

Form Series EU500 provides forms for summarizing information about the emissions units defined for the Permit. Note that some of the forms in this series are tailored to particular types of emissions units, while others are more general. The following forms are included in this series.

Form Number	Description	Page Number
EU501	EU501 is a generic Emissions Unit Summary form. Use this form to represent the emissions units defined from the devices and processes identified in Form Series DV200.	2
EU502	EU502 is a Painting or Coating Operation Emissions Unit Summary form. Complete this form <i>once</i> for painting and coating operations at the facility.	2
EU503	EU503 is a Printing Operation Emissions Unit Summary form. Complete this form <i>once</i> for printing operations at the facility.	3
EU504	EU504 is a Plant-Wide VOC Material Balance Emissions Unit Summary form. This form is used if the entire facility is defined as an emissions unit for purposes of VOC material balance.	4
EU505	EU505 is for storage piles emitting fugitive particulate matter (PM) or VOCs.	5
EU506	EU506 is for materials handling activities emitting fugitive PM or VOCs.	6
EU507	EU507 is for unpaved roads emitting fugitive PM.	6
EU508	EU508 is for paved industrial roads emitting fugitive PM.	6
Applicable Requirements Instructions		7
Compliance Monitoring Methods		8
Example Compliance Schedule		9

As discussed in the Application Instructions, emissions units are the grouping of one or more pieces of equipment (devices) or processes that all:

- Emit the same regulated air pollutant(s);
- Trigger the same applicable requirements; and
- Share the same compliance monitoring method(s).

For each of the emissions unit forms, the owner/operator will first provide information that defines the emissions unit. On Form EU501, the emissions units are defined by the emissions devices, processes, and control devices described on Form Series DV200 and CD300. For all of the other EU500 forms, the owner/operator is asked to describe the emissions unit on the emissions unit form itself.

The second part of the form captures information about the pollutant emissions. List the regulated pollutant(s) and the projected maximum annual emissions. For Form EU501, the emissions information is obtained from Form ED605. For all of the other EU500 forms, the owner/operator is asked to provide the emissions information and supporting calculations on the emissions unit form itself. [The emissions totals can then be transferred to Form ED605.]

The last section of each form captures information about applicable requirements and compliance monitoring. To complete this section of the Emissions Unit Summary forms refer to two forms:

- Form AR401, Applicable Requirements Checklist--the owner/operator will need to transfer relevant applicable requirements from Form AR401 to this form. Specifically, review Form AR401 to determine which of the ◆-marked applicable requirements to which he/she responded "YES" apply to this emissions unit. Indicate whether or not the emissions unit is currently in compliance with the applicable limits and standards identified. If "no," attach a compliance schedule. See the example provided on page 9.
- Form Series CP700, Monitoring--complete the appropriate form from Form Series CP700 for each emissions



unit. For those emissions units based on VOC material balance (Forms EU502, EU503, and EU504), the compliance monitoring method is always **material balance**. Thus, the owner/operator will complete Form CP707 for the emissions units defined on EU502. EU503, and EU504.

#### **Dates**

Some emissions unit summaries contain questions addressing the date on which the emissions unit was first installed or constructed, or on which the owner/operator first commenced construction/installation of the unit. These dates are collected for purposes of determining the applicability of certain standards, specifically New Source Performance Standards, MACT, NSR/PSD, and standards in Divisions 208, 226, and 228. In completing these questions, the owner/operator should understand the definition of the term *commenced*. This term refers to the date on which the owner/operator first made a financial commitment to install or construct the unit.

#### **EU501-EMISSIONS UNIT SUMMARY SHEET**

For <u>each</u> emissions unit other than those described on Forms EU502 through EU508, complete one Emissions Unit Summary Sheet, Form EU501.

- 1. Enter the name and identification (ID) number or label assigned to this emissions unit by the owner/operator.
- 2. Briefly describe the emissions unit (e.g., boilers, dryers, etc.).
- 3. Enter the identification number(s) or label(s) of the operating scenario(s) in which this emissions unit, in this configuration, is found. (Identification number(s) and label(s) have been assigned to the operating scenario(s) on Form AP103.)
- 4. Define the emissions unit:
  - Enter the identification numbers or labels of the constituent devices and/or processes for which this
    emissions unit has been defined. (These devices/processes have been described and assigned
    identification numbers or labels on the appropriate forms in Form Series DV200.)
  - Enter the identification number(s) of the control device(s) associated with the devices and/or
    processes within the emissions unit. (The identification numbers and labels are assigned on Form
    CD301.)
- 5. Identify the regulated air pollutant(s) for which this emissions unit has been defined. For each pollutant identified, provide the annual Plant Site Emissions Limits (PSELs) in tons per year. If requesting a facility-wide PSEL, provide the component of the PSEL that applies to the individual emissions unit. This information is obtained from Form ED605.

If the PSELs identified in question **5** do *not* equal the totals provided in the Emissions Data Form(s) ED605 for this emissions unit, explain the discrepancies. This may involve addressing any operating restrictions associated with the emissions unit that will limit emissions. This explanation will help DEQ understand the PSELs relative to the operating data that was provided on the relevant device/process forms (Form Series DV200) for this emissions unit, and the emissions data provided on Form(s) ED605.

## Example:

An owner/operator defines an emissions unit as containing three power boilers. Each boiler has the capacity to emit 40 tons per year of  $NO_x$  (as illustrated through the data provided in Form DV202). Thus, if all boilers operated at full capacity, the emissions unit would emit 120 tons per year of  $NO_x$ . The owner/operator is requesting an emissions limit of 80 tons per year (on Form ED605) to reflect the fact that it will operate only two of the three boilers at any given time. The owner/operator has employed certain *operating restrictions* to limit air emissions from this emissions unit.

6. Applicable requirements. Refer to the Applicable Requirements Instructions on page 7.

### **EU502 – PAINTING OR COATING OPERATIONS**

Complete this form *once* to summarize painting or coating operations at the facility.

Note that device/process forms (Form Series DV200) are not needed to elaborate on the information contained in this



form, unless otherwise noted.

1. Enter the name and identification (ID) number or label assigned to this emissions unit by the owner/operator.

- 2. Briefly describe the painting/coating operation.
- 3. Enter the date that construction/installation of this operation commenced.
- 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, incorporate the ovens themselves into an appropriate emissions unit. Complete Form DV209, Material Dryer Device, to describe the ovens and then Form EU501, Emissions Unit Summary, for the emissions unit into which the ovens are grouped.]
  - 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 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 CD300 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. (See OAR 340-200-0020 for a discussion of exempted solvents under the definition of Volatile Organic Compounds.)
  - The control efficiency, if controls are used.
  - The annual emissions, which equals the annual usage times the density times the non-exempt VOC weight % times (1 minus the control efficiency/100), if there is a control device.
- 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. (See OAR 340-200-0020 for a discussion of exempted solvents under the definition of Volatile Organic Compounds.)
  - The VOC emissions, in tons per year.
- 12. Enter the total VOC emissions from the paint/coating operations and cleanup solvents. This is the sum of the emissions calculated in questions 10 and 11. This information should be transferred to Form ED605 with a cross-reference back to this form.
- 13. Applicable requirements. Refer to the Applicable Requirements Instructions on page 7. Note that the compliance monitoring method to be used for this emissions unit is *material balance*. The owner/operator will need to complete Form CP707.

### **EU503- PRINTING OPERATIONS**

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

Device/process forms (Form Series DV200) are not needed to elaborate on the information contained in this form, unless otherwise noted.



1. Enter the name and identification (ID) number or label assigned to this emissions unit by the owner/operator.

- 2. Briefly describe the printing operation.
- 3. Enter the date that construction/installation of this operation commenced.
- 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 CD300 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, incorporate the dryers themselves into an appropriate emissions unit. Complete Form DV209, Material Dryer Device, to describe the dryers and then Form EU501, Emissions Unit Summary, for the emissions unit into which the dryers are grouped.]
- 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. (See OAR 340-200-0020 for a discussion of exempted solvents under the definition of Volatile Organic Compounds.)
  - The control efficiency, if controls are used.
  - The annual emissions, which equals the annual usage times the density times the non-exempt VOC weight % times (1 minus the control efficiency/100), if there is a control device.
- 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. (See OAR 340-200-0020 for a discussion of exempted solvents under the definition of Volatile Organic Compounds.)
  - The VOC emissions, in tons per year.
- 12. Enter the total VOC emissions from the printing operations and cleanup solvents. This is the sum of the emissions calculated in questions 10 and 11. This information should be transferred to Form ED605 with a cross-reference back to this form.
- 13. Applicable requirements. Refer to the Applicable Requirements Instructions on page 7. Note that the compliance monitoring method to be used for this emissions unit is *material balance*. The owner/operator will need to complete Form CP707.

# **EU504 – FACILITY-WIDE VOC**

Complete this form *once* for all emissions of volatile organic compounds (VOCs) at the facility for which compliance is being demonstrated through material balance of chemical usage at the facility. This form should *not* be used for fugitive VOC sources such as storage or handling of raw materials or wood products--address those fugitive VOC-emitting activities through forms EU505 and EU506.

Device/process forms (Form Series DV200) are not needed to elaborate on the information contained in this form, unless otherwise noted.

- 1. Enter the name and identification (ID) number or label assigned to this emissions unit by the owner/operator.
- 2. Briefly describe the source of the VOC emissions.

Example: The circuit board printing building has twenty vents through which volatilized chemicals pass.



- 3. Enter the date that construction/installation of this operation commenced.
- 4. Enter the date that this operation was installed. If before 1970, provide only the year.
- 5. Estimate the quantity (by weight) of VOC containing waste disposed of off-site during the year, and indicate approximately what percentage of the waste consists of Volatile Organic Compounds (VOC).
- 6. Does the emissions unit have any control devices for controlling VOC emissions? [yes or no] If yes, enter the identification number(s) and label(s) from Form Series CD300 along with the capture, destruction, and overall control efficiency.
- 7. Are the controls described above the result of an NSR/PSD permitting action? [yes or no]
- 8. For *each* material used in this operation, provide the following information:
  - The name of the material.
  - Annual usage. This refers to the maximum projected annual usage during the permit term.
  - The density of the material in pounds per gallon.
  - The percentage by weight of nonexempt solvents. (See OAR 340-200-0020 for a discussion of exempted solvents under the definition of Volatile Organic Compounds.)
  - The control efficiency, if controls are used.
  - The annual emissions, which equals the annual usage times the density times the non-exempt VOC weight % times (1 minus the control efficiency/100), if there is a control device.
  - Total the emissions. This information should be transferred to Form ED605 with a cross-reference back to this form.
- 9. Applicable requirements. Refer to the Applicable Requirements Instructions on page 7. Note that the compliance monitoring method to be used for this emissions unit is *material balance*. The owner/operator will need to complete Form CP707.

#### **EU505 – STORAGE PILES**

Complete this form *once* for the storage pile fugitive emissions unit at the facility. Fugitive emissions are emissions that cannot reasonably pass through a stack, chimney, vent, or other functionally equivalent opening (OAR 340-200-0020). Examples include dust or VOC emissions from wood piles.

Device/process forms (Form Series DV200) are not needed to elaborate on the information contained in this form. This form is a self-contained form for describing fugitive emissions from storage piles.

- 1. Enter the name and identification (ID) number or label assigned to this emissions unit by the owner/operator.
- 2. Briefly describe the operations and indicate whether this fugitive emissions unit is defined for particulate or VOC. If particulate, quantify PM, PM<sub>10</sub> and PM<sub>2.5</sub>.
- 3. Enter the date that construction/installation of this operation commenced.
- 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 in completing the information requested below, refer to AP-42, Section 13.2.5.** 
  - 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).
  - 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).
  - Enter the PM, PM<sub>10</sub>, PM<sub>2.5</sub> and VOC emission factors (e.g., lbs/ft<sup>2</sup> of surface area, etc) used to calculate the fugitive emissions for this device/process pollutant. Specify the unit of measure. Be sure to incorporate the efficiency of the fugitive controls identified.
  - Calculate the annual PM, PM<sub>10</sub>, PM<sub>2.5</sub> and VOC emissions, in tons per year based on the maximum



amount of raw materials, wastes, or by-products maintained and expected to be disturbed in the pile in a year. The number should reflect the highest amount anticipated for any one year in the permit term. This information should be transferred to Form ED605 with a cross-reference back to this form.

• Attach supporting data and calculations used to determine the emission factor(s) and emissions.

6. Applicable requirements. Refer to the Applicable Requirements Instructions on page 7. The compliance monitoring method to be used for this emissions unit is *recordkeeping*. The owner/operator will need to complete Form CP710.

#### **EU506 – MATERIALS HANDLING**

Complete this form *once* for *each* materials handling fugitive emissions unit at the facility. Fugitive emissions are emissions that cannot reasonably pass through a stack, chimney, vent, or other functionally equivalent opening (OAR 340-200-0020). Examples include fugitives from conveyors, outloading of rail cars, and pick-up and drop material handling activities.

Device/process forms (Form Series DV200) are not needed to elaborate on the information contained in this form. This form is a self-contained form for describing fugitive emissions from storage piles.

- 1. Enter the name and identification (ID) number or label assigned to this emissions unit by the owner/operator.
- 2. Briefly describe the devices and/or processes in 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.
- 4. Enter the date that this operation was installed. If before 1970, provide only the year.
- 5. For *each* device/process for which this materials handling fugitive emissions unit has been defined, provide the following information about fugitive emissions. [Use additional forms if there are more than 4 devices.] **For guidance in completing the information requested below, refer to AP-42, Section 13.2.4.** 
  - Enter the name of the device/process.
  - Identify the material handled by this device/process.
  - 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).
  - Identify any controls used (e.g., enclosures, watering, chemical suppression, etc.).
  - Calculate the annual PM, PM<sub>10</sub>, PM<sub>2.5</sub> and VOC emissions, in tons per year based on the maximum amount of raw materials, wastes, or by-products handled in a year. The number should reflect the highest amount anticipated for any one year in the permit term. This information should be transferred to Form ED605 with a cross-reference back to this form.
  - Attach supporting data and calculations used to determine the emission factor(s) and emissions.
- 6. Applicable requirements. Refer to the Applicable Requirements Instructions on page 7. The compliance monitoring method for this fugitive emissions unit is *recordkeeping*. The owner/operator will need to complete Form CP710.

#### EU507 – UNPAVED ROADS

Complete this form *once* for unpaved roads at the facility.

Device/process forms (Form Series DV200) are not needed to elaborate on the information contained in this form. This



form is a self-contained form for describing fugitive emissions from unpaved roads.

1. Enter the name and identification (ID) number or label assigned to this emissions unit by the owner/operator.

- 2. Provide the following information about fugitive particulate emissions from the unpaved road at the facility. For guidance in completing the information requested below, refer to AP-42, Section 13.2.2.
  - 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).
  - Enter the particulate matter (PM) emission factor and attach calculations.
  - Enter the annual PM emissions and attach calculations.
  - Enter the annual PM<sub>10</sub> emissions and attach calculations.
  - Enter the annual PM<sub>2.5</sub> emissions and attach calculations.
- 3. Applicable requirements. Refer to the Applicable Requirements Instructions on page 7. Note that the compliance monitoring method for this fugitive emissions unit is recordkeeping. The owner/operator will need to complete Form CP710.

## **EU508 – INDUSTRIAL PAVED ROADS**

# Complete this form once for industrial paved roads at the facility.

Device/process forms (Form Series DV200) are not needed to elaborate on the information contained in this form. This form is a self-contained form for describing fugitive emissions from paved roads.

- 14. Enter the name and identification (ID) number or label assigned to this emissions unit by the owner/operator.
- Provide the following information about fugitive particulate emissions from the paved road at the facility. For guidance in completing the information requested below, refer to AP-42, Section 13.2.1.
  - 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).
  - Enter the particulate matter (PM) emission factor and attach calculations.
  - Enter the annual PM emissions and attach calculations.
  - Enter the annual PM<sub>10</sub> emissions and attach calculations.
  - Enter the annual PM<sub>2.5</sub> emissions and attach calculations.
- 16. Applicable requirements. Refer to the Applicable Requirements Instructions on page 7. Note that the compliance monitoring method for this fugitive emissions unit is recordkeeping. The owner/operator will need to complete Form CP710.

# APPLICABLE REQUIREMENTS INSTRUCTIONS



The last question in each Emissions Unit Form has a table that collects data on the applicable requirements and compliance monitoring requirements for the emissions unit. In completing Form AR401, Applicable Requirements Checklist, certain requirements on that form were marked with a diamond (♦). If the owner/operator checked "Yes" for any applicable requirement marked with a♦, then he/she must address that requirement in this form if it applies to the emissions unit. Include all limits and standards specified by conditions in the Air Contaminant Discharge Permit (ACDP). Even if the existing permit condition is more stringent than the relevant rule, still identify *both* the permit condition limit and the rule limit in the table. This will enable the owner/operator to obtain the permit shield. [As explained in the *Application Instructions*, the owner/operator may request a change or discontinuation of an ACDP condition through this application. To do complete Form AR404, ACDP Condition Change Request, as directed in the associated instructions. Until such time as DEQ does approve the request to change an ACDP condition, the owner/operator must continue to comply with the condition in question in the Permit.]

#### Instructions for the table are as follows:

- Enter the citation for the applicable requirement. If the applicable requirement is a rule, enter the complete citation (e.g., 340-226-0210(1)). If the applicable requirement is an ACDP condition, enter "ACDP-XX," where XX is the existing permit condition number.
- Enter the parameter, pollutant, or work practice to which the rule or ACDP condition applies (e.g., VOC, opacity, sulfur dioxide, sulfur content of fuel, thermal oxidizer temperature, tank seals and valves inspection and maintenance, etc.).
- Enter the applicable requirement limit or standard. [In answering this, be as brief as possible: e.g. 20% opacity]
- Indicate whether the emissions unit is in compliance with the applicable requirement at the time of submitting the application. If the emissions unit is not in compliance, attach a compliance schedule. A sample compliance schedule is provided below.
- Indicate the method for determining the current compliance status. Enter an abbreviation from the list provided below if there is current monitoring or test data available to make the determination. If monitoring or test data is not available, use the best information available, which may merely be a general knowledge of the process in conjunction with the absence of any evidence to suggest non-compliance.
- Indicate the method that will be used for monitoring compliance during the permit term. Enter an abbreviation from the list provided at the end of these instructions.

<u>FormsEU502, EU503, and EU504:</u> In most cases, the compliance monitoring will be material balance (MB). However, if there is an add-on control device, the owner/operator will have to provide a method for determining whether the control device is operating properly. This may involve periodic source testing (Form CP702) for verifying the control efficiency or continuous monitoring of the control device operating parameters (Form CP703).

Forms EU505, EU506, EU507, and EU508: In most cases, the compliance monitoring will be Periodic Visible Emissions Monitoring (PVEM) or recordkeeping (REC). However, if fugitive emissions are minimized by activities such as routine water application, the owner/operator will have to provide a method for determining whether the activities are being performed. This may involve monitoring maintenance activities (Form CP705).

## **COMPLIANCE MONITORING METHODS:**

### CMS Continuous Monitoring System (CMS), Form CP701

This compliance demonstration method may be appropriate for, but is not limited to any of the following: sulfur dioxide ( $SO_2$ ), nitrogen oxides ( $NO_x$ ), oxygen ( $O_2$ ), carbon dioxide ( $CO_2$ ), opacity, flow, moisture, carbon monoxide ( $CO_2$ ), total reduced sulfur ( $TRS_2$ ), hydrogen chloride ( $HCl_2$ ), hydrogen sulfide ( $H_2S_2$ ), and volatile organic compounds ( $VOC_2$ ).

# ST Stack Testing Form, CP702

This compliance demonstration method utilizes periodic stack testing (also referred to as source testing) to demonstrate compliance with any one of the regulated pollutants. Table CP702 in Form Series CP700 sets



forth the various methods available with the parameter/pollutant for which they are designed, the technique on which the method is based, and any limitations with respect to the process for which the method can be used. Operation and Maintenance (Highest and Best) Monitoring, Form CP703

O&M Operation and Maintenance (Highest and Best) Monitoring, Form CP703

This method may be appropriate but is not limited to any of the following:

- Baghouse: pressure drop across baghouse, broken bag detector, opacity.
- Mechanical Collectors: pressure drop across collector, hopper full detector, opacity.
- Electrostatic Precipitators: primary and secondary voltage, primary and secondary current, spark rate, broken wire detector, rap cycle frequency, resistivity measurement, inlet water flow rate, total solids, opacity.
- Thermal Incinerator: firebox temperature.
- Catalytic Incinerator: catalyst bed temperature.
- Flare: pilot light detector, temperature after the flame zone.
- Particulate Scrubber: pressure drop across scrubber and demister, scrubber fluid recirculation rate, pump discharge pressure, pump motor current.
- Absorber for Gases: pH of fluid, fluid recirculation rate, air flow, pressure drop across absorber and demister, fluid temperature.
- Carbon Absorber: steam mass flow per regeneration cycle, carbon bed temperatures.
- Condenser: condenser exit temperature, amount of solvent recovered daily.
- Charging rate, production rate, hours of operation, secondary chamber temperature, kiln or dryer
  exit temperature, burner combustion efficiency, power consumption, static pressure, fuel use rate,
  water injection rate.
- In some cases, parametric monitoring may be used in conjunction with emissions factors to demonstrate compliance with applicable standards and limits.

## PVEM Periodic Visible Emissions Monitoring, Form CP704

This method may be appropriate but is not limited to any of the following:  $SO_2$ ,  $NO_x$ ,  $O_2$ ,  $CO_2$ , CO, HCl,  $H_2S$ , VOC, flow, moisture, combustibles, leak checks, and combustion efficiency.

#### MMP Monitoring Maintenance Procedures, Form CP705

This method may be appropriate for any of the following: water quality testing, Reid vapor pressure testing, sludge solids testing, sludge mercury testing, periodic inspection of process operating parameters, sootblowing frequency, electrostatic precipitator cleaning frequency, control equipment inspection frequency, fugitive dust control measures, and blacklight inspections of baghouses.

### FSA Fuel Sampling and Analysis, Form CP706

This method may be appropriate for but is not limited to any of the following fuels: coal, coke, tire derived fuel, residual fuel oil, sewage sludge, paper sludge, refuse derived fuel, old corrugated cardboard rejects, and landfill gas. Fuel sampling and analysis also includes fuel usage monitoring.

### MB Material Balance, Form CP707

This method may be appropriate for but is not limited to any of the following: testing and monitoring records, records of malfunctions, compliance schedule records, as-applied coating and ink use records, as-applied coating and ink composition records, process hours of operation records, nuisance condition complaints, transfer efficiency records, fuel use records, and production records.

# P2 <u>Pollution Prevention, Form CP708</u>

This is required if compliance is achieved by pollution prevention measures.

## CAM Compliance Assurance Monitoring, Form CP709

This method is required for emissions units if add-on control are used to comply with standards promulgated before November 15, 2002 and the pre-controlled emissions would be greater than 100 tons per year.

### REC Recordkeeping, Form CP710

This method is used if compliance can be demonstrated through process records, such as, but not limited to, raw material usage, fuel usage, and production data. This method includes calculating emissions using emission factors in conjunction with process records. Note that recordkeeping for the purposes of material balances should be described on Form CP707 and not on this form.

#### SAMPLE COMPLIANCE SCHEDULE



The following is a sample compliance schedule provided for reference in completing the emissions unit summaries.

The permittee must provide controls for the [emissions unit] in accordance with the following schedule:

- 1. By no later than [date], the permittee shall submit a final control strategy, including detailed plans and specifications, to the Department of Environmental Quality for review and approval.
- 2. By no later than [date], the permittee shall issue purchase orders for the major components of emission control equipment and/or for process modification work. The permittee shall notify the Department in writing within seven (7) days that the above has been accomplished.
- 3. By no later than [date], the permittee shall initiate the installation of emission control equipment and/or on-site construction or process modification work. The permittee shall notify the Department in writing within seven (7) days that the above has been accomplished.
- 4. By no later than [date], the permittee shall complete the installation of emission control equipment and/or on-site construction or process modification work. The permittee shall notify the Department in writing within seven (7) days that the above has been accomplished.
- 5. By no later than [date], the permittee shall demonstrate that the [emissions unit] is capable of operating at its maximum operating capacity in continuous compliance with Condition [condition number] by conducting a source test for [pollutant] emissions.