual Fuel Consumption \_\_\_\_\_ (gal)

Estimated Total Vehicle Miles Traveled	_____	Ave. Wgt. _____
Seasonal Usage (%)	<u>Paved Areas</u>	Unpaved Areas
December, January, and February	_____	_____
March, April, and May	_____	_____
June, July, and August	_____	_____
September, October, and November	_____	_____
Annual Storage Losses (tons)	_____	_____

**Heavy-Duty Diesel Vehicles (HDDV)** Estimated Annual Fuel Consumption \_\_\_\_\_ (gal)

Estimated Total Vehicle Miles Traveled	_____	Ave. Wgt. _____
Seasonal Usage (%)	<u>Paved Areas</u>	Unpaved Areas
December, January, and February	_____	_____
March, April, and May	_____	_____
June, July, and August	_____	_____
September, October, and November	_____	_____
Annual Storage Losses (tons)	_____	_____

**Road Dust Emissions**

	<u>TSP</u>	<u>PM10</u>
Uncontrolled Emissions	_____	_____
Control Efficiency	_____	_____
Controlled (Actual) Emissions	_____	_____
Dust Control Measures (Describe):		

Transfer this information to the summary emissions sheets.

**PERMIT APPLICATION FORM G  
MISCELLANEOUS FUGITIVE EMISSIONS**

This form is for reporting miscellaneous fugitive emissions which are not reported in forms A-F. Fugitives are emissions which escape into the plant air or outdoor air by means other than a flue or duct. Fugitives associated with a particular process should be reported on the form for that process. For example, fugitives from a paper coating line would be reported for that line. Fugitives from several segments may be grouped together. Fugitives not associated with any one process should be reported here as "Plant Fugitives." Examples are dust (TSP) and fine particulates (PM<sub>10</sub>) from abrasive blasting or construction/demolition, VOC and/or air toxics from cleanup, painting or maintenance, or chemicals from laboratory experiments or hoods. A separate form G should be completed for each type or category of activity. Additional forms may be attached if there are more than four (4) pollutants for the activity.

**Process Description or Miscellaneous Activity (describe):**

Give a verbal description of the activity reported, such as construction projects, abrasive blasting, painting, cleaning, or other activity that has no relation to regular plant processes. State the type of abrasives, cleaners, or paints used, and other information that would be helpful in estimating dust or evaporative emissions.

**GASES AND LIQUIDS**

Common Name:	<hr/>	<hr/>	<hr/>	<hr/>
Chemical Name:	<hr/>	<hr/>	<hr/>	<hr/>
CAS #:	<hr/>	<hr/>	<hr/>	<hr/>
Use:	<hr/>	<hr/>	<hr/>	<hr/>
Quantity Purchased (units):				
Annually:	<hr/>	<hr/>	<hr/>	<hr/>
Daily:	<hr/>	<hr/>	<hr/>	<hr/>
Seasonal Use: (%)				
December, January, and February:	<hr/>	<hr/>	<hr/>	<hr/>
March, April, and May:	<hr/>	<hr/>	<hr/>	<hr/>
June, July, and August:	<hr/>	<hr/>	<hr/>	<hr/>
September, October, and November:	<hr/>	<hr/>	<hr/>	<hr/>
Volatiles Wgt % or lb./gal. <u>OR</u>	<hr/>	<hr/>	<hr/>	<hr/>
Total Volatiles	<hr/>	<hr/>	<hr/>	<hr/>
Amt Volatiles Recovered and Shipped Off Site	<hr/>	<hr/>	<hr/>	<hr/>
Amount Emitted	<hr/>	<hr/>	<hr/>	<hr/>

**PARTICULATE EMISSIONS**

	<u>TSP</u>	<u>PM10</u>
Estimated amount of particulates generated per unit of activity	<hr/>	<hr/>
Estimated total amount of particulates	<hr/>	<hr/>
Seasonal Distribution (%)		
December, January, and February:	<hr/>	<hr/>
March, April, and May:	<hr/>	<hr/>
June, July, and August:	<hr/>	<hr/>
September, October, and November:	<hr/>	<hr/>
Controls (describe):	<hr/>	<hr/>
Efficiency (%)	<hr/>	<hr/>
Net Emissions	<hr/>	<hr/>



**PERMIT APPLICATION FORM M  
SOURCE OUT OF COMPLIANCE**

**FORM M** Sources Out of Compliance

There is no Form M included in this application form. Strategies for bringing non-complying sources into compliance will vary so widely from source to source that it would not be useful to provide a form for completion. Provide your own description and label it Form M. Include enough detail that it is clear what emission units are not in compliance and of what regulations they are not in compliance. Provide a detailed schedule of compliance. This would include an installation schedule, changes in operations, a leak detection program schedule -- whatever it will require to bring the emission unit into compliance. Make sure that the dates are manageable; they may be included in the permit, and become enforceable. Regular reports on the progress of reaching compliance are required every six months (they may be more frequent if desired).

**PERMIT APPLICATION FORM N  
ALTERNATIVE OPERATING SCENARIO**

**A: GENERAL INFORMATION**

1. Alternative Scenario Number (Plan #): \_\_\_\_\_
2. Give a general description of the changes involved in this alternative scenario:
3. Please Identify the emissions units affected in the Table below:

<u>Emission Unit #</u>	<u>Type of Emission Unit</u>	<u>Changes in the Process / Changes in the Project / Other Changes</u>	<u>SIC/SCC Associated with Scenario</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

4. Describe and cite all applicable requirements pertaining to this alternative scenario:

**B: COMPLIANCE METHOD**

<u>Emission Unit #</u>	<u>Pollutant</u>	<u>Compliance Method</u>	<u>Reference Test Method</u>	<u>Monitoring Device</u>	<u>Frequency / Duration of Sampling</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Attach any other related information which would further explain the method of compliance.

**C: RECORDKEEPING AND REPORTING**

1. List what parameter will be recorded and the frequency of recording:
2. Describe what is to be reported and the frequency of reporting? (Reports must be submitted at least every six (6) months)
3. Beginning reporting date:     /     /     \_\_\_\_\_