Form Series B collects information on the emission units at the stationary source. These emission units constitute the building blocks of the permit application. If this Title V application is for the stationary source's *initial* Title V permit, emission units numbers established in the current stationary source Permit-to-Operate and/or Alaska Title I permits should be used consistently in Form Series B. Form Series B must be completed for each initial and renewal application and for each emission unit at the stationary source.

If this Title V application is for a Title V renewal, the first page of Form B should be used to indicate emission units that have changed or have been added to the stationary source since the most recent issuance of the Title V permit. The second page should be used to indicate Title V permitted emission units that have not been modified.

Form Number	Description	Page Number
B	Emission Unit Listing for This Application	<u>3</u>
<u>B1</u>	External Combustion Equipment (Boilers and Heaters)	<u>4</u>
<u>B2</u>	Internal Combustion Equipment (Engines and Turbines)	<u>5</u>
<u>B3</u>	Incinerators	<u>6</u>
<u>B4</u>	VOC Storage Tanks	<u>8</u>
<u>B5</u>	Miscellaneous Emission Units	<u>10</u>
<u>B9.1</u>	Painting or Coating Operation Emissions Unit Summary form. Complete this form <i>once</i> for painting and coating operations at the stationary source.	<u>11</u>
<u>B9.2</u>	Printing Operation Emissions Unit Summary form. Complete this form <i>once</i> for printing operations at the stationary source.	<u>12</u>
<u>B9.3</u>	Storage piles emitting fugitive particulate matter (PM) or VOCs.	<u>13</u>
<u>B9.4</u>	Materials handling activities emitting fugitive PM or VOCs.	<u>14</u>
<u>B9.5</u>	Unpaved roads emitting fugitive PM.	<u>15</u>
<u>B9.6</u>	Paved industrial roads emitting fugitive PM.	<u>16</u>
<u>B9.7</u>	Lumber Dry Kilns	<u>17</u>
<u>B9.8</u>	Cement/Lime Kilns and Calciners	<u>18</u>
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<u>B9.11</u>	Hardboard/Particleboard/Plywood Presses	<u>21</u>
<u>B9.12</u>	Material Dryers	<u>22</u>
<u>B9.13</u>	Veneer Dryers	<u>23</u>

# APPLICABLE AND NON-APPLICABLE REQUIREMENTS

All state and federal standards applicable and non-applicable to each emission unit at the stationary source must be identified. Additionally, requirements established in the stationary source Permit-to-Operate and current Alaska Title I identified. Information permits must be on Alaska standards can be found here: http://www.dec.state.ak.us/air/ap/regulati.htm. Current federal standards can be found here: http://ecfr.gpoaccess.gov/ and/or through hard copy and other electronic media.

The Department has provided one table for applicable requirements and one table for non-applicable requirements at the end of each B# form. If space is needed for additional requirements, the Department has provided supplement tables. See *Form B Supplement - Emission Unit-Specific Applicable Requirements*, and *Form B Supplement - Emission Unit-Specific Permit Shield Request*.

#### **Applicable Requirements**

The regulatory applicability for each emission unit should be identified in the table provided for "Applicable Requirements". For example, for a fuel oil-fired boiler, rule 18 AAC 50.055(a)(1) is an applicable requirement, and should be cited in the applicable requirements table under "Applicable Requirement Citation".

- Enter the current Title V operating permit number (if applicable), Permit-to-Operate, or Alaska Title I permit number followed by a dash "-", and the condition number.
- Enter the applicable requirements. If an applicable requirement is a rule, enter the complete citation (e.g., 18 AAC 50.055(a)(1)).
- Enter the parameter, pollutant, or work practice to which the rule condition applies (e.g., for the rule cited above, visible emissions).
- Enter the limit or standard established by the applicable requirement (e.g., for the rule cited above, "20 percent averaged over any six consecutive minutes").
- Write "in" if the emission unit is currently in compliance with the limit/standard. Write "out" if the emission unit is currently is out of compliance with the limit/standard. If the answer is "out," the owner/operator **must** attach a compliance schedule for the emission unit.
- Identify the monitoring, record keeping, and reporting method that is the basis for the compliance determination. If an EPA-granted waiver, exemption, or custom monitoring plan applies, indicate in the space provided and attach a copy of the applicable documentation to this permit application.

#### Non-Applicable Requirements

Regulations for which the owner/operator would like a permit shield should be identified in the table provided for "Non-Applicable Requirements". Complete this table for each emission unit. The table must be completed and returned even if no shields are requested. If no shields are requested, simply type "NO SHIELD REQUEST" on the first line under "Non Applicable Requirements".

The "Non-Applicable Requirements" table collects information about specified requirements that are not applicable to the emission unit at the time of permit issuance. If any of the requirements for which a permit shield is granted becomes applicable during the permit term, the Permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

In this table, the owner/operator will explain the basis for each permit shield request. In the first column, enter the state or federal citation for which the owner/operator is requesting a permit shield. In the second column, explain why the rule does not apply to the emissions unit, and include the citation/basis.

#### **Reasons for Regulatory Applicability Determination**

Owners/operators are required to identify in their permit applications all requirements that are applicable and non-applicable to their operations. The purpose for doing so is three-fold:

- First, the applicable requirements constitute the skeleton of the permit that the Department will write. As such, the full range of applicable requirements must be identified in the permit application so that the Department will have adequate information to structure the permit correctly.
- Second, if the owner/operator identifies all applicable and non-applicable requirements, the Department can grant a permit shield. If the stationary source is in compliance with all of the conditions in the permit, the shield protects the owner/operator from third-party lawsuits.
- Third, permitted stationary sources are required to certify continuous or intermittent compliance with all applicable requirements annually by March 31. The information used to determine compliance will be based on the monitoring required in the permit, which will be established separately for each applicable requirement. Thus, the owner/operator needs to identify all applicable requirements comprehensively and accurately so that the stationary source's monitoring activities are appropriate.

## FORM B – EMISSION UNIT LISTING FOR THIS APPLICATION

The first page of Form B gathers emission unit information on *significant and insignificant* emission units to be added, modified, or deleted by this application, and should be completed for all initial applications. For renewals, emission units in the current Title V permit that have not been modified should be included on the second page of Form B. Forms B1 through B4 are for typical emission units located at Alaska Title V stationary sources. Form B5 is a generic emission unit form and can be used for all emission units *not* covered in the other Form Series B forms. Forms B9.# are "archived" forms which should be used if applicable, but are considered to be atypical emission units in Alaska.

If more than one operating scenario is defined for the stationary source or an emission unit in Form A3, complete a B# form for each operating scenario under which the emission unit may operate.

Before proceeding to complete the appropriate forms in this series, the owner/operator should review the discussion on "dates" below.

#### Date installation/construction commenced

The emission unit forms request the date that the owner/operator commenced construction/installation of the emission unit. This date is collected for purposes of determining the applicability of certain standards, specifically NSPS, NESHAP, MACT, and NSR/PSD. In completing this question, the owner/operator should understand the definition of the term *commenced*. This term often refers to the date on which the owner/operator first made a financial commitment to install or construct the device/process. In some cases, such as with internal combustion engines subject to 40 C.F.R. 60 Subpart IIII, the construction date refers to the engine model year. Consult applicable regulations to determine the proper response for each emission unit.

#### Date installed

The emission unit forms also request the date that the device/process was installed and operational. If the emission unit being described is new, the owner/operator should provide the anticipated date when installation of the emission unit will be completed.

#### **Emissions Data**

These forms collect the emission unit-specific *design* information but do *not* collect emissions data for the emission unit. Emissions data is summarized in by Form Series D.

# FORM B1 – EXTERNAL COMBUSTION EQUIPMENT (BOILERS AND HEATERS)

#### Complete one form for *each* external combustion unit (e.g., boiler, heater) at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this external combustion unit commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this boiler was installed. If before 1970, provide only the year.
- 4. Enter the serial number from the emission unit nameplate or other physical component.
- 5. Does this external combustion unit have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 6. Enter the name of the manufacturer of the external combustion unit.
- 7. Briefly describe the external combustion unit including any add-on control devices and the firing method. Include any additional information needed to adequately describe the firing method. For example, if a boiler is a traveling grate stoker, indicate whether it is overfeed or underfeed.

For liquid/gaseous fuels:

- tangential
- normal
- other (specify)

For solid fuels:

- traveling grate stoker
- spreader stoker
- other (specify)
- 8. Enter the rated design capacity (heat input) in British Thermal Units per hour.
- 9. Enter the maximum steam production rate (lbs/hr).
- 10. Enter the maximum operating steam pressure in pounds per square inch (gauge pressure).
- 11. Enter the maximum operating steam temperature, in degrees Fahrenheit.
- 12. Fuel usage: List all of the fuels that can be burned in the external combustion unit (e.g., natural gas, #2 distillate, residual oil, etc.) and the maximum firing rate (e.g., cubic feet per hour, gallons per hour, etc.).
- 13. If waste heat generated by the emission unit is utilized for any purpose, provide a description of how the waste heat is utilized, (e.g. glycol dehydrator heat source, production or process heat, etc.)

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B2 – INTERNAL COMBUSTION EQUIPMENT (ENGINES AND TURBINES)

# Complete one form for *each* internal combustion emission unit (i.e., turbine or IC engine) at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this emission unit commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this emission unit was installed. If before 1970, provide only the year.
- 4. Enter the serial number from the emission unit nameplate, engine block, or other physical component.
- 5. Does this emission unit have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 6. Enter the name of the manufacturer and the model number of the emission unit.
- 7. Enter the type of combustion device (e.g., simple cycle combustion turbine, combined cycle combustion turbine, internal combustion engine, etc.)
- 8. Enter the rated design capacity in horsepower.
- 9. Enter the rated design capacity (heat input) in British Thermal Units per hour.
- 10. If used for power generation, indicate the maximum electrical output (kW)
- 11. Enter the type of fuel (e.g., natural gas, #2 distillate, etc.) and maximum amount of fuel used on an hourly basis.
- 12. Describe any specific modifications to the emission unit that must be addressed in the permit, (e.g. injector modifications or replacement, turbochargers, intercooler upgrades; or decreases such as permitting a 1,500 kW generator set as a 1,250 kW generator set).

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

## FORM B3 - INCINERATORS

#### Complete one form for *each* incinerator at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this incinerator commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this incinerator was installed. If before 1970, provide only the year.
- 4. Enter the serial number from the emission unit nameplate or other physical component.
- 5. Does this incinerator have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 6. Enter the name of the manufacturer.
- 7. Indicate the type of waste incinerated. Select from the following.
  - solid
  - infectious
  - other (specify)
- 8. Briefly describe the type of incinerator (e.g., multiple chamber controlled air).
- 9. Provide the charging information for the incinerator.
  - Indicate whether the incinerator is batch or continuous feed.
  - Describe the charging method.
  - Describe how the charge is measured.
- 10. Provide the following information about the primary combustion chamber.
  - Enter the minimum temperature in °F at which the primary combustion gases are maintained.
  - Enter the rated heat input of the burner, in millions of British Thermal Units per hour.
  - Enter the type and grade (if applicable) of fuel used by the burner.
- 11. Provide the following information about the secondary combustion chamber (if applicable).
  - Enter the minimum temperature in °F at which the secondary combustion gases are maintained.
  - Enter the residency time at which the combustion gases are held at the temperature listed.
  - Enter the rated heat input of the burner, in millions of British Thermal Units per hour.
  - Enter the type and grade (if applicable) of fuel used by the burner.
- 12. Indicate (yes or no) whether the incinerator is equipped with automatically controlled auxiliary burners.
- 13. Indicate (yes or no) whether the incinerator is equipped with an interlock system.
- 14. Indicate (yes or no) whether the incinerator is equipped with an air lock system.
- 15. Indicate (yes or not) whether the incinerator is equipped with a waste heat boiler.
- 16. Enter the maximum flue gas outlet temperature.
- 17. Enter the rated manufacturer's capacity, in tons of material burned per day.
- 18. Indicate whether the incinerator has an emergency bypass stack. If it does, describe the operating conditions which would require use of the stack.
- 19. Provide the design efficiency of the unit in incinerating the materials charged. Attach calculations.
- 20. For *each* incinerated material, provide the following:
  - Enter the type of material (e.g., garbage, biological waste, cultures, sharps, construction debris, office waste).
  - Enter the origin of the material (e.g., municipalities, hospitals, research labs, generated on site).
  - Estimate the percentage of the annual tons of material charged that comes from this type of waste.
  - If heat is recovered from the process, estimate the heating value from burning this type of material.
- 21. Attached a diagram showing the following: [Note that an electronic version of this diagram/blueprint is not required.]
  - combustion chambers
  - waste feed ports
  - emissions stack
  - air supply fans and air feed
  - auxiliary burner

- control equipment
- continuous monitoring system sites
- 22. Attach energy balance equations for the materials incinerated.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B4 – VOC STORAGE TANKS

#### Complete one form for *each* VOC storage tank at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this tank commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this tank was installed. If before 1970, provide only the year.
- 4. Does this tank have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 5. Enter the name of the manufacturer.
- 6. Enter the rated capacity of the tank, in gallons.
- 7. Enter the height of the tank, in feet.
- 8. Enter the diameter of the tank, in feet.
- 9. Enter the approximate age of the tank.
- 10. Indicate (yes or no) whether the tank has a submerged fill pipe.
- 11. Indicate the type of tank. Select from the following.
  - external floating roof
  - fixed roof with internal floating roof
  - variable vapor space
  - pressurized
  - open top
  - fixed roof
  - other (please specify)

12. Indicate (yes or no) whether the tank is an underground storage tank. If the answer is "yes," indicate which of the following apply:

- single point fill tube and poppeted vapor return
- separate fill tube and vapor return points inside on well
- Parker Hannifin single point fill tube
- separate fill tube and vapor return points not inside on well.
- 13. If the tank is an above ground storage tank, provide the following information:
  - Pipe material.
  - Pipe size.
  - Piping drainage: Indicate (yes or no) whether the piping continuously drains downward. If the answer is "no," describe the condensate collection tank.
  - Isolation valves installed in piping (yes/no).
- 14. Pressure/vacuum relief valves.
  - Enter the pressure settings of the vents in pounds per square inch absolute
  - Enter the months in which the relief valves are removed to prevent freezing
- 15. Indicate (yes or no) whether the tank has a vent intended to conserve pressure. If the answer is "yes," specify at what pressure the vent is set, in pounds per square inch absolute.
- 16. Fixed roof tanks.
  - Enter the color of the roof.
  - Enter the color of the shell.
  - Enter the height of the vapor space inside the tank, on an estimated annual average.
  - Indicate the shell condition of the tank and whether it is lined with gunite: light rust gunite lined

dense rust other (specify)

- 17. Floating roof tanks.
  - Enter the type of construction of the tank.

• Enter the condition of the tank and whether it is lined with gunite:

light rust	gunite lined

- dense rust other (specify)
- Enter the color of the tank.
- Enter the type of deck on the tank. Welded

bolted

- 18. For external tanks with floating roofs, indicate how the roof is sealed:
  - shoe mounted primary
  - liquid primary with weather shield
  - vapor primary, rim secondary
  - liquid mounted primary
  - vapor primary with weather shield
  - shoe primary, rim secondary
  - vapor mounted primary
  - shoe primary and secondary
  - liquid primary, rim secondary
  - other (specify)
- 19. Internal tanks with floating roofs.
  - Enter how the roof is sealed.
    - Seal type:
      - liquid mounted primary
      - liquid primary, rim secondary
      - vapor mounted primary
      - vapor primary, rim secondary
    - Enter the number of columns.
    - Enter the effective column diameter, in feet.
    - Enter the total length of the deck seam, in feet.
  - Indicate the number of *EACH* type of deck fitting the tank has. Enter the number in the answer sheet in the space provided next to the appropriate fitting type(s).
- 20. Enter the maximum rate at which the tank can be filled, in gallons per hour.
- 21. Describe how submerged fill at the delivery truck out-loading is achieved.
- 22. For *each* material stored, provide the following information.
  - The name and type of material stored (e.g., gasoline, etc).
  - The anticipated normal annual throughput of this material, in gallons per year.
  - The normal number of turnovers per year.
  - The density of the material stored, in pounds per gallon.
  - The molecular weight of the material stored.
  - The average storage temperature, in degrees Fahrenheit.
  - The vapor pressure of the material stored, in pounds per square inch absolute, at the average stored temperature.

# For guidance on completing the information requested in number 22, refer to AP-42 Section 12.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM **B5** – MISCELLANEOUS EMISSION UNITS

#### Complete one form for each emission unit for which no other specific emission unit form is available.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this emission unit commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this emission unit was installed. If before 1970, provide only the year.
- 4. Enter the serial number from the emission unit nameplate or other physical component if applicable.
- 5. Does this emission unit have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 6. Briefly describe the emission unit, including any add-on pollution control devices.
- 7. Indicate whether the emission unit is continuous or batch. If batch, list the maximum number of batches processed per hour.
- 8. Raw material usage. Complete for *each* raw material used, as applicable.
  - Enter the type of raw material used in the emission unit.
  - For both continuous and batch processes, enter the maximum amount of raw material used in the emission unit operating at rated design capacity (pounds per hour or pounds per batch).
- 9. Production data. Complete for *each* product, as applicable.
  - Enter the type of product.
  - For both continuous and batch processes, enter the production of the process at maximum design capacity (pounds per hour or pounds per batch).
- 10. Attach any additional information necessary to describe this emission unit and its operating and usage parameters.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.1 – PAINTING OR COATING OPERATIONS

#### Complete this form *once* to summarize painting or coating operations at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Briefly describe the painting/coating operation.
- 3. Enter the date that construction/installation of this operation commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 4. Enter the date that this operation was installed. If before 1970, provide only the year.
- 5. Describe the application method and technology. For example: conventional spray; HVLP (high volume low pressure) spray; airless assisted air spray; conventional roller; brush; etc.
- 6. Curing ovens information:
  - Enter the number of ovens
  - Enter the type and grade, if applicable, of fuel used to heat the ovens. [If the ovens are heated with fuel, the owner/operator will need to incorporate the ovens themselves into an appropriate emissions unit. The owner/operator will need to complete Form B9.12, Material Dryer Device, to describe the ovens.]
  - Enter the rated heat input to the ovens, in millions of British Thermal Units per hour.
- 7. Estimate the quantity (by weight) of painting and coating waste disposed of off-site during the year, and indicate approximately what percentage of the waste consists of Volatile Organic Compounds (VOC).
- 8. Does the emission unit have any control devices for controlling VOC emissions? [yes or no] If yes, enter the identification number(s) or label(s) from Form Series C# along with the capture, destruction, and overall control efficiency.
- 9. Are the controls described above the result of an NSR/PSD permitting action? [yes or no]
- 10. For *each* paint and coating (except clean-up solvents, addressed in question 11) used in this operation, provide the following information:
  - The name of the paint/coating.
  - The paint/coating category (e.g., air-dried, oven-dried).
  - Annual usage. This refers to the maximum projected usage rate during the permit term.
  - The density of the paint/coating, in pounds per gallon.
  - The percentage by weight of nonexempt solvents.
- 11. For each clean-up solvent used in this operation, provide the following information:
  - The name of the clean-up solvent.
  - Annual usage. This refers to the maximum projected usage rate during the permit term.
  - The density of the clean-up solvent, in pounds per gallon.
  - The percentage by weight of nonexempt solvents.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.2 - PRINTING OPERATIONS

#### Complete this form *once* to summarize printing operations at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Briefly describe the printing operation.
- 3. Enter the date that construction/installation of this operation commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 4. Enter the date that this operation was installed. If before 1970, provide only the year.
- 5. Briefly describe or list the products printed.
- 6. Estimate the quantity (by weight) of painting and coating waste disposed of off-site during the year, and indicate approximately what percentage of the waste consists of Volatile Organic Compounds (VOC).
- 7. Does the emissions unit have any control devices for controlling VOC emissions? [yes or no] If yes, enter the identification number(s) or label(s) from Form Series C along with the capture, destruction, and overall control efficiency.
- 8. Are the controls described above the result of an NSR/PSD permitting action? [yes or no]
- 9. Provide the requested information for each dryer used in the process. [If the dryers are heated by burning fuel, the owner/operator will need to incorporate the dryers themselves into an appropriate emissions unit. The owner/operator will need to complete Form B9.12, Material Dryer Device, to describe the ovens.]
- 10. For *each* ink used in this operation, provide the following information:
  - The name of the paint/coating.
  - Annual usage. This refers to the maximum projected usage during the permit term.
  - The density of the ink in pounds per gallon.
  - The percentage by weight of nonexempt solvents.
- 11. For *each* clean-up solvent used in this operation, provide the following information:
  - The name of the clean-up solvent.
  - Annual usage. This refers to the maximum projected usage during the permit term.
  - The density of the clean-up solvent, in pounds per gallon.
  - The percentage by weight of nonexempt solvents.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

## FORM B9.3 – STORAGE PILES

Complete this form *once* for the storage pile fugitive emissions unit at the stationary source. Fugitive emissions are emissions that cannot reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Examples include dust or VOC emissions from wood piles.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Briefly describe the operations and indicate whether this fugitive emissions unit is defined for particulate or VOC. If particulate, indicate whether the owner/operator will quantify  $PM_{10}$  only or will distinguish between  $PM_{10}$  and Particulate Matter (PM).
- 3. Enter the date that construction/installation of this operation commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 4. Enter the date that this operation was installed. If before 1970, provide only the year.
- 5. Provide the following information for *each* individual storage pile in this emissions unit. [Use additional forms if there are more than 4 storage piles at the facility.] For guidance on completing the information requested below, refer to AP-42, Section 11.2.7.
  - Identify the material in the pile (e.g., gypsum, iron ore, clinker, wood chips, slag, road bed material, hog fuel, etc).
  - Identify the size of the pile (height x width x length) [ft].
  - Specify the number of disturbances (e.g., adding, removing, or moving material to, from, or within the storage pile) that occur in the pile on a regular basis (e.g., daily, weekly, monthly).
  - Identify the area of the disturbed surface (ft<sup>2</sup>).
  - Identify any fugitive controls used for this pile (e.g., watering, seeding, chemical suppression, physical enclosure).

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

## FORM B9.4 – MATERIALS HANDLING

Complete this form *once* for *each* materials handling fugitive emissions unit at the stationary source. Fugitive emissions are emissions that cannot reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Examples include fugitives from conveyors, outloading of rail cars, and pick-up and drop material handling activities.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Briefly describe the this fugitive emissions unit (e.g., three conveyors, a rail car outloading system, front-end loader moving hog fuel from a pile to a conveyor, etc).
- 3. Enter the date that construction/installation of this operation commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 4. Enter the date that this operation was installed. If before 1970, provide only the year.
- 5. For *each* source of fugitive emissions from material handling, provide the following information about fugitive emissions. For guidance on completing the information requested below, refer to AP-42, Section 11.2.3.
  - Enter the name of the emission unit.
  - Identify the material handled by this emission unit.
  - Specify the particle size of the fugitives from the material.
  - Specify the moisture content, in percent, of the material identified.
  - Specify the mean (average) wind speed, in miles per hour, associated with the fugitive emissions of this material.
  - Briefly describe any methods used to control the fugitive emissions (e.g., watering, physical enclosure, etc.)
  - Enter the frequency with which the material is transferred (e.g., number of times daily, weekly, monthly).
  - Enter the average quantity of material in each transfer (e.g., pounds, tons).

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.5 – UNPAVED ROADS

#### Complete this form *once* for unpaved roads at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Provide the following information about fugitive particulate emissions from the unpaved road at the stationary source. For guidance on completing the information requested, refer to AP-42, Section 11.2.1.
  - Road ID or description
  - Enter the particle size multiplier for the road material.
  - Specify the silt content, in percent, of the road material.
  - Specify the mean (average) speed, in miles per hour, of the vehicles that travel on the road.
  - Enter the mean (average) vehicle weight, in tons, of the vehicles that travel on the road.
  - Enter the mean (average) number of wheels of the vehicles that travel on the road.
  - Enter the number of days per year with at least 0.01 inch of precipitation.
  - Identify any fugitive controls used (e.g., watering, chemical suppression).

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.6 – INDUSTRIAL PAVED ROADS

#### Complete this form *once* for industrial paved roads at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Provide the following information about fugitive particulate emissions from the paved road at the stationary source. For guidance on completing the information requested, refer to AP-42, Section 11.2.1.
  - Road ID or description
  - Enter the industrial augmentation factor.
  - Specify the number of traffic lanes on the road.
  - Specify the silt content, in percent, of the surface material.
  - Specify the surface dust loading, in pounds per mile of road traveled.
  - Enter the mean (average) vehicle weight, in tons, of the vehicles that travel on the road.
  - Enter the vehicle miles traveled per month (maximum projected).
  - Enter the vehicle miles traveled per year (maximum projected).
  - Identify any fugitive controls used (e.g., watering, chemical suppression).

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

## FORM B9.7 – LUMBER DRY KILNS

#### Complete one form for *each* lumber dry kiln at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this kiln commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this kiln was installed. If before 1970, provide only the year.
- 4. Does this kiln have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 5. Enter the name of the manufacturer of the kiln.
- 6. Enter the heat source (e.g., steam, electricity, natural gas burner, etc.).
- 7. For each species of wood dried in the kiln, enter the average cycle time (e.g., drying time) and maximum design capacity.
- 8. If fuel is burned in the kiln, enter the type of fuel (e.g., natural gas, #2 distillate, etc.) and maximum amount of fuel used on an hourly basis.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.8 – CEMENT/LIME KILNS AND CALCINERS

#### Complete one form for *each* cement kiln, lime kiln, or calciner at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this emission unit commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this emission unit was installed. If before 1970, provide only the year.
- 4. Does this emission unit have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 5. Enter the name of the manufacturer of the emission unit.
- 5. Briefly describe the process, including any add-on pollution control devices.
- 7. Indicate whether this is a continuous or batch process.
- 8. Provide the maximum design capacity for each raw material processed.
- 9. Provide the maximum design capacity for each product.
- 10. Enter the type of fuel (e.g., natural gas, #2 distillate, etc.) and maximum amount of fuel used on an hourly basis.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.9 – MELT FURNACE SYSTEMS

# Complete one form for *each* furnace system at the stationary source. This may be an electric arc furnace at a steel mill, or it may be a series of furnaces for alloying aluminum.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this furnace system commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this furnace system was installed. If before 1970, provide only the year.
- 4. Does this furnace system have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 5. Enter the name of the manufacturer of the furnace system.
- 6. Briefly describe the furnace system, including any add-on pollution control devices. Identify the type of furnace in the system (e.g., melting, holding, sweating, remelting, alloying, fluxing, refining, dross, etc.).
- 7. Enter the holding capacity of the system, in tons. If this form is completed for a series of furnaces performing a process, then base the holding capacity on the portion of the system that most limits production capacity--that is, the "bottleneck" of the system.
- 8. Enter the typical cycle time (e.g., tap to tap)
- 9. Enter the heat source (e.g., natural gas burner, electricity, etc.)
- 10. Provide the furnace rating, in millions of BTUs per hour, or, if electric, in kilowatt hours.
- 11. Identify the types of alloying materials processed (e.g., chromium, cadmium, lead, manganese, etc.), if applicable to the furnace system. Provide the annual usage of each material. Indicate the method of alloy material introduction (e.g., pure or alloyed) for each material. If this does not apply, enter "NA."
- 12. Provide the maximum design capacity for each product.
- 13. Enter the type of fuel (e.g., natural gas, #2 distillate, etc.) and maximum amount of fuel used on an hourly basis.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.10 – KRAFT RECOVERY FURNACES

#### Complete one form for *each* kraft recovery furnace at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this recovery furnace commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this recovery furnace was installed. If before 1970, provide only the year.
- 4. Does this furnace have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 5. Enter the name of the manufacturer of the recovery furnace.
- 6. Provide a brief description of the recovery process, including any add-on pollution control devices.
- 7. Indicate whether the hot flue gases from the recovery furnace have direct or indirect contact with the black liquor in the evaporator.
- 8. Provide the requested operating data for the recovery furnace's capacity.
  - Specify the rated design capacity of the furnace, in pounds of black liquor solids (BLS) per hour.
  - Specify the maximum firing rate of the furnace, in pounds of BLS per hour.
  - If the maximum firing rate is higher than the rated design capacity, please explain why.
- 9. Enter the range of BLS sulfidity, in percent.
- 10. Enter the range of BLS going to the recovery furnace, in percent.
- 11. Indicate (yes or no) whether the recovery furnace is equipped with a black liquor oxidation tower.
- 12. Specify the firing method for auxiliary fuel for the furnace. Select from the following.
  - tangential
  - vertical
  - other (specify)
- 13. Indicate (yes or no) whether the recovery furnace has load burners.
- 14. Indicate (yea or no) whether hazardous waste is burned in the recovery furnace.
- 15. Enter the type of auxiliary fuel (e.g., natural gas, #2 distillate, etc.) and maximum amount of fuel used on an hourly basis.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.11 – HARDBOARD/PARTICLEBOARD/PLYWOOD PRESSES

#### Complete one form for each hardboard\particleboard press at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this emission unit commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this emission unit was installed. If before 1970, provide only the year.
- 4. Does this emission unit have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 5. Enter the manufacturer of the press.
- 6. Indicate the type of product produced in this press. Select from the following.
  - oriented strandboard (OSB)
  - particleboard
  - hardboard
  - medium density fiberboard (MDF)
  - flakeboard
  - waferboard
  - plywood
  - other (specify)
- 7. Enter the range in thickness in which this product is produced (inches).
- 8. Enter the maximum dimensions of the pressed board (inches).
- 9. Indicate the type(s) of resin(s) and additive(s) used in this product.
- 10. Indicate the range in resin content of this product (%).
- 11. Indicate the range in the formaldehyde:urea mole ratio in the resin.
- 12. Indicate the range in wax content of this product (%).
- 13. Indicate the range in press temperature (°F).
- 14. Indicate the range in press cycle time (minutes).

For question 15, the Department requires the owner/operator to provide information on *actual* hourly and annual production rates as well as those production rates *corrected* to an industry-standard product thickness. If, for example, the stationary source produces 1,000 square feet per hour of 3/8" particleboard, the owner/operator would correct that to 500 square feet per hour of 3/4" particleboard. Use the following industry standards for the corrections:

- 3/4" basis for particleboard
- 1/8" basis for hardboards (MDF and OSB)
- 3/8" basis for plywood
- 15. For *each* type of product and thickness identified in question 6, enter the maximum hourly production, as follows. The *maximum* production rate should be based on the maximum *capacity* of the press to produce the given thickness.
  - Identify the actual thickness (e.g., 1/2") of the board.
  - Identify the actual maximum hourly production rate, in square feet per hour, for that actual thickness.
  - Identify the press cycle time
  - Identify the corrected thickness, which is the actual thickness *corrected* to the industry-standard for the board type, as specified in the instructions above (e.g., 3/8" for particleboard).
  - Calculate the corrected hourly production rate, in square feet per hour. This is the hourly production rate of a based on the industry standard.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.12 – MATERIAL DRYERS

#### Complete one form for each material particle dryer at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this dryer commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this dryer was installed. If before 1970, provide only the year.
- 4. Does this dryer have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 5. Enter the name of the manufacturer of the dryer.
- 6. Indicate the type of dryer. Select from the following:
  - rotary
  - tube
  - flashtube
  - other (specify)
- 7. Provide a description of the dryer.
- 8. List the type of materials dried.
- 9. List any additives (e.g., urea/formaldehyde resin) added to the material before entering the dryer. This may be intentional or a result of re-using left over material from the production process.
- 10. Indicate the source(s) of heat. Select from the following all that apply:
  - steam (indirect)
  - wood waste
  - natural gas
  - oil
  - sanderdust
  - other (specify)
- 11. Provide the following operating ranges for each type of material dried in the dryer.
  - Moisture content (%) of material entering the dryer;
  - Moisture content (%) of material exiting the dryer;
  - Dryer exhaust gas temperature
  - Maximum hourly production rate
- 12. Enter the type of fuel (e.g., natural gas, #2 distillate, etc.) and maximum amount of fuel used on an hourly basis.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B9.13 – VENEER DRYERS

#### Complete one form for each veneer dryer at the stationary source.

- 1. Enter the Emission Unit ID Number and operating scenario. Operating scenario does not need to be noted if there is only one operating scenario for the emission unit.
- 2. Enter the date that construction/installation of this dryer commenced (see page 2 of these instructions for discussion of the correct date for use here).
- 3. Enter the date that this dryer was installed. If before 1970, provide only the year.
- 4. Does this dryer have special control requirements as a result of NSR/PSD (yes or no)? If yes, discuss.
- 5. Enter the name of the manufacturer of the dryer.
- 6. Enter the type of dryer. Select from the following.
  - jet
  - longitudinal
  - crossflow
  - other (specify)
- 7. Enter the heat source for the dryer. Select from the following.
  - steam
  - wood
  - natural gas
  - other (specify)
- 8. Enter the number of decks in the dryer.
- 9. Enter the number of zones in the dryer.
- 10. Provide the following operating parameters:
  - Species
  - Thickness (inches)
  - Dryer temperature (°F), if there are multiple zones, provide the temperature for each zone
  - Maximum hourly production (ft<sup>2</sup>/hr)
- 11. Enter the type of fuel (e.g., natural gas, #2 distillate, etc.) and maximum amount of fuel used on an hourly basis.

Attach any applicable EPA-granted waivers, exemptions, or custom monitoring plans specific to the emission unit.

# FORM B Emission Unit Listing For This Application

Stationary Source Name:		Permit Number:		
	EMISSION UNIT LISTING	: New, Modified, Previously Unper	mitted, Replaced, De	leted
Emission Unit ID Number	Emission Unit Name	Brief Emission Unit Description	Rating/Size	Construction Date
	Emission Units To Be ADDED B	y This Application (New, Previously	Unpermitted, or Repla	cement)
	Emission U	Jnits To Be MODIFIED By This App	olication	
	Emission	Units To Be DELETED By This App	lication	1

# FORM B Emission Unit Listing For This Application

EMISSION UNIT LISTING: Title V permitted emission units that have not been modified				
Emission Unit ID Number	Emission Unit Name	Brief Emission Unit Description	Rating/Size	Construction Date

# **FORM B1** Emission Unit Detail Form – External Combustion Equipment (Boilers and Heaters)

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [if yes, describe]	
6.	Manufacturer	
7.	Description of emission unit, including type of bo	iler/heater and firing method:
8.	Rated design capacity (heat input. Btu/hr)	
9.	Maximum steam production rate (lbs/hr)	
10.	Maximum steam pressure (psi)	
11.	Maximum steam temperature (°F)	
	internet south temperature (1)	

# 12. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)

13.	Is waste heat utilized for any purpose? If yes, describe:

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

#### Non-applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

# FORM B2 Emission Unit Detail Form - Internal Combustion Equipment (Engines and Turbines)

Statio	nary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced <sup>1</sup>	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [ if yes, describe]	
6.	Manufacturer and model number	
7.	Type of combustion device	
8.	Rated design capacity (horsepower)	
9.	Rated design capacity (heat input, Btu/hr)	
10.	If used for power generation, electrical output (kW)	

<sup>1.</sup> See page 2 of the Form B instructions regarding installation/construction date and consult regulations under 40 C.F.R. 60 (NSPS) and 40 C.F.R. 63 (NESHAP) for applicability dates, e.g.,

- NSPS Subparts IIII and JJJJ, and NESHAP Subpart ZZZZ for engines, and

- NSPS Subparts GG and KKKK, and NESHAP Subpart YYYY for turbines.

Note that other regulations may apply in addition to the regulations cited.

# 11. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)

12.	Describe any specific modifications to the emission unit that must be addressed in the permit:

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

#### Non-applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

# FORM B3 Emission Unit Detail Form - Incinerators

Stationary Source Name:		Permit Number:	
1.	Emission Unit ID Number // Operating Scenario		
2.	Date installation/construction commenced <sup>1</sup>		
3.	Date installed		
4.	Emission Unit serial number		
5.	Special control requirements? [if yes, describe]		
6.	Manufacturer		
7.	Waste classification		
8.	Type of incinerator		
9.	Charge information:		
	batch or continuous		
	charge method		
	charge measurement method		
10.	Primary combustion chamber information:		
	temperature (°F)		
	rated heat input (Btu/hr)		
	type/grade fuel(s)		
11.	Secondary combustion chamber information:		
	temperature (°F)		
	gas residency time [attach calculations]		
	rated heat input (Btu/hr)		
	type/grade fuel(s)		
12.	Automatically controlled auxiliary burners?		
13.	Interlock system to control charging?		
14.	Air lock system?		
15.	Waste heat boiler?		
16.	Maximum flue gas outlet temperature (°F)		
17.	Rated capacity (tons material /day)		
18.	Emergency bypass stack?		
19.	Incinerator design efficiency (%) [attach calculations]		

<sup>1</sup> See page 2 of the Form B instructions regarding installation/construction date and consult regulations under 40 C.F.R. 60 (NSPS) and 40 C.F.R. 63 (NESHAP) for applicability dates.

## 20. Incinerated materials:

Material	Origin of material	Weight percentage (%)	Heating value (Btu/lb)

21. Attach diagram.

22. Attach energy balance equations for the materials incinerated.

# FORM B3 Emission Unit Detail Form - Incinerators

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

<sup>1</sup> Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

#### Non-applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Permit Shield Request):

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

# FORM B4 Emission Unit Detail Form - VOC Storage Tanks

Statior	ary Source Name:	Permit Number:		
1.	Emission Unit ID Number // Operating Scenario			
2.	Date installation/construction commenced			
3.	Date installed			
4.	Special control requirements? [if yes, describe]			
5.	Manufacturer			
6.	Rated capacity (gallons)			
7.	Tank height (ft)			
8.	Tank diameter (ft)			
9.	Tank age (years)			
10.	Submerged fill pipe?			
11.	Type of tank (specify)			
12.	Underground?			
	If underground, specify type of tube and vapor return.			
13.	Above ground vapor control information:			
	Pipe material			
	Pipe size			
	Piping drainage (continuous drain downward or condensate collection tank – if condensate collection, attach a description) Isolation valve installed in piping?			
14.	Pressure vacuum relief valves:			
	Vent pressure settings (psia)			
	Months in which relief valves removed (specify)			
15.	Pressure conservation vent? [if			
16.	Fixed roof tanks:			
	Roof color			
	Shell color			
	Average vapor space height (ft)			
	Shell condition (specify)			
# FORM B4 Emission Unit Detail Form - VOC Storage Tanks

	Emission Unit ID Number	
17	Floating roof tanks:	
	Type of construction (specify)	
	Condition (specify)	
	Tank color	
	Deck type (specify)	
18.	External floating roof tanks, seal type (specify)	
19.	Internal floating roof tanks:	
	Seal type (specify)	
	Number of columns	
	Effective column diameter (ft)	
	Total deck seam length (ft)	
	Deck fitting types – access hatch	
	bolted cover, gasketed	
	unbolted cover, gasketed	
	unbolted cover, ungasketed	
	Deck fitting types - Automatic gauge	float well
	bolted cover, gasketed	
	unbolted cover, gasketed	
	unbolted cover, ungasketed	
	Deck fitting types – column well	
	Built up column – sliding cover, gasketed	
	Built up column – sliding cover, ungasketed	
	Pipe column – flexible fabric	
	sleeve seal Pipe column – – sliding cover,	
	gasketed	
	Pipe column – – sliding cover, ungasketed	
	Deck fitting types – ladder well	
	sliding cover, gasketed	
	sliding cover, ungasketed	

# FORM B4 Emission Unit Detail Form - VOC Storage Tanks

	Emission Unit ID Number	
19.	Deck fitting types – smple well or	
	pipe Slotted pipe sliding cover	
	slotted pipe – shalling cover,	
	Slotted pipe – sliding cover,	
	ungasketed	
	Sample well – slit fabric seal, 10%	
	open area	
	Stub drain – 1-inch diameter	
	Deck fitting type – roof leg or hanger	will
	Adjustable	
	fixed	
	Deck fitting type – vacuum breaker	
	Weighted mechanical actuation,	
	gasketed	
	Weighted mechanical actuation,	
20.	Maximum liquid loading rate	
	(gal/hr)	
21	Submerged fill at out-loading	
	(describe)	
22.	Material(s) stored	
	Type of material	
	Normal annual throughput (gal/yr)	
	Normal turnovers per year	
	Density (lbs/gal)	
	Molecular weight	
	Average storage temperature (°F)	
	Vapor pressure (psi)	

## **FORM B4** Emission Unit Detail Form - VOC Storage Tanks

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

## FORM B5 Emission Unit Detail Form - Miscellaneous Emission Units

Stationary Source Name:		Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Emission Unit serial number	
5.	Special control requirements? [ if yes, describe]	
6.	Description of process:	
7.	Continuous or batch process? [if batch, maximum batches per hour]	

### 8. Raw material usage: [for EACH raw material used, enter]:

Material	Maximum design capacity (lbs/batch or lbs/hr)	

### 9. Production data: [for EACH product, enter]:

Product	Maximum design capacity (lbs/batch or lbs/hr)	

10. Attach any additional information necessary to describe this process and its operating and usage parameters, both short-term and annual.

FORM B5 Emission Unit Detail Form - Miscellaneous Emission Units

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# **FORM B9.1** Emission Unit Detail Form - Painting or Coating Operations

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Description of operation	
3.	Date installation/construction commenced	
4.	Date installed	
5.	Application method and technology	
6.	Curing ovens: Number of ovens	
	Type and grade of fuel	
	Rated heat input (Btu/hr)	
7.	Waste disposal Quantity (tons/yr)	
	VOC content (%)	
8.	Are there any control devices? [if yes, enter the ID from Form C# and the capture, destruction, and overall efficiency.]	
9.	Special control requirements?	

#### 10. Painting/coating VOC Emissions:

Paint/coating name	Category	Annual usage (gallons)	Density (lbs/gal)	Non-exempt VOC (wt.%)

## 11. Cleanup Solvent VOC Emissions:

Solvent	Annual usage (gallons)	Density (lbs/gal)	Non-exempt VOC (wt %)

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# **FORM B9.2** Emission Unit Detail Form - Printing Operations

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Description of operation	
3.	Date installation/construction commenced	
4.	Date installed	
5.	Products printed	
6.	Waste disposalQuantity (tons/yr)	
	VOC content (%)	
7.	Are there any control devices? [if yes, enter the ID from Form Series C and the capture, destruction, and overall efficiency.]	
8.	Special control requirements?	

### 9. Dryer specifications:

Dryer ID		
Manufacturer		
Model number		
Fuel		
Heat input (Btu/hr)		

## 10. Printing VOC Emissions:

Ink name	Annual usage (gallons)	Density (lbs/gal)	Non-exempt VOC (wt.%)

## 11. Cleanup Solvent VOC Emissions:

Solvent	Annual usage (gallons)	Density (lbs/gal)	Non-exempt solvents (weight %)

## **FORM B9.2** Emission Unit Detail Form - Printing Operations

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# **FORM B9.3** Emission Unit Detail Form - Storage Piles

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Description of operations	
3.	Date installation/construction commenced	
4.	Date installed	

## 5. Storage Pile Information:

Storage pile ID		
Name of material		
Size of pile (height x width x length) [ft]		
Number of disturbances		
Disturbed surface area $(ft^2)$		
Fugitive controls		

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# FORM B9.4 Emission Unit Detail Form - Materials Handling

Station	ary Source Name:	Permit Number:
<b></b>		
1.	Emission Unit ID Number // Operating Scenario	
2.	Description of operations	
3.	Date installation/construction commenced	
4.	Date installed	

5.

Name		
Material	 	
Particle size (microns)		
Moisture content (%)		
Mean wind speed (mph)		
Fugitive controls		
Frequency of material transfer		
Average quantity in each transfer		

## **FORM B9.4** Emission Unit Detail Form - Materials Handling

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# **FORM B9.5** Emission Unit Detail Form - Unpaved Roads

Stationa	ry Source Name:	Permit Number:		
			-	
1.	Emission Unit ID Number // Operating Scenario			

## 2. Fugitive emissions:

Road		
Particle size		
multiplier		
Silt content (%)		
Mean vehicle speed		
(mph)		
Mean vehicle weight		
(tons)		
Mean number of		
wheels		
Annual number of		
days with		
precipitation greater		
than 0.01"		
Fugitive controls		

## **FORM B9.5** Emission Unit Detail Form - Unpaved Roads

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Reason for non-applicability and citation/basis

# **FORM B9.6** Emission Unit Detail Form - Paved Industrial Roads

Stationary Source Name:	Permit Number:	

1.	Emission Unit ID Number // Operating Scenario	

## 2. Fugitive emissions:

Road		
Industrial		
augmentation factor		
Number of traffic		
lanes on road		
Silt content (%)		
Surface dust loading		
(lbs/mile traveled)		
Mean vehicle weight		
Vehicle miles traveled		
(miles/month)		
Vehicle miles traveled		
(miles/year)		
Fugitive emissions		
control		

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

## FORM B9.7 Emission Unit Detail Form - Lumber Dry Kilns

 Stationary Source Name:
 Permit Number:

 1.
 Emission Unit ID Number // Operating Scenario

 2.
 Date installation/construction commenced

 3.
 Date installed

 4.
 Special control requirements? [if yes, describe]

 5.
 Manufacturer

 6.
 Heat source (if fuel is burned to heat the kiln, complete item 8)

#### 7. Species of wood dried: [for EACH species, enter]:

Species	Average cycle time (hours)	Maximum design capacity (board feet/cycle)

### 8. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)

## **FORM B9.7** Emission Unit Detail Form - Lumber Dry Kilns

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# FORM B9.8 Emission Unit Detail Form - Cement/Lime Kilns and Calciners

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Special control requirements? [if yes, describe]	
5.	Manufacturer	
6.	Description:	
7.	Continuous or batch process? [if batch,	
	maximum batches per hour or day]	

### 8. Feed rates: [for EACH material used, enter]:

Material	Maximum design capacity (lbs/batch or lbs/hr)

## 9. Production data: [for EACH product, enter]:

Product	Maximum design capacity (lbs/batch or lbs/hr)

### 10. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# **FORM B9.9** Emission Unit Detail Form - Melt Furnace Systems

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Special control requirements? [if yes, describe]	
5.	Manufacturer	
6.	Description of furnace system, including degassing	g, demagging, and other work practices:
7.	Holding capacity (tons)	
8.	Cycle time (hours)	
9.	Heat source:	
10.	Rating (Btu/hr or kWh)	

### 11. Alloying materials processed: [for EACH material, enter]:

Material	Annual usage (units)	Method

### 12. Production data: [for EACH product, enter]:

Product	Maximum design capacity (lbs/batch or lbs/hr)

### 13. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# **FORM B9.10** Emission Unit Detail Form - Kraft Recovery Furnaces

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Special control requirements? [if yes, describe]	
5.	Manufacturer	
6.	Describe recovery process:	
7.	Flue gases (direct or indirect contact)	
8.	Operating data:	
	rated design capacity (lbs BLS/hr)	
	maximum firing rate (lbs BLS/hr)	
	description of why firing rate is higher than	
9.	Range of BLS sulfidity (%)	
10.	Range of BLS going to the recovery furnace (%)	
11.	Equipped with black liquor oxidation toxer?	
12.	Firing method	
13.	Load burners?	
14.	Hazardous waste burned?	

15. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)
# **FORM B9.10** Emission Unit Detail Form - Kraft Recovery Furnaces

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# FORM B9.11 Emission Unit Detail Form - Hardboard/Particleboard/Plywood Presses

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Special control requirements? [if yes, describe]	
5.	Manufacturer	
6.	Product type	
7.	Range in product thickness (inches)	
8.	Maximum board dimensions (inches)	
9.	Resin(s)/additive(s)	
10.	Range in resin content (%)	
11.	Range in formaldehyde:urea mole ratio	
12.	Range in wax content (%)	
13.	Range in press temperature (°F)	
14.	Range in press cycle time	

# 15. Operating parameters:

Actual thickness (inches)	Maximum throughput (ft <sup>2</sup> /hr)	cycle time (minutes)	Corrected thickness (inches)	Maximum throughput (ft <sup>2</sup> /hr)

FORM B9.11 Emission Unit Detail Form - Hardboard/Particleboard/Plywood Presses

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

# **FORM B9.12** Emission Unit Detail Form - Material Dryers

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Special control requirements? [if yes, describe]	
5.	Manufacturer	
6.	Type of dryer	
7.	Description of dryer:	
8.	Material(s) dried	
9.	Material additive(s)	
10.	Heat source	

## 11. Operating parameters:

Material	Range of moisture content entering dryer (%)	Range of moisture content exiting dryer (%)	Range in dryer exhaust gas temperature(°F)	Maximum hourly production (units)

12. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)

# **FORM B9.12** Emission Unit Detail Form - Material Dryers

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis
-	

# **FORM B9.13** Emission Unit Detail Form - Veneer Dryers

Station	ary Source Name:	Permit Number:
1.	Emission Unit ID Number // Operating Scenario	
2.	Date installation/construction commenced	
3.	Date installed	
4.	Special control requirements? [if yes, describe]	
5.	Manufacturer	
6.	Type of dryer	
7.	Heat source	
8.	Number of decks	
9.	Number of zones	

### 10. Operating parameters:

Species	Thickness (inches)	Dryer temperature (°F)	Percent re-dry	Maximum hourly production (ft <sup>2</sup> /hr)

### 11. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)

## **FORM B9.13** Emission Unit Detail Form - Veneer Dryers

Applicable Requirements Specific to Emission Unit (attach additional sheets as needed. Form B Supplement - Emission Unit-Specific Applicable Requirements):

Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods

Non-Applicable Requirements <sup>1</sup>	Reason for non-applicability and citation/basis

## **FORM B SUPPLEMENT** Emission Unit-Specific Applicable Requirements

Alaska Department of Environmental Conservation

Stationary Source Name:

Permit Number:

### Stationary Source-Wide Applicable Requirements (attach additional sheets as needed):

Affected Emission Units (EUID)	Permit and Condition Number	Applicable Requirement Citation <sup>1</sup>	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Monitoring, Recordkeeping and Reporting Methods
<sup>1</sup> Citations must be s	pecific. Include sub-	paragraph level detail	[e.g. 18 AAC 50.055	5(a)(1), or 40 C.F.R. (	50.332(a)(2).]	

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Revised 07/08/2011

## Emis st

Stationary Source Name: Permit Number:

#### Non-applicable requirements (attach additional sheets as needed):

Non-Applicable Requirements<sup>1</sup> EU ID Reason for non-applicability and citation/basis

Citations must be specific. Include sub-paragraph level detail [e.g. 18 AAC 50.055(a)(1), or 40 C.F.R. 60.332(a)(2).]

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	FORM B SUPPLEMENT
ssion Unit-Specific Permit Shield Reque	ssion Unit-Specific Permit Shield Reques