SPECIFIC INSTRUCTIONS FOR COMPLETING FORM B2

COMPLETE ALL APPLICABLE QUESTIONS. ALL APPLICATIONS MUST BE TYPED OR PRINTED WITH A BALL-PINT PEN (PREFERABLY TYPED).

SECTION A (Items 1-25)

	Question Number and Name	Specific Instructions
1.	Name of Owner/Firm	Name of owner of source for which application is being prepared. For corporations, include division or subsidiary name, if any.
2-5.	Number and Street address, etc.	Mailing address of the owner or firm
6.	Name & Title of Owner's Representative	Employee of firm to be contacted regarding air pollution control at this facility and who is authorized by owner to act on his behalf.
7.	Telephone	Telephone number of owner's representative
8-13.	Name of Professional Engineer	Name, telephone number and mailing address of Professional Engineer authorized by owner to act as agent in filing application. A letter of authorization must be attached.
14-16.	Stamp/seal and License of P.E.	Stamp, seal and license number of P.E. preparing application.
17.	Signature of Professional Engineer, etc.	Signature and date of signature of authorized P.E. must be affixed before application will be processed for a Permit to Construct.
18-21.	Facility Name, etc.	Name and address of facility where process is located.
22.	Building Name or Number	Building name or number of actual physical location of process unit.
23.	Start-up Date	If application is for a Permit to Construct, specify month and year construction is expected to be completed. If application is for a Certificate to Operate for an existing source, specify month and year operation began.
24.	Drawing Numbers of Plans Submitted	Specify the drawing numbers of the plans submitted with this application.
25.	Emission Point I.D. No.	Specify the number or letter assigned to the emission point through which the contaminants are emitted from the furnace (units). Each stack within a facility must be assigned a different number or letter not to exceed five digits. The stacks must also be numbered on the site plans and/or drawings submitted.

SECTION B (Items 26-36)

26.	Ground Elevation	Elevation above mean was level at the base of the stack to the nearest foot (e.g., 120 rather than 119.6). This information is available from USGS topography maps.
27.	Height Above Structures	Height of the stack above the building or structure to the nearest foot (e.g., 39 rather than 38.7). If top of stack is below the building heights, it should be expressed as a negative number.
28.	Stack Height	Height of the stack measured from ground level to top of stack to the nearest foot (e.g., 62 rather than 62.3).
29.	Inside Dimensions	Inside diameter at the exit of stack expressed in inches to the nearest inch. For stacks of rectangular cross-section specify inside length and width in inches to the nearest inch (e.g., 40 x 20).
30.	Exit Temperature	Stack gas exit temperature (°F).
31.	Exit Velocity	Stack gas exit velocity (ft./sec.).
32.	Exit Flow Rate	Stack gas exit flow water in cubic feet per minute at actual conditions.
33.	Heat Input	If application is for a Permit to Construct, specify in million Btu/hr. the total anticipated maximum operating heat input of the stationary combustion installation (all units connected to same stack). If application is for Certificate to Operate, specify the actual maximum operating heat input in million Btu/hr. at which the installation (all units connected to the same stack) is operated. If a stack test acceptable to the Department was performed, specify the heat input during the test.
34..	Continuous Monitors	If the main stack or branches to main stack will be equipped with continuous emission monitoring instruments, check those contaminants that will be measured.
35.	Permit to Construct	If applying for a Permit to Construct, check whether new source or modifications; leave blank if applying for a Certificate to Operate.
36.	Certificate to Operate	If applying for a Certificate to Operate, check whether new source, modification or existing source; leave blank if applying for a Permit to Construct.

SECTION C (Items 37-62)

Answer all questions on from B2 only if a single furnace (unit is vented to the emission point (stack). If more than one combustion unit vents to this emission point, leave questions in this Section blank and complete additional form Y for each unit (furnace). A standby or emergency furnace (unit) is considered a separate unit. However, a dual fuel burner maybe indicated by completing this form as if it were a second burner. Similarly, a unit that also burns refuse or refuse derived fuel should be indicated as a second burner if the unit vents to a common stack.

37. Unit Type

Specify the code tat best represents the unit types:

- 01 - Package unit
- 02 - Built up unit
- 03 - Simple cycle gas turbine
- 04 - Regenerative cycle gas turbine
- 05 - Combined cycle gas turbine
- 06 - Diesel engine
- 07 - Spark ignition internal combustion engine
- 99 - Other

38. Unit Manufacturer's Name and Model Number

Specify the name of the manufacturer of the unit and the manufacturer's model number.

39. Unit Heat Input

Specify the actual maximum operating heat input in million Btu/hr. for existing units or the anticipated maximum operating heat input for new unit. If a stack test acceptable to the Department was performed on the unit, specify the heat input during the test.

40. Air Intake

Use the code below to describe the type of air in-take:

- 1 - Outside air in-take
- 2 - Unit ventilator with outside air in-take
- 3 - System consisting of an outside air in-take, with air ducts and a fan
- 4 - System consisting of an outside air in-take, with ducts, fan and means of heating in-take air
- 5 - Other
- 6 - None

41. Burner Type

Enter the code to specify the type of burner used:

Coal

- 01 - Pulverized, dry bottom
- 03 - Pulverized, wet bottom without fly ash reinjection
- 05 - Pulverized, wet bottom with fly ash reinjection
- 07 - Cyclone
- 09 - Pulverized, general
- 13 - Spreader stoker with fly ash reinjection
- 15 - All other stokers
- 17 - Hand-fired
- 19 - Not listed above

Oil
- 51 - Pressure atomized burners
- 52 - Steam atomized burners
- 53 - Air atomized burners
- 54 - Rotary cup burners
- 55 - Sonic atomizer
- 59 - Not listed above

Natural Gas
- 60 - Atmospheric gas burner
- 61 - Natural draft power gas burner
- 62 - Forced draft power gas burner
- 69 - Not listed above

Wood, Refuse or RDF
- 70 - Pneumatic feed blower
- 71 - Gravity fed, rotary valve, screw conveyor
- 77 - Hand-fired
- 79 - Not listed above

42. No. of Burners

Number of identical burners of the types listed under question 41 for this unit (furnace).

43. Burner Manufacturer's Name

Name of the manufacturer of the burner and the manufacturer's model number.

44. Fuel Type

Enter the code for the type of fuel burned or to be burned:

- 01 - Anthracite coal
- 04 - Bituminous coal
- 08 - Bus-bituminous coal
- 12 - Lignite
- 19 - Coal (other)
- 29 - Coke
- 31 - No. 1 fuel oil
- 32 - No. 2 fuel oil
- 34 - No. 4 fuel oil
- 35 - No. 5 fuel oil
- 36 - No. 6 fuel oil
- 40 - Diesel
- 49 - Oil (other)
- 52 - Natural gas
- 56 - Blast furnace gas
- 58 - Coke oven gas
- 60 - Manufactured gas
- 62 - Producer gas
- 64 - Refinery gas
- 68 - Sewage gas
- 72 - L.P. gas
- 79 - Gas (other)
- 80 - Wood
- 84 - Refuse derived fuel (RDF)
- 86 - Refuse
- 92 - Liquid waste
- 94 - Gaseous waste
- 96 - Sludge
- 99 - Other

Section C (cont'd.)

45.	Average Quantity of Fuel/Hr.	Average quantity of fuel burned/hr. by this burner during normal operation; in lbs./hr. for wood, refuse, RDF, or coal; gals./hr. for oil; or cubic feet or gas. Compute average by dividing quantity/year (question 47) by hrs./day (question 48) times days/year (question 49).
46.	Maximum Quantity of Fuel/Hr.	Specify maximum quantity of fuel burned/hr. by this burner from prior years' records, or enter manufacturers' specified maximum quantity of fuel burned/hr. in lbs./hr. for wood, refuse, RDF or coal; gals./hr. for oil; or cubic ft./hr. for gas.
47.	Quantity of Fuel/Yr.	Total quantity of fuel burned/yr. for this burner only in lbs./yr. for wood, refuse, RDF, or coal; gals./yr for oil, cubic ft./yr. for gas.
48.	Hrs./Day	Average number of hrs./day burner is or will be in operation.
49.	Days/Year	Average number of day/yr. burner is or will be in operation.
50.	% Operation by Season	Indicate the percentage of time burner is or will be operated by season. Total of four percentages listed must equal 100. Winter: January-March, Spring: April-June, etc.
51.	Names of Fuel Supplier(s)	Name and address of the supplier(s) of the type of fuel used.

52-62. If more than one burner is used, complete these questions. See instructions for questions 42-51.

Complete Section only if a single furnace (unit) is vented to the emission point (stack) or if the emissions from all furnaces vented to this emission point are directed to the same emission control equipment. Complete additional Form Y for each furnace (unit) and leave this SECTION blank if emissions from each are directed to separate emission control equipment.

SECTION D (Items 63-68)

Complete Section D only if a single process or unit is vented to the emission point (stack) or if the emission from all units vented to this emission point are directed to the same emission control equipment. Complete additional Form Y for each process (unit) and leave this SECTION blank if emissions from each process (unit) are directed to separate emission control equipment.

63. Emission Control Equipment I.D. No.

Number assigned to each emission control device being reported. Each emission control device connected to the same stack must be assigned a different number not to exceed two digits. Control equipment must be numbered on the plot plans and/or drawings submitted.

64. Control Type

Enter the code to designate the type of emission control equipment used.

02	-	Settling chamber
03	-	Louver collector
04	-	Baffle chamber
06	-	Centrifugal collector (dry)
07	-	Centrifugal collector (wet)
08	-	Fabric collector
09	-	Electrostatic precipitator
13	-	Venturi scrubber
98	-	Other
99	-	None

65. Manufacturer's Name and Model Number

Specify name of manufacturer and model number of the control equipment specified in previous question.

66. Disposal Method

Enter the code that describes the type of disposal used for collected air contaminants.

1 - Landfill - on-site
2 - Landfill - off-site
4 - Recycled on-site
6 - Sold
9 - Other

67. Date Installed

Actual or expected date of installation of control equipment (month and year).

68. Useful Life

Expected years of useful life of emission control equipment.

SECTION F (Items 69-78)

If more than one furnace or unit vents to the emission point specified in Section B, complete the appropriate number of Form Y (one for each non-identical process or unit,) before completing this section. This section is used to summarize the total air contaminants emitted through the emission point specified in Section B.

69-70.	Contaminant Name and CAS Number (Total Particulates, Sulfur Dioxide, Nitrogen Oxides, Carbon Monoxide, etc.)	This contaminant entry and its code number represent the total of the contaminant emitted by this combustion installation (all units connected to same stack)..
71.	Actual Emissions	If application is for a Permit to Construct, enter the anticipated contaminant emissions (after controls) in lbs./million Btu based on stack tests performed on pilot or similar full scale installations or reliable material balance.
72.	Unit	Enter code number 11 (lbs./million Btu) for a single furnace or where <u>all</u> furnaces burn only wood and/or solid fossil fuel or when <u>all</u> furnaces burn only liquid fossil fuel. Where dissimilar fuels are burned in each of two or more furnaces, enter the code number 01 (lbs./hr.)
73.	How Determined	Use the code to designate how the actual emissions are determined. 1 - Stack test of emissions from this combustion installation 2 - Stack test of emissions from the identical combustion installation 3 - Stack test of emissions from geometrically similar combustion installation 4 - Manufacturer's guarantee 5 - Published emission factors 6 - Fuel analysis or mass balance calculations 7 - Continuous stack monitoring 9 - Other
74.	% Control Efficiency	Enter actual efficiency of emission control equipment specified in Section D.
75.	Actual Hourly Emissions	Enter the actual hourly emissions in lbs./hr. based on normal daily operation of the combustion installation.
76.	Actual Annual Emissions	Enter the actual hourly emission in lbs./hr. based on normal daily operation of the process.
77.	10^x	Utilize the exponent of 10 to specify the correct magnitude. Enter the exponent (x) and indicate whether plus (+) and indicate whether plus (+) or minus (-). If the exponent is not needed, enter zero.
78.	Signature of Authorized Representative or	Signature of owner's representative or authorized agent must be affixed when applying for a Certificate to Operate, or the application will not be processed. Leave blank when applying for a Permit to Construct. Enter date at time of signature.