

# New York State Department of Environmental Conservation

## Air Permit Application Instructions



Department of  
Environmental  
Conservation

Stationary sources meeting the applicability requirements of 6 NYCRR Subparts 201-5 and 201-6 are required to obtain a facility permit from the Department. A facility permit is a single comprehensive document that describes the regulatory requirements that apply to a facility and the methods that the facility will use to demonstrate compliance with them.

All permit applications are to be submitted to the appropriate NYSDEC Regional Office to the attention of the Regional Permit Administrator. A list of NYSDEC Regional Offices and Regional Permit Administrators is available on the Department's website at <http://www.dec.ny.gov/about/558.html>. The application form and any required supporting documentation may be submitted electronically or as a paper copy at the applicant's discretion. Please contact the appropriate DEC regional office if you are unsure how to complete any portion of the permit application form.

For activities conducted at Title V facilities that are not in compliance with one or more applicable requirements at the time of application, the applicant must identify remedial measures for those activities and provide a schedule for their implementation. The applicant should define these measures at the facility, emission unit or process level, as appropriate.

**Note:** Applications for permit modifications must contain a complete set of data at the facility level and for each emission unit affected by the modification. A complete set of facility level data includes all information listed in Section III, taking the modification into account. Emission unit information refers to all relevant data in Section IV pertaining to the affected emission unit(s), process(es), emission source(s), and emission point(s). If a second modification application is submitted while the initial application is under review, it should replace the first application and include the combined set of proposed changes.

## Detailed Instructions

**DEC ID:** Enter the 10 digit DEC ID that corresponds to the facility described in this application. **If this application is for a new facility, leave this box blank.** If the facility's DEC ID is known, it should be entered on each page of the application.

**Application ID:** For facilities with multiple Title V permits, enter the 15 digit Application ID that corresponds to the portion of the facility described by this application, if known. **If this application is for a new facility, leave this box blank.**

**Application Type:** Check the box that corresponds to the type of permit being applied for. Note that applications for Title V facility permits require additional information to be supplied as specified on the application form and in these instructions.

**NOTE:** If more space is needed to enter information for any item on the application form, use the appropriate continuation sheet(s). If the facility's DEC ID is known, it should be entered on each continuation sheet.

## Section I - Certification

**Certification:** Enter the name, official title, signature, and date of signature of the responsible official accountable for the truth, accuracy, and completeness of the information contained in this permit application. Responsible official is defined as one of the following:

1. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal

business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

- a. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
  - b. The delegation of authority to such representatives is approved in advance by the permitting authority;
2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
  3. For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. a Regional Administrator of EPA); or
  4. For (Title IV) affected sources:
    - a. The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the CAAA or the regulations promulgated thereunder are concerned; and
    - b. The designated representative for any other purposes under Part 70.

**Note: Applications that are not signed by a responsible official will not be accepted.**

**New York State Professional Engineer Certification:** If preparing any part of the permit application involved the practice of engineering, provide the name, New York State P.E. license number, and signature of the professional engineer under whose auspices the practice of engineering was conducted while preparing this application.

New York State professional licensing rules (Section 7200 of the State Education Law, et. seq.) require that the practice of engineering be conducted by, or under the direct supervision of, a professional engineer licensed in New York State. The practice of engineering is defined as the performance of a professional service such as consultation, investigation, evaluation, planning, design or supervision of construction or operation in connection with any utilities, structures, buildings, machines, equipment, processes, works, or projects wherein the safeguarding of life, health and property is concerned, when such service or work requires the application of engineering principles and data.

## **Section II – Identification Information**

**Type of Permit Action Requested:** Check the box that best describes the type of permit action being applied for.

**Note:** Minor modifications, significant modifications, and administrative amendments to Title V permits are described in 6 NYCRR Part 201-6.6(c). Modifications to state facility permits are described in 6 NYCRR Part 201-5.4.

**Facility Information:** Enter the name and the correct **physical location** of the facility (e.g. Acme Rd. or Bldg. 3, XYZ Industrial Park). Check the appropriate box and enter the name of the City, Town or Village, and Zip Code for the primary jurisdiction of the facility. For instances where a facility is located in multiple jurisdictions (i.e., across city, town, village or county lines) list all jurisdictions with the primary jurisdiction listed first.

**Owner/Firm Information:**

**Name:** Enter the name of the owner of the facility for which this application is being prepared. If the owner is an individual, list his or her full name. If the owner is not a partnership or corporation (i.e. a single taxpayer ID) provide the name of each individual owner. This includes situations where the ownership is listed in the name of multiple individuals but no legal business partnership exists. For corporations, include division or subsidiary name, if any.

**Business Taxpayer ID:** Enter the business taxpayer ID associated with the owner(s) named above. **Do not enter personal social security numbers.**

**Street Address:** Enter the mailing address of the facility owner(s). If the mailing address for each owner is different, list each address separately.

**City:** List the city that corresponds to the mailing address listed above.

**State/Province:** List the state or province for the mailing address specified above.

**Country:** List the country of the mailing address specified above. If the address is in the U.S., leave blank.

**Zip:** List the full zip or other applicable mail code. Add the necessary extensions to U.S. zip codes where applicable.

**Owner Classification:** Check the box that most closely represents the facility owner's classification.

**Owner/Firm Contact Information:**

**Name:** List the owner's representative responsible for answering any air permit inquiries.

**Phone:** Provide the telephone number for the individual listed above.

**E-mail Address:** Provide the e-mail address for the listed individual.

**Fax:** Provide the fax number, if available, for the listed individual.

**Affiliation:** List the entity (e.g. company, corporation, consultant, law firm, business, etc.) that the above named contact is associated with if it is different from the owner/firm listed above.

**Title:** List the title of the contact specified above (e.g. Vice President, Project Engineer, etc.)

**Street Address:** List the mailing address of the contact named above. **Do not provide personal addresses.**

**City:** List the city, town or village for the mailing address of the contact specified above.

**State/Province:** List the state or province for the mailing address of the contact specified above.

**Country:** List the country of the mailing address specified above. If the address is in the U.S., leave blank.

**Zip:** List the full zip or other applicable mail code. Add the necessary extensions to U.S. zip codes where applicable.

**Note:** The final operating permit will be sent to the Owner/Firm contact listed above.

**Facility Contact Information:**

**Name:** List the facility’s representative responsible for answering any air permit inquiries.

**Phone:** List the telephone number for the individual listed above.

**E-mail Address:** Provide the e-mail address for the listed individual.

**Fax:** List the fax number, if available, for the listed individual.

**Affiliation:** List the entity (e.g. company, corporation, consultant, law firm, business, etc.) that the above named contact is associated with if it is different from the owner/firm listed above.

**Title:** List the title of the contact specified above (e.g. Vice President, Project Engineer, etc.)

**Street Address:** List the mailing address of the contact named above. Do not provide personal addresses.

**City:** List the city, town or village for the mailing address of the contact specified above.

**State/Province:** List the state or province for the mailing address of the contact specified above.

**Country:** List the country of the mailing address specified above. If the address is in the U.S., leave this box blank.

**Zip:** List the full zip or other applicable mail code. Add the necessary extensions to U.S. zip codes where applicable.

**Project Description:** Describe the project being applied for in this submittal. Indicate if changes in facility operations have occurred or will occur as a result of this application or whether the application is representative of the status quo. For modifications to existing permits, provide a description of the proposed modifications to the permitted facility.

If the applicant is seeking to cap the Potential to Emit (PTE) of the facility or an emission unit in order to avoid applicability to a regulatory requirement, this information should be included in the project description. The applicant should also specify whether any emission reduction credits (ERCs) are being requested or used as part of this project, including the amount, type, and origin of the credits.

If the applicant is requesting a variance from one or more Reasonably Available Control Technology (RACT) requirements, a brief summary of the requested variance and the reason for requesting it (e.g. technical or economic infeasibility) should be provided with the project description.

**Section III – Facility Information**

**Classification:** Check the box that most closely corresponds to the primary classification of this facility.

**Affected States:** For Title V permit applications only, check all states and identify any federally recognized Native American

Indian tribal lands that are located within 50 miles of the facility referenced in this application. If applicable, list the name of the tribal land on the line provided. For assistance in locating applicable federally recognized Tribal Lands, contact the appropriate DEC Regional Office.

**SIC and NAICS Codes:** Enter all Standard Industrial Classification (SIC) and North American Industrial Classification System (NAICS) Codes that apply to the facility defined by this application. The primary SIC and NAICS code for the facility (or portion of the facility covered by this application) should be listed first.

**Facility Description:** Provide an overview description of the facility referenced in this application in terms of its primary function or business activity, principal industrial or manufacturing processes (including the primary item(s) being manufactured), and any other information supporting the SIC and NAICS codes listed above. If more than one Title V Facility permit is anticipated, provide sufficient detail in this description to adequately define that portion of the facility associated with this application.

#### Example Facility Descriptions

1. This facility is a teaching hospital associated with NY State University. The hospital operates one crematory for human remains and three boilers. Two of the boilers burn natural gas and are both rated at 20 mmBtu/hr. The other boiler burns number 2 fuel oil and is rated at 25 mmBtu/hr.
2. This is a leather finishing facility which treats and colors leather material for sale to apparel manufacturers. It has two leather coating lines each consisting of a dozen individual emission sources such as spray painting booths. Several other emission points are located throughout the facility involving such other activities as trimming and paint testing.

**Compliance Statements:** Title V facility permit applicants must attest to the compliance status of the facility with respect to all applicable federal requirements. To fulfill this requirement, check the boxes to acknowledge that the compliance statements have been read and that their provisions regarding compliance within the facility have been agreed to. If the facility described in this application contains one or more emission units that are not in compliance with an applicable requirement as of the date of application, complete the compliance plan on page 8 of the application form for each of those emission units.

**Note: Title V facility permit applications without completed compliance statements will not be accepted.**

**Facility Applicable Federal Requirements:** Provide the rule citations of all applicable federal requirements that apply at the facility level. A facility level regulation is one that applies to more than one emission unit at the facility or to the facility as a whole (e.g. general requirements, emission caps etc.). Applicable federal requirements include the list of federal regulations defined as applicable requirements in 6 NYCRR Part 200.10 and those state regulations which have been approved or have been submitted for approval into the New York State Implementation Plan (SIP). Information regarding the SIP status of state regulations may be obtained by contacting the appropriate DEC regional office. All rule citations listed in this section should be as precise as necessary in order to define the applicable requirement. In some instances, a federal regulation may reference or overlap a corresponding state regulation (or vice-versa). All such regulations must be listed in the appropriate (i.e. applicable federal or state only requirements) sections even though they may have similar or identical requirements.

**Note:** The applicant should be aware that federal applicable requirements include those regulations relating to Stratospheric Ozone Protection (Title VI of the Clean Air Act Amendments of 1990). To determine whether the facility is subject to Title VI requirements, the applicant should consider the following questions regarding operations at the

facility defined by this application:

- a. Does the facility have any air conditioners or refrigeration equipment that uses CFCs (chlorofluorocarbons), HCFCs (hydrochlorofluorocarbons) or other ozone-depleting substances or regulated substitute substances?
- b. Do any air conditioners or any pieces of refrigeration equipment contain a refrigeration charge greater than 50 lbs?
- c. Do facility personnel maintain, service, repair or dispose of any motor vehicle air conditioners (MVACs) or appliances as defined by 40 CFR Part 82.115?

If the answer to any of these questions is yes, the applicant must cite the appropriate Title VI requirement (i.e. 40 CFR Part 82 Subparts A through G) at the facility level.

**Facility State Only Requirements:** Provide the rule citations of all applicable state only requirements that apply at the facility level. State-only regulations include all those New York State air emission regulations which are not in the SIP. Information regarding the SIP status of state air emission regulations may be obtained by contacting the appropriate DEC regional office. All citations listed in this section should be as precise as necessary in order to define the applicable requirement. In some instances, a state regulation may reference or overlap a corresponding federal regulation (or vice-versa). All such regulations must be listed in the appropriate (i.e. applicable federal or state only requirements) sections even though similar or identical requirements may apply.

**Facility Compliance Certification:** The facility owner or operator should complete a separate facility compliance certification for each facility level monitoring strategy that is being proposed:

- (a) to comply with a listed applicable federal or state only requirement that requires, but does not specify, a detailed method of compliance monitoring; or
- (b) as an alternative to the compliance monitoring method specified by an applicable requirement.

Each compliance certification must contain a detailed description of the proposed method(s) for demonstrating compliance with the listed applicable requirement. Appropriate monitoring methodology may include parametric monitoring (e.g. temperature monitoring), fuel sampling, record keeping, work practices, or any other monitoring or testing methodology approved by the Department. Once a determination is made by the Department that the monitoring strategy and limits being proposed are sufficient to demonstrate compliance with the applicable requirement, these limits will be incorporated as enforceable permit conditions.

**Rule Citation:** Specify the rule citation for the applicable requirement for which a facility compliance certification plan is being proposed. The citation should be as precise as necessary to define the applicable requirement. If the same compliance monitoring strategy is to be applied to several different regulations, separate compliance certification sections should be completed for each rule.

**Rule Type and Capping Check Boxes:** Check the box indicating whether the rule cited above refers to an applicable federal or state only requirement. If the proposed limit and associated monitoring activity is being conducted for the express purpose of avoiding applicability to the rule cited above, check the box marked Capping.

**CAS Number:** Enter the Chemical Abstract Series (CAS) number for the contaminant being monitored for compliance

with the applicable requirement cited above. This box should be completed regardless of whether the contaminant is being measured directly or through the use of surrogates. If the rule cited above contains a requirement that does not specify a contaminant, this box may be left blank (e.g. an applicable regulation containing a limit on opacity that does not reference a contaminant).

**Contaminant Name:** Enter the name of the contaminant that corresponds to the listed CAS Number. Do not abbreviate or use chemical formulas. If the rule cited above contains a requirement that does not specify or reference a contaminant, this box may be left blank.

**Monitoring Information:** This section provides a means for the applicant to detail the methods that are being proposed to demonstrate compliance. Describe the monitoring strategy that is being proposed to demonstrate compliance with each rule cited in the facility compliance certification section by completing the information below.

**Monitoring Type:** Check one box that describes the general category of monitoring activity that is being proposed to meet the requirements of the rule cited above. The monitoring types are defined as follows:

- 1. Ambient Air Monitoring:** This type of monitoring involves the direct measurement of contaminant concentrations (including surrogate contaminants where applicable) in the ambient air via instrumentation or devices that are operated on a continuous or periodic basis. The monitors are typically sited either at the facility property line or some other predetermined receptor location and may be used to augment or confirm other monitoring activities or compliance demonstrations (e.g. dispersion modeling). When selecting this monitoring type, an ambient air monitoring plan must also be provided as described in the Supporting Documents and Attachments section of these instructions.
- 2. Work Practices Involving Specific Operations:** This type of monitoring involves activities where the duration of operation, throughput of product, throughput of raw material, or a parameter of a process material is being measured. This type of monitoring generally represents an operating limit.
- 3. Record Keeping/Maintenance Procedures:** This type of monitoring refers to activities involving the upkeep of records to demonstrate compliance with a requirement or the application of maintenance procedures which may be necessary to maintain acceptable operations.

**Description:** Provide a brief description of the chosen monitoring activity. The description should include details regarding the specific item being monitored.

#### Example Monitoring Descriptions

- 1. Ambient Air Monitoring:** Ambient air monitoring is to be conducted at the eastern end of the facility near the Main Gate. A hi-vol air filtration device is to be used for the sampling of particulates following the procedures described in the Ambient Air Monitoring Plan attached to this application.
- 2. Work Practice Involving Specific Operations:** The facility is restricted to burning 1,000,000 gallons of ultra-low sulfur #2 fuel oil or less as determined by summing the individual monthly fuel usage quantities during any consecutive 12 month period. Fuel usage quantities will be quantified via fuel purchase records. Such records will be maintained at the facility for a 5 year period.
- 3. Record Keeping/Maintenance Procedures:** The cement plant is required to have all haul roads watered twice per day. The length of time, date and time of day the water truck is used will be recorded in a written log kept on site

for a period of at least 5 years.

**Work Practice Type Code:** If Work Practice Involving Specific Operations is chosen as the monitoring type, complete this box by entering the appropriate code (see Work Practice Type code table) corresponding to the item being monitored via the application of a work practice.

**Process Material Code:** If either of the following Work Practice Type codes are entered above: 03 – Process Material Throughput or 04 – Parameter of Process Material, complete this box by providing the appropriate code from the Process Material code table.

**Process Material Description:** If an appropriate process material code is not contained in the Process Material code table, provide a brief description of the process material being measured.

**Reference Test Method:** Enter the reference test method or analytical procedure that will be used to conduct the monitoring activity being described. If a reference test method does not apply (i.e. for a record keeping requirement), leave this box blank.

**Monitored Parameter Code:** Complete this box by entering the appropriate code (see Monitored Parameter code table) that best describes the parameter that is being monitored, if applicable, otherwise leave this box blank. If a Work Practice Type code is included above, complete this box only if code 04 - Parameter of Process Material is listed, otherwise leave this box blank. For instances where a specific contaminant is the parameter being measured, enter the CAS Number of the contaminant. This applies for contaminants that are being measured directly or as surrogates for other contaminants. The following are examples of process material parameters: sulfur or ash content of a fuel being combusted; pounds of VOC per gallon of coating as applied; moisture content of raw material etc.

**Monitored Parameter Description:** If the appropriate parameter code is not contained in the Monitored Parameter code table, provide a brief description of the parameter being measured, otherwise leave this box blank. If a CAS Number is entered as a parameter code, provide the name of the contaminant in this box.

**Manufacturer Name/Model Number:** Enter the manufacturer's name and model number of any instrumentation being used for the monitoring activity identified above or provide a brief description identifying the monitoring device. If no instrumentation is being used, leave this box blank.

**Limit:** Enter the proposed upper and/or lower permit limit(s) (where applicable) which pertain to the monitoring activity.

**Limit Units Code:** Enter the unit code that corresponds to the specified permit limit (see Units of Measurement code table).

**Limit Units Description:** If an appropriate unit code is not contained in the Units of Measurement code table, provide a brief description of the limit units.

**Averaging Method Code:** Enter the code (see Averaging Method code table) corresponding to the averaging method or statistical basis used to verify the results of the monitoring activity with the specified limit. **Note:** Limits placed on production and operation should not exceed an annual limit rolled on a monthly basis. Limits expressed on a calendar year basis are not considered to be federally enforceable restrictions and will not be accepted.

**Averaging Method Description:** If the proposed averaging method is not contained in the Averaging Method code



table, provide a brief description of the averaging method being used for the listed monitoring activity.

**Monitoring Frequency Code:** Enter the code (see Monitoring Frequency code table) that corresponds to the proposed monitoring frequency.

**Monitoring Frequency Description:** If the proposed monitoring frequency is not contained in the Monitoring Frequency code table, provide a brief description of the monitoring frequency being proposed.

**Reporting Requirements Code:** Enter the code (see Report Submittal code table) that corresponds to the appropriate report submittal requirement. **Note:** Title V facilities are required to submit monitoring reports on a semiannual basis at a minimum.

**Reporting Requirements Description:** If the proposed reporting requirement code is not contained in the Report Submittal code table, provide a brief description of the proposed monitoring reporting requirement.

**Facility Emissions Summary:** Provide a summary of emissions of all regulated air pollutants that are emitted from the facility by individual CAS Number. Regulated air pollutants include the criteria pollutants, individual Hazardous Air Pollutants (HAPs), high toxicity air contaminants (see 6 NYCRR Subpart 201-9 and 6 NYCRR Subpart 212-2.2), and any other contaminants being emitted from regulated processes.

For purposes of determining applicability to Title V and New Source Review pursuant to 6 NYCRR Part 231, facility emissions listed in this section should also include contributions from any exempt and trivial activities. Exempt activities, as defined in 6 NYCRR Part 201-3.2, must be identified using the List of Exempt Activities form and attached as supporting documentation. Trivial activities, as defined in 6 NYCRR Part 201-3.3, do not need to be identified individually. Records verifying that each activity is trivial must be maintained on-site and be made available to the Department upon request. Annual actual emissions from both exempt and trivial activities should also be provided as part of the emissions calculations in the supporting documentation. The actual emissions can be quantified in the aggregate, that is, the applicant may provide an estimate of the total actual annual emissions of each regulated air pollutant (with the exception of speciated HAPs) from all exempt activities (e.g., if the total actual annual HAP emissions from all exempt activities are estimated to be 750 lbs/yr, the applicant could indicate that these do not exceed 800 lbs/yr). A separate but similar analysis would be completed for the aggregated trivial activities.

**CAS Number:** Specify the Chemical Abstract Series number for each regulated air pollutant emitted from the facility (or portion of the facility defined by the application). The first 9 lines of CAS Numbers and contaminant names are prefilled and represent the following criteria pollutants:

- PM-10 – Particulate matter less than 10µm in diameter;
- PM-2.5 – Particulate matter less than 2.5µm in diameter;
- Sulfur Dioxide (SO<sub>2</sub>);
- Oxides of Nitrogen (NO<sub>x</sub>);
- Carbon Monoxide;
- Lead – elemental lead;
- Total Volatile Organic Compounds (VOC) – the total quantity of all volatile organic compounds (as defined in 6 NYCRR Part 200.1) emitted in all forms;
- Total Hazardous Air Pollutants (HAP) – the total quantity of all hazardous air pollutants (as defined in Section 112(b) of the Clean Air Act Amendments of 1990) emitted in all forms; and
- Carbon Dioxide Equivalents – the total quantity of CO<sub>2</sub> equivalents (as defined in 6 NYCRR Part 231) emitted.

**Note:** Some emission totals may overlap. For example, Total HAPs may include lead; Total VOC may include some HAPs, etc.

**Contaminant Name:** List the complete name of the regulated air pollutant that corresponds to the listed CAS Number. Do not abbreviate or use chemical formulas.

**Potential to Emit (tons/yr):** Enter the facility wide total potential to emit (PTE) in tons per year for each regulated air pollutant that is listed. The PTE is defined as the maximum capacity of an air contamination source to emit any regulated air pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the air contamination source to emit a regulated air pollutant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type of material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The reported quantity should reflect the total of the maximum possible emissions from each individual emission unit.

**Actual (lbs/yr):** Enter the actual emissions in pounds per year for all regulated air pollutants for any existing source which has not submitted an emission statement for the previous year, as per requirements set forth in 6 NYCRR Part 202-2, and for all High Toxicity Air Contaminants as described in 6 NYCRR Part 212-2.4. Actual emissions represent those resulting from normal daily operations, verifiable by operating records or other compliance monitoring activities, averaged over the last two years or some other more representative time interval justified by the applicant (in the Calculations Attachment) to the Department's satisfaction.

**Note:** All calculations performed when determining the PTE and/or actual emissions from the facility must be attached to the application as supporting documentation.

## **Section IV – Emission Unit Information**

An emission unit is defined as any part or activity of a facility that emits or has the potential to emit any regulated air pollutant. An emission unit is represented as a grouping of processes (activities and emission sources) for any of the following:

1. A single emission point; or
2. A group of emission points provided that the appropriate compliance assurance methods can be demonstrated to the satisfaction of the Department; or
3. A process that cannot be associated with one emission point or a group of emission points.

In defining an emission unit, the following restrictions apply:

1. A defined emission source can only be cited in one emission unit;
2. A defined emission point can only be cited in one emission unit;
3. A defined emission point can only be cited in one issued permit; and
4. A defined emission unit can only be cited in one issued permit.

Applicants are encouraged to configure emission units to simplify the compliance certification and monitoring activities needed to meet regulatory requirements. Emission sources within an emission unit which will not be in compliance with applicable federal requirements at the time of permit issuance must be included in the Compliance Plan portion of this section.

**Emission Unit ID:** Enter the 6 character emission unit identification number. For new emission units, applicants may assign this identifier. **Note:** The emission unit ID is unique, and cannot be duplicated within a facility.

**Emission Unit Description:** Provide a description of the emission unit. At a minimum, the emission unit description should identify, in general terms, all emission points and processes that comprise the emission unit and their general function. If the emission unit constitutes a facility-wide activity not associated with any specific emission points, the applicant should state this in the description along with general descriptive information concerning the activity.

**Building Information:** Applicants are required to provide location information regarding any structures associated with the emission unit identified above.

**Building ID:** Using a designation not to exceed 10 characters, identify each building which contains the emission sources, emission points, and/or processes associated with the emission unit identified above.

**Building Name:** For each building identified, provide the name of the building.

**Length:** Enter the longest projected dimension of the listed building in feet.

**Width:** Enter the greatest projected width of the listed building in feet. This is the greatest dimension perpendicular to the building length provided above.

**Orientation:** Specify the orientation or alignment of the listed building along its length with respect to the north direction. The value should be within +/- 10 degrees. Assume north represents 0° and that the degrees increase moving in a clockwise direction (i.e., east is 90°, south is 180° and west is 270°).

**Emission Unit Emissions Summary:** This section consists of optional information which should be completed only if the applicant intends to describe any regulated air pollutants being emitted at the emission unit level. Emissions at this level will need to be quantified if required by an applicable requirement, a proposed permit limitation references a specific emission limit at the emission unit level, or the Department determines that the information is necessary to evaluate a compliance strategy proposed by the applicant.

**Emission Unit:** Enter the 6 character emission unit identification number.

**CAS Number:** Specify the Chemical Abstract Series Number for each listed regulated air pollutant.

**Contaminant Name:** Enter the name of the regulated air pollutant for each listed CAS Number. Do not abbreviate or use chemical formulas.

**ERP:** Enter the total emission rate potential (ERP) of each listed contaminant in pounds per year for all processes emitting regulated air pollutants that comprise this emission unit. The ERP is defined as the maximum rate at which a specified air contaminant from an emission unit would be emitted to the outdoor atmosphere in the absence of any control equipment. The ERP of a specified air contaminant from an emission unit is calculated by dividing weight of the contaminant (expressed in pounds) that would be emitted to the outdoor atmosphere during maximum emission conditions in the absence of any control equipment, by the duration (expressed in hours) of the emissions. This value may not be a simple summation of all individual process ERPs since individual processes may not necessarily be able to operate simultaneously. If this is the case, the applicant should list the ERP representing the combination of individual process ERPs that result in the maximum ERP for the emission unit.

**Potential to Emit:** Enter the total PTE of each listed contaminant, in both pounds per hour and pounds per year, for all processes emitting regulated air pollutants that comprise this emission unit. The values should reflect the PTE from the combination of individual process PTEs that result in the maximum PTE values for the emission unit.

**Actual Emissions:** Enter the actual emissions in pounds per hour and pounds per year for all regulated air pollutants emitted by the emission unit and for which an emission statement has not been submitted for the previous year, as per requirements set forth in 6 NYCRR Part 202-2, and for all High Toxicity Air Contaminants as described in 6 NYCRR Part 212-2.4. Actual emissions represent those resulting from normal daily operations, verifiable by operating records or other compliance monitoring activities, averaged over the last two years or some other more representative time interval justified by the applicant in the Calculations attachment to the Department's satisfaction.

**Emission Point Information:** An emission point is defined as a stack, vent, chimney or other functionally equivalent opening that vents one or more air contaminants to the outdoor atmosphere. The information listed in this section is required for each emission point described in the application. Activities that are defined as exempt or trivial, pursuant to 6 NYCRR Part 201-3, are excluded from the requirement to provide emission point data.

**Emission Point ID:** Enter the 5 character emission point identification number for each emission point associated with the above listed emission unit. For new emission points, applicants may assign this identifier, however any existing emission point IDs should not be altered. **Note:** The emission point ID is unique and cannot be duplicated within a facility.

**Ground Elevation:** Enter the elevation above mean sea level at the base of the emission point to the nearest foot (i.e., 120 rather than 119.6). This information is available from NYSDOT or USGS topographic maps.

**Height:** Enter the height of the emission point measured from ground level to the top of the stack or vent to the nearest foot (i.e., 62 rather than 62.3).

**Height Above Structure:** Enter the height of the emission point above the highest point of a building or structure to the nearest foot (39 rather than 38.7). If the top of the emission point is below the building height, this parameter should be expressed as a negative number.

**Inside Diameter:** Enter the inside diameter at the exit of the emission point expressed to the nearest inch. If the emission point cross-section is not circular, leave blank and complete the cross-section box instead.

**Exit Temperature:** Enter the stack gas exit temperature to the nearest degree Fahrenheit, if applicable, otherwise leave blank. If this parameter varies 30°F or more depending on the process, list the value that results in the greatest environmental impact using Department approved dispersion modeling.

**Cross Section:** For each non-circular emission point, enter the internal length and width in the appropriate boxes to the nearest inch.

**Exit Velocity:** Enter the stack gas exit velocity to the nearest foot per second. If this value varies by more than 10% depending on the process involved, list the value that results in the greatest environmental impact using Department approved dispersion modeling.

**Exit Flow:** Enter the stack gas exit flow to the nearest cubic foot per minute at actual conditions. If this value varies by more than 10% depending on the process involved, list the value that results in the greatest environmental impact using Department approved dispersion modeling.

**NYTM Coordinates:** Enter the East and North New York Transverse Mercator (NYTM) coordinates of the emission point to the nearest three decimal places, unless a less precise degree of detail is approved by the Department. Gross values (to the nearest tenth) may be obtained from the most recent 7.5 Minute Series Planimetric Maps published by the New York State Department of Transportation.

**Building:** Enter the ID of the building or structure where the emission point is physically located. If the emission point is not located within any building or structure leave this box blank.

**Distance to Property Line:** Enter the straight line distance to the nearest foot from the emission point to the nearest point on the property line of the facility.

**Date of Removal:** For an emission point cited in a prior application that is no longer in service, enter the month and year (mm/yr) when the emission point was permanently removed, otherwise leave this box blank.

**Emission Source/Control Information:** An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. This section should identify each emission source that directly results in the emission of regulated air pollutants from an activity and all equipment used to control emissions from the activity. For example, an incinerator would be considered as an emission source along with the afterburner that is used to control emissions. A surface coating line may be considered a single emission source or multiple emission sources (i.e., applicator, heating oven, curing oven) depending on whether the different portions of the coating line are identified as separate processes in the application and are vented through individual emission points. Emission sources associated with exempt and trivial activities as defined in 6 NYCRR Subpart 201-3 need not be described.

**Emission Source ID:** Enter the emission source ID. The emission source ID is unique, and cannot be duplicated within a facility.

**Emission Source Type:** Enter the letter corresponding to the type of emission source being described as listed below:

- C – Combustion unit (boiler, gas turbine, diesel engine, etc.)
- R – Incinerator, crematory
- I – Process source (paint booth, rock crusher, degreaser, etc.)
- K – Air pollution control equipment

**Date of Construction:** Enter the month and year (mm/yr) when construction of this emission source/control commenced.

**Date of Operation:** Enter the month and year (mm/yr) when this emission source/control commenced operation.

**Date of Removal:** For equipment cited in a prior application that is no longer in service, enter the month and year (mm/yr) when the emission source was permanently removed from operation.

**Control Type Code:** If the specified emission source is an emission control device, enter the appropriate three digit code from the Control Equipment Type code table to designate the type of emission control equipment being used, otherwise leave this box blank.

**Control Type Description:** If the appropriate code is not contained in the Control Equipment Type code table, provide

a brief description of the emission control equipment in this box, otherwise leave this box blank.

**Manufacturer's Name/Model Number:** Specify the name of the manufacturer and the model number of the listed emission source or provide a brief description identifying the emission source (e.g. spray booth #2 on coating line #1).

**Design Capacity:** Enter the design or maximum capacity value (typically in terms of input or production rate) of the identified emission source. **Note:** For sources having several different design capacities depending on a specific input, the applicant should list that capacity in terms of the input that results in the greatest total emissions.

**Design Capacity Units:** Enter the units of the listed design capacity using the Units (of measurement) code table. The listed design capacity should be in the same units referenced in regulation where appropriate.

**Design Capacity Description:** If the appropriate code is not contained in the Units (of measurement) code table, provide a brief description of the design capacity units in this box, otherwise leave this box blank.

**Waste Feed Code:** Enter the code that best describes the method by which waste is being fed into the incinerator unit using the codes listed in the Waste Feed (Incinerator) code table. If the facility does not operate an incinerator, leave this box blank.

**Waste Feed Description:** If an appropriate waste feed code is not contained in the Waste Feed (Incinerator) code table, provide a brief description of the waste feed method to the specified incinerator. If the facility does not operate an incinerator, leave this box blank.

**Waste Type Code:** Enter the value from the Waste Type (Incinerator) code table that best describes the type of waste being fed into each listed incinerator otherwise leave this box blank.

**Waste Type Description:** If the appropriate waste type code is not contained in the Waste Type (Incinerator) code table, provide a brief description of the waste type being fed into the specified incinerator otherwise leave this box blank.

**Process Information:** A process is defined as any activity involving one or more emission sources that emits or has the potential to emit any regulated air pollutant.

**Emission Unit ID:** Enter the six character identification number for the emission unit associated with this process.

**Process ID:** Enter the three character identification for the process. For a new process, applicants may assign this identifier. **Note:** The process ID is unique and cannot be duplicated within a facility.

**Process Description:** Provide a description of the identified process. **Note:** The process description will not be considered confidential, consequently the applicant should avoid including any proprietary information.

**SCC Code:** Specify the Source Classification Code (SCC) which best describes the process. The applicant should verify that the units of measurement associated with the selected SCC code match the units that will be used to report the facility's emissions. **Note:** A SCC is required for each process described in the application.

**Total Throughput:** Enter the total maximum throughput, input, production rate, etc. in terms of quantity per hour and quantity per year for the process.

**Throughput Quantity Units Code:** Enter the appropriate code (see Process Rate code table) specifying the units in which the throughput/input/production rate for the process is expressed, if necessary. The units must be consistent with the listed SCC.

**Throughput Quantity Units Description:** If the appropriate throughput quantity units are not contained in the Process Rate code table, provide a brief description of the throughput quantity units for this process, otherwise leave blank.

**Confidential:** If this box is checked, certain information for this specific process will be kept confidential with restricted access to the public (as described in 6 NYCRR Part 616) provided adequate justification is attached as supporting documentation to the application. Confidential process information includes:

- a. The design capacity and design capacity units of each emission source;
- b. The total throughput quantity per hour and per year and the throughput quantity units;
- c. The operating schedule in hours per day and days per year; and
- d. The emissions estimation methods used.

Those items listed above that are determined to be eligible for confidential status will not be disclosed to any party outside the Department until and unless a formal determination pursuant to 6 NYCRR Part 616 is made that the information cited is not confidential. The USEPA has the authority to request information that is designated confidential by the Department directly from the applicant. The applicant should be aware that once this information is submitted, the USEPA may allow public access to it. In order to prevent this from occurring, Subpart 201-6.2(e) allows the applicant to submit information directly to the USEPA to determine whether it can be treated as a trade secret pursuant to 40 CFR Part 2. Information submitted as supporting documentation will be treated in the same manner (i.e. it will remain confidential, if so requested, until a formal determination is made that it is not confidential).

**Operating at Maximum Capacity:** Check this box if the process is or may be operated at its maximum design or achievable capacity.

**Operating Schedule:** Enter the maximum hours per day and days per year the process will be in operation.

**Building (ID):** Enter the ID of the building or structure where the process identified above is physically located. If the process is not located within any building or structure, leave blank.

**Floor:** Enter the floor name or number corresponding to the building or structure where the process identified above is physically located. If the process is not located within a building or structure, briefly describe the physical location of the process (e.g. Main Yard).

**Emission Point Identifier(s):** Enter the ID of each emission point associated with the process being described. These identifiers should match some or all of those used in the Emission Point Information section previously completed for the emission unit.

**Emission Source/Control Identifier(s):** Enter all the emission source identifiers associated with this process. These identifiers should match some or all of those listed in the Emission Source/Control Information section previously completed for the emission unit.

**Process Emissions Summary:** This section should be completed if process level emissions information is needed because of a federal or state regulatory requirement, a proposed permit limitation or a compliance strategy. Since emissions from an individual process may vary depending on a variety of factors such as production or throughput, type of raw material,

capture efficiency, control efficiency, etc., the applicant should provide information relative to the operating scenario that results in the greatest flexibility in operations while maintaining emissions within regulatory requirements.

**Emission Unit:** Enter the six character identification number for the emission unit associated with this process.

**Process:** Enter the three character identification for the process.

**CAS Number:** Specify the Chemical Abstract Series Number for each listed regulated air pollutant.

**Contaminant Name:** List the complete name of the regulated air pollutant for each listed CAS Number. Do not abbreviate or use chemical formulas.

**% Throughput:** Enter the percentage of throughput or input that consists of the listed contaminant. For example, half of a surface coating is comprised of solvents, of which 50% by weight is toluene. The percent of throughput for toluene would be 50% of 50% or 25%. If a specific contaminant is not part of an input, such as a product of incomplete combustion, leave this box blank.

**% Capture:** Specify the percent capture efficiency of the stack or emission control device, if applicable. This is defined as the percentage of emissions from the process that go into the stack before being released into the atmosphere. If it is assumed that all emissions go into the stack to be emitted or captured by a control device, the % capture equals 100%.

**% Control:** Specify the percent control efficiency of each identified control device for each listed contaminant. If the process emissions of the contaminant are being controlled by more than one device, list the overall efficiency. Documentation of this value should be provided as supporting documentation. Enter 0 in this box if the contaminant emissions are not controlled by a control device.

**ERP:** Specify the maximum rate, in pounds per hour, at which the listed contaminant would be emitted to the outdoor atmosphere in the absence of any control equipment. The emission rate potential (ERP) of a specified air contaminant is calculated by dividing the weight of the contaminant (expressed in pounds) that would be emitted to the outdoor atmosphere during maximum emission conditions in the absence of any control equipment, by the duration (expressed in hours) of such emissions. The ERP refers to all emissions of the contaminant from the process including both captured and uncaptured.

**ERP How Determined:** Specify the code from the Emission Rate How Determined code table that best describes how the emission rate potential was determined.

**PTE:** Enter the potential to emit (PTE) of the listed contaminant from the process in terms of pounds per hour, pounds per year and standard units. The PTE is defined as the maximum capacity of an air contamination source to emit any regulated air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the process contained in federally enforceable permit conditions is to be considered part of the design.

**Standard Units:** Standard units are defined as any units specifically referenced in an applicable regulation. Specify the emissions unit value from the Units code table that corresponds to the quantity entered in the standard units box. If the standard units are expressed in terms of pounds per hour or pounds per year, leave this box and the standard units code box blank.

**PTE How Determined:** Specify the code from the Emission Rate How Determined code table that best describes how



the potential to emit or PTE was determined.

**Actual Emissions:** For an existing source which has not submitted an emission statement, as per 6 NYCRR Part 202-2 for the previous year, and for all High Toxicity Air Contaminants as described in 6 NYCRR Part 212-2.4, enter the actual emissions in pounds per hour and pounds for year for all federal or state regulated air pollutants emitted by the process.

**Emission Source Emissions Summary:** This section should be completed if emission source level emissions information is needed because of a federal or state regulatory requirement (e.g. 6 NYCRR Part 212), a proposed permit limitation or a compliance strategy. Since emissions from an individual emission source may vary depending on a variety of factors such as production or throughput, type of raw material, capture efficiency, control efficiency, etc., the applicant should provide information relative to the operating scenario that results in the greatest flexibility in operations while maintaining emissions within regulatory requirements.

**Emission Unit:** Enter the six character identification number for the emission unit associated with this emission source.

**Process:** Enter the three character identification for the process associated with this emission source.

**CAS Number:** Specify the Chemical Abstract Series Number for each listed regulated air pollutant.

**Contaminant Name:** List the complete name of the regulated air pollutant listed for each CAS Number. Do not abbreviate or use chemical formulas.

**% Throughput:** Enter the percentage of throughput or input that consists of the listed contaminant. For example, half of a surface coating is comprised of solvents, of which 50% by weight is toluene. The percent of throughput for toluene would be 50% of 50% or 25%. If a specific contaminant is not part of an input, such as a product of incomplete combustion, leave this box blank.

**% Capture:** Specify the percent capture efficiency of the stack or emission control device, if applicable. This is defined as the percentage of emissions from the emission source that go into the stack before being released into the atmosphere. If it is assumed that all emissions go into the stack to be emitted or captured by a control device, the % capture equals 100%.

**% Control:** Specify the percent control efficiency of each identified control device for each listed contaminant. If the emission source emissions of the contaminant are being controlled by more than one device, list the overall efficiency. Documentation of this value should be provided in Calculations Attachment of the Supporting Documentation. If the contaminant emissions are not controlled by a control device enter 0 in this box.

**ERP:** Specify the maximum rate, in pounds per hour, at which the listed contaminant would be emitted to the outdoor atmosphere in the absence of any control equipment. The emission rate potential (ERP) of a specified air contaminant is calculated by dividing the weight of the contaminant (expressed in pounds) that would be emitted to the outdoor atmosphere during maximum emission conditions in the absence of any control equipment, by the duration (expressed in hours) of such emissions. The ERP refers to all emissions of the contaminant from the emission source including both captured and uncaptured.

**ERP How Determined:** Specify the code from the Emission Rate How Determined code table that best describes how the emission rate potential was determined.

**PTE:** Enter the potential to emit (PTE) of the listed contaminant from the emission source in terms of pounds per hour, pounds per year and standard units. The PTE is defined as the maximum capacity of an air contamination source to emit any regulated air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the process contained in federally enforceable permit conditions is to be considered part of the design.

**Standard Units:** Standard units are defined as any units specifically referenced in an applicable regulation. Specify the emissions unit value from the Units code table that corresponds to the quantity entered in the standard units box. If the standard units are expressed in terms of pounds per hour or pounds per year, leave this box and the standard units code box blank.

**PTE How Determined:** Specify the code from the Emission Rate How Determined code table that best describes how the potential to emit or PTE was determined.

**Actual Emissions:** For an existing source which has not submitted an emission statement, as per 6 NYCRR Part 202-2 for the previous year, and for all High Toxicity Air Contaminants as described in 6 NYCRR Part 212-2.4, enter the actual emissions in pounds per hour and pounds for year for all federal or state regulated air pollutants emitted by the emission source, otherwise leave this box blank.

**Emission Unit Applicable Federal Requirements:** Provide the rule citations of all applicable federal requirements that apply at the emission unit level. An emission unit level regulation is one that applies to a specific emission unit, process, emission source, or emission point at the facility. Applicable federal requirements include the list of federal regulations defined as applicable requirements in 6 NYCRR Part 200.10 and those state regulations which have been approved or have been submitted for approval into the New York State Implementation Plan (SIP). Information regarding the SIP status of state regulations may be obtained by contacting the appropriate DEC regional office. All rule citations listed in this section should be as precise as necessary in order to define the applicable requirement. In some instances, a federal regulation may reference or overlap a corresponding state regulation (or vice-versa). All such regulations must be listed in the appropriate (i.e. applicable federal or state only requirements) sections even though they may have similar or identical requirements. The applicant must also specify the emission unit, emission source, emission point or process ID associated with each listed citation as follows:

1. If the specified regulation applies to an emission unit as a whole, list only the emission unit ID.
2. If the specified regulation applies to an emission source or process within an emission unit, provide **both** the emission source and process ID in addition to the emission unit ID.
3. If the specified regulation applies to an emission point, provide the emission unit ID and the emission point ID.

**Note:** The applicant must provide an emission unit ID at a minimum when completing this section.

**Note:** The applicant should be aware that federal applicable requirements include those regulations relating to Stratospheric Ozone Protection (Title VI of the CAAA). To determine whether the facility is subject to Title VI requirements, the applicant should consider the following questions regarding operations at the facility defined by this application:

- a. Does the facility have any air conditioners or refrigeration equipment that uses CFCs (chlorofluorocarbons), HCFCs (hydrochlorofluorocarbons) or other ozone-depleting substances or regulated substitute substances?

- b. Do any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs?
- c. Do facility personnel maintain, service, repair or dispose of any motor vehicle air conditioners (MVACs) or appliances as defined by 40 CFR Part 82.115?

If the answer to any of these questions is yes, the applicant must cite the appropriate Title VI requirement (i.e. 40 CFR Part 82 Subparts A through G) at the facility level.

**Emission Unit State Only Requirements:** Provide the rule citations of all applicable state only requirements that apply at the emission unit level. An emission unit level regulation is one that applies to a specific emission unit, emission source, emission point, or process at the facility. State only regulations include all those New York State air emission regulations which do not appear in the New York State SIP (or will not in the near future). Information regarding the SIP status of New York State air emission regulations may be obtained by contacting the appropriate DEC regional office. All citations listed in this section should be as precise as necessary in order to define the state only requirement. The applicant must also specify the emission unit, emission source, emission point or process ID associated with each listed citation as follows:

- 1. If the specified regulation applies to an emission unit as a whole, list only the emission unit ID.
- 2. If the specified regulation applies to an emission source or process within an emission unit, provide **both** the emission source and process ID in addition to the emission unit ID.
- 3. If the specified regulation applies to an emission point, provide the emission unit ID and the emission point ID.

**Note:** The applicant must provide an emission unit ID at a minimum when completing this section.

**Emission Unit Compliance Certification:** The facility owner or operator should complete a separate emission unit compliance certification for each emission unit level monitoring strategy that is being proposed:

- (a) to comply with a listed applicable federal or state only requirement that requires, but does not specify, a detailed method of compliance monitoring; or
- (b) as an alternative to the compliance monitoring method specified by the regulation.

Each compliance certification must contain a detailed description of the proposed method(s) for demonstrating compliance with the listed applicable requirement. Appropriate monitoring methodology may include parametric monitoring (e.g. temperature monitoring), fuel sampling, record keeping, work practices, or any other monitoring or testing methodology approved by the Department. Once a determination is made by the Department that the monitoring strategy and limits being proposed are sufficient to demonstrate compliance with the applicable requirement, they will be incorporated as enforceable permit conditions. The applicant must also specify the emission unit, emission source, emission point or process ID associated with each proposed compliance activity as follows:

- 1. If the specified regulation applies to an emission unit as a whole, list only the emission unit ID.
- 2. If the specified regulation applies to an emission source or process within an emission unit, provide **both** the emission source and process ID in addition to the emission unit ID.
- 3. If the specified regulation applies to an emission point, provide the emission unit ID and the emission point ID.

**Note:** The applicant must provide an emission unit ID at a minimum when completing this section.

**Rule Citation:** Provide the rule citation for the proposed compliance certification method. The citation should be as precise as necessary to define the applicable requirement.

**Note:** If the same compliance monitoring strategy will be used for multiple regulations, a separate compliance certification section should be completed for each rule cited.

**Rule Type and Capping Check Boxes:** Check the box indicating whether the rule cited above refers to an applicable federal or state only requirement. If the proposed limit and associated monitoring activity is being conducted for the express purpose of avoiding applicability to the rule cited above (see 6 NYCRR Part 201-7), check the box marked Capping.

**Emission Unit:** Enter the 6 character emission unit identification.

**Emission Point:** Enter the 5 character emission point identification, if applicable.

**Process:** Enter the 3 character process identification, if applicable.

**Emission Source:** Enter the 5 character emission source identification, if applicable.

**CAS Number:** Enter the Chemical Abstract Series number for the air contaminant being monitored for compliance with the applicable requirement cited above. This box should be completed regardless of whether the contaminant is being measured directly or through the use of surrogates. If the rule cited above contains a requirement that does not specify a contaminant, the CAS Number may be omitted. An example of this would be an applicable regulation with a limit on opacity that does not reference any single contaminant.

**Contaminant Name:** Enter the name of the contaminant being monitored which corresponds to the listed CAS Number. Do not abbreviate or use chemical formulas. If the rule cited above contains a requirement that does not specify or reference a contaminant, the contaminant name may be omitted.

**Monitoring Information:** Each Emission Unit Compliance Certification must describe the monitoring strategy that is being proposed to satisfy the requirements of the rule. This section provides a means for the applicant to outline methods for parametric and continuous emission monitoring, record keeping and reporting to demonstrate compliance to the Department. If the proposed monitoring strategy is found acceptable to the Department, it will be incorporated as a permit condition.

**Monitoring Type:** Check the box that best describes the general category of monitoring activity that is being proposed to meet the requirements of the rule cited above. The monitoring types are defined as follows:

1. **Continuous Emission Monitoring (CEM):** This type of monitoring involves the direct measurement of contaminant (or surrogate contaminant) emissions from an emission point using instrumentation which operates on a continuous basis. If this option is selected, additional information regarding a CEM monitoring plan and quality assurance/quality control also needs to be provided as per the instructions for that supporting documentation attachment.
2. **Intermittent Emission Testing:** This type of monitoring involves the direct measurement of contaminant

(or surrogate contaminant) emissions from an emission point on a periodic basis. If this option is selected, additional information regarding stack test protocols/reports also needs to be provided as per the instructions for the related supporting documentation attachment.

3. **Ambient Air Monitoring:** This type of monitoring involves the direct measurement of contaminant concentrations (including surrogate contaminants, if applicable) in the ambient air via instrumentation or devices that are operated on a continuous or periodic basis. The monitors are typically sited either at the facility property line or some other predetermined receptor location and may be used to augment or confirm other monitoring activities or compliance demonstrations such as dispersion modeling. In selecting this monitoring type, information regarding an ambient air monitoring plan should also need to be provided as per the instructions for the related supporting documentation attachment.
4. **Monitoring of Process or Control Device Parameters as a Surrogate:** This type of monitoring involves the indirect measurement of emissions via monitoring of process or control device parameters and performance on a continuous or periodic basis (e.g. opacity, flow rate, temperature, pressure drop, etc.). Instrumentation may be involved but is not required. Other contaminants may also be utilized as surrogates to measure certain air contaminants for which proven test methods are not available.
5. **Work Practice Involving Specific Operations:** This type of monitoring involves activities where time of operation, throughput of product, throughput of raw material, or parameter of a process material throughput is being measured and represents an operating limit.
6. **Record Keeping/Maintenance Procedures:** This type of monitoring refers to activities involving the upkeep of records to demonstrate compliance with a requirement or the application of maintenance procedures which may be necessary to maintain acceptable operations.

**Description:** Provide a brief description of the specific monitoring activity related to the general category identified above. The description should include details regarding the specific item being measured.

#### Example Monitoring Descriptions

1. **Continuous Emission Monitoring:** In stack NO<sub>x</sub> monitor for boiler 2.
2. **Intermittent Emissions Testing:** Annual stack test for SO<sub>2</sub> is to be conducted while burning #6 fuel oil in boiler 2.
3. **Monitoring of Process or Control Device Parameters as a Surrogate:** A pressure monitoring device will be used to measure the pressure drop across the fabric filter control device. The fabric filter is used to control emissions from the 40 CFR 61 Subpart M applicable asbestos brake lining cutting operations in Building BLC1 (process 001).
4. **Ambient Air Monitoring:** A hi-vol air filtration device located near the Main Gate is to be used to sample particulates being emitted from Kiln 1. Sampling procedures are detailed in the Ambient Air Monitoring Plan attachment to the application.
5. **Work Practice Involving Specific Operations:** The main boiler plant, consisting of two 50 mmBtu/hr #6 oil fired units (emission unit 0-00001), will be restricted to burning low sulfur (0.30% by weight) fuel oil in order to limit SO<sub>2</sub> emissions.

- Record Keeping/Maintenance Procedures:** The time, date, wind speed and direction is to be monitored and recorded in a log whenever gypsum is being off-loaded. No off-loading is to occur if an easterly wind is blowing in excess of 20 mph.

**Work Practice Type Code:** If Work Practice Involving Specific Operations is indicated as a Monitoring Type, complete this box by entering the appropriate code (see Work Practice Type code table) corresponding to the item being monitored via the application of a work practice, otherwise leave blank.

**Process Material Code:** If the Work Practice Type codes 03 – Process Material Throughput or 04 – Parameter of Process Material are entered above, complete this box by providing the appropriate code from the Process Material code table, otherwise leave blank.

**Process Material Description:** If an appropriate process material code is not contained in the Process Material code table, provide a brief description of the process material being measured, otherwise leave blank.

**Reference Test Method:** Enter the reference test method or analytical procedure that will be used to conduct the monitoring activity indicated. If a reference test method does not apply such as for a simple production record keeping requirement, leave this box blank.

**Monitored Parameter Code:** Complete this box by entering the appropriate code (see Monitored Parameter code table) that best describes the parameter that is being monitored, if applicable, otherwise leave blank. If a Work Practice Type code was entered above, complete this box only if code 04 – Parameter of Process Material is listed, otherwise leave this box blank. For instances where a specific contaminant contained in the throughput is the parameter being measured, enter the CAS Number of the contaminant. This applies for contaminants that are being measured directly or as surrogates for other contaminants.

The following are examples of process material parameters: sulfur or ash content of a fuel being combusted; pounds of VOC per gallon of coating as applied; moisture content of raw material etc.

**Monitored Parameter Description:** If the appropriate parameter code is not contained in the Monitored Parameter code table, provide a brief description of the parameter being measured, otherwise leave blank. If a CAS Number is entered as a parameter code, provide the name of the contaminant instead.

**Manufacturer's Name/Model Number:** Enter the manufacturer's name and model number of any instrumentation being used for the monitoring activity identified above or provide a brief description identifying the monitoring device. If no instrumentation is being used, leave this box blank. **Note:** The manufacturer's name and model number must be provided for continuous emission monitoring instrumentation.

**Limit:** Enter the proposed upper and/or lower permit limit(s) (where applicable) which pertain to the monitoring activity.

**Limit Units Code:** Enter the unit code that corresponds to the specified permit limit (see Units (of measurement) code table).

**Limit Units Description:** If an appropriate work practice and/or parameter limit unit code is not contained in the Units (of measurement) code table, provide a brief description of the limit units, otherwise leave this box blank.

**Averaging Method Code:** Enter the code (see Averaging Method code table) corresponding to the averaging method or statistical basis used to verify the results of the monitoring activity with the specified limit.

**Note:** In order to be enforceable, limits placed on production and operation must be averaged over regular intervals. In general, the averaging period should not exceed an annual limit rolled on a monthly basis. Limits that are averaged on a calendar year basis are not considered to be legally enforceable, and should not be used.

**Averaging Method Description:** If a proposed averaging method is not contained in the Averaging Method code table, provide a brief description of the averaging method being proposed for the listed monitoring activity.

**Monitoring Frequency Code:** Enter the code (see Monitoring Frequency code table) that corresponds to the proposed frequency for the monitoring activity identified above.

**Monitoring Frequency Description:** If the proposed monitoring frequency is not contained in the Monitoring Frequency code table, provide a brief description of the monitoring frequency being used for the listed monitoring activity.

**Reporting Requirements Code:** Enter the code (see the Report Submittal Frequency code table) that corresponds to the appropriate report submittal requirement.

**Note:** Monitoring reports for Title V facilities must be submitted on a semiannual basis unless more frequent reporting is required by the applicable requirement or the Department.

**Reporting Requirements Description:** If the proposed reporting requirement code is not contained in the Report Submittal Frequency code table, provide a brief description of the monitoring reporting requirement for the listed contaminant.

**Determination of Non-applicability:** This section is optional and should only be completed if the applicant is seeking to obtain formal confirmation that the specified activities are not subject to the listed requirement. A rule cited in this section is one that could apply to an emission unit (or emission point, or process, or emission source) but does not apply for the stated reasons. By citing a rule here, Departmental agreement is being sought with the non-applicability determination by the applicant. If agreement is secured, the non-applicability determination will be contained in the issued Title V permit which in turn provides a shield against any future enforcement action. Only those regulations for which there is a reasonable question regarding applicability will be listed in the permit.

**Rule Citation:** Provide the rule citation of the applicable requirement for which a non-applicability determination is being sought. The listed citation should be as precise as necessary in order to define the requirement.

**Emission Unit:** Enter the 6 character identification for each emission unit that the rule cited above does not apply to.

**Emission Point:** Enter the 5 character emission point identification for the rule and emission unit cited above, if applicable.

**Process:** Enter the process identification for the rule and emission unit cited above, if applicable.

**Emission Source:** Enter the emission source identification for the rule and emission unit cited above, if applicable.

**Check Boxes:** Indicate whether the rule cited above refers to an applicable federal or state only requirement.

**Description:** Provide the specific reason(s) for the determination of non-applicability. This description should reference any specific data that supports the applicant's determination of non-applicability. Information must be provided in enough detail so that the Department can conduct an adequate review of the determination.

**Compliance Plan:** Noncompliant emission sources operating at a facility are allowed to apply for, and be included in, a Title V facility permit provided that the applicant submits a plan for achieving compliance within a time frame acceptable to the Department. Part 201-6.4(d) and (e) require applicants to provide a description of the details of any compliance plan. The compliance plan may refer to activities at either the facility, emission unit or process level. If the compliance plan refers to facility level activities, the emission unit and process ID data items are left blank.

**Consent Order:** Enter the number of the consent order under which any of the listed noncompliant emission units have been operating. If the facility is operating under more than one order, use continuation sheets and list each additional order on a separate page. If the noncompliant source is not under a consent order, leave this box blank.

**Certified Progress Reports:** Specify the date when submittal of the certified progress reports regarding the actions listed in the compliance schedule are to commence.

**Emission Unit:** Enter each 6 character emission unit ID pertaining to the emission unit described in the listed consent order, if applicable.

**Process:** Enter the process ID number for each process pertaining to the listed consent order, if applicable.

**Applicable Federal Requirement:** Enter the citation of each applicable federal requirement where the facility is in noncompliance. Citation of the noncompliance requirement should follow the format previously set forth for the applicable federal requirements for emission units previously listed in Section IV.

**Remedial Measures and Intermediate Milestones:** Specify the remedial measure(s) to be taken in order for the noncompliant source to achieve compliance with the applicable requirement listed above. The applicant should also specify, in chronological order, the intermediate steps which may precede implementation of the remedial measure.

**R/I:** Specify whether the compliance action listed above refers to a remedial measure (R) or an intermediate milestone (I) by entering the appropriate letter.

**Date Scheduled:** Enter the date (mm/dd/yr) by which the listed remedial measure or intermediate milestone is to be completed.

**Request for Emission Reduction Credits:** Emission Reduction Credits (ERCs) are required as emission offsets for new major facilities or major modifications at existing facilities subject to 6 NYCRR Part 231-5 or 231-6 and for netting out of Part 231-6 or 231-8 applicability for major modifications. Emission reductions for ozone precursors (NO<sub>x</sub> and VOC) and PM-10 resulting from facility shutdown, curtailment, source reduction and/or over control which occur on or after November 15, 1990 are eligible to be certified as ERCs. Emission reductions for PM-2.5 and ozone precursors (NO<sub>x</sub> and SO<sub>2</sub>) resulting from facility shutdown, curtailment, source reduction and/or over control which occur on or after April 5, 2005 are eligible to be certified as ERCs. Generally, applicants can have their emission reductions certified by submitting an application for a permit modification including a completed ERC quantification form as an attachment with adequate supporting documentation. The application is reviewed by the appropriate DEC regional office and subject to a 30-day public notice period. After the public notice period, ERCs are issued as a permit modification for a facility that will continue to operate. This section should be completed only if the applicant is seeking to obtain new ERCs. Facilities having previously approved



ERCs are not required to complete this section.

**Emission Source ID:** Enter the emission source identification number of the emission source creating the ERCs.

**Emission Reduction Description:** Provide a description of the emission reduction. In the case of a past reduction, the description should identify how and when the reduction occurred. Part 231 prohibits certification of future reductions unless they are linked with a Proposed Major Modification (PMM) or Proposed Major Facility (PMF). For a future reduction, the description should identify how and when the reduction will occur and the PMM or PMF for which it will be used.

**Contaminant Emission Reduction Data:**

**Baseline Period:** Enter the appropriate baseline period for the reduction.

For a past reduction, the baseline period is defined as any 24 consecutive months within the five years immediately preceding the reduction date.

For a future reduction, the baseline period is defined as any 24 consecutive months within the five years immediately preceding the date the permit application for a PMM or PMF using the reduction is submitted.

**Reduction Date:** Enter the date of the emission reduction:

For a past reduction, the reduction date is the date the reduction physically occurred.

For a future reduction, the reduction date is the date of submittal of a permit application for the PMM or PMF using the reduction.

**Method:** Enter the code corresponding to the method used to reduce emissions:

- 01 – Shutdown
- 02 – Curtailment
- 03 – Over control
- 04 – Source reduction

Shutdown, curtailment and source reduction are defined in Part 231. Over control is defined as controlling emissions beyond what is required by state or federal regulations.

**CAS Number:** Enter the Chemical Abstract Series number for the regulated NSR contaminant for which ERCs are being requested. **Note:** Nonattainment (NA) contaminants are identified as VOC and NO<sub>x</sub> (statewide), PM-10 (Manhattan only) and PM-2.5 including precursors NO<sub>x</sub> and SO<sub>2</sub> (New York City Metropolitan Area and Orange County). If the regulated NSR contaminant involved is VOC, use the CAS Number established for total VOCs (ONY998-00-0). VOC should not be speciated when calculating ERCs.

**Contaminant Name:** Enter the name of the regulated NSR contaminant for which ERCs are being requested. Do not abbreviate or use chemical formulas.

**ERC (lbs/yr):** Enter the amount of ERC, in pounds per year, which is to be used for netting or offset purposes. Netting and offsets are defined as follows:

**Netting:** A mechanism by which a PMM at an existing major facility can avoid applicability of Part 231-6 or 231-8.

**Offsets:** The prescribed ratios by which any PMM or PMF subject to Part 231-5 or 231-6 needs to apply Lowest Achievable Emission Rate (LAER), and obtain certified and registered ERCs.

**Facility to Use Future Reduction:** Enter the name, address, and application ID of the facility using the future reduction. An application requesting ERCs for a future reduction will not be accepted by the Department unless this section of the form has been completed.

#### **Use of Emission Reduction Credits:**

**Emission Source ID:** Enter the emission source identification number of the emission source which is part of the Proposed Major Modification (PMM) or Proposed Major Facility (PMF) using the ERCs. For a new emission source, applicants may assign this identifier.

**Proposed Project Description:** Provide a description of the PMM or PMF using the ERCs. Ensure that the ERCs are being obtained from the same NA area or from an area having an equal or more restrictive nonattainment designation and that the reduced emissions contribute to the NA status for the location of the PMM or PMF. Applicants are advised to contact the Bureau of Stationary Sources to determine the appropriate location of offsets.

#### **Contaminant Emissions Increase Data:**

**CAS Number:** Enter the Chemical Abstract Series Number for the NA contaminant for which ERCs are being used as offsets. **Note:** These are identified as VOC and NO<sub>x</sub> (statewide), PM-10 (Manhattan only) and PM-2.5 including precursors NO<sub>x</sub> and SO<sub>2</sub> (New York City Metropolitan Area and Orange County). If the NA contaminant involved is VOC, use the CAS Number established for total VOCs (0NY998-00-0). VOC should not be speciated.

**Contaminant Name:** Enter the name of the NA contaminant for which ERCs are being used. Do not abbreviate or use chemical formulas.

**Project Emission Potential (PEP):** Enter the project emission potential in lbs/yr, for each contaminant which is applicable to 6 NYCRR Part 231. The PEP is determined as follows:

1. for a new major facility - the PTE of all sources
2. for a new emission source - the PTE of the source
3. for a modification of an existing source. The PEP shall be quantified as the difference between baseline actual emissions and the subsequent projected actual emissions.

**Statement of Compliance:** Part 231-5.2(a) and 231-6.3(a) requires an affirmation that all major facilities under the applicant's ownership or control (or under the ownership or control of any entity which controls, is controlled by, or has common control with the applicant) are in operating compliance with all applicable state and federal requirements or are meeting the schedule of a consent order. To fulfill this requirement, check the box to acknowledge that the compliance statement has been read and that the applicant is in agreement with the provisions regarding compliance.

**Source of Emission Reduction Credit – Facility:** Enter the name, address, and permit ID of the facility that has created or will be creating the ERC.

**Emission Source ID:** Enter the emission source identification number.

**CAS Number:** Enter the Chemical Abstract Series Number of the regulated NSR contaminant for which ERCs have been or will be created. **Note:** NA contaminants are identified as VOC and NO<sub>x</sub> (statewide), PM-10 (Manhattan only) and PM-2.5 including precursors NO<sub>x</sub> and SO<sub>2</sub> (New York City Metropolitan Area and Orange County). VOC should not be speciated.

**Contaminant Name:** Enter the name of the regulated NSR contaminant for which ERCs have been or will be created. Do not abbreviate or use chemical formulas.

**ERC Netting/Offset:** Enter the lbs/yr of ERCs being used, for netting out of applicability by the same facility proposing the project or, as offsets by the same or another facility. Netting and offsets are defined as follows:

**Netting:** A mechanism by which a PMM at an existing major facility can avoid applicability of Part 231-6 or 231-8.

**Offsets:** The prescribed ratios by which any PMM or PMF subject to Part 231-5 or 231-6 needs to apply Lowest Achievable Emission Rate (LAER), and obtain certified and registered ERCs.

## Supporting Documentation and Attachments

This section describes the documentation which may need to be provided in support of data listed in the application. Supporting documentation may be submitted as either as a hard copy, electronically, or a combination of the two unless specified otherwise in the instructions for that documentation.

**Required Supporting Documentation:** The following supporting documentation is required with each permit application unless otherwise specified.

**List of Exempt Activities:** Each Title V permit application is required to include a list of all activities which are considered exempt from permitting as defined in 6 NYCRR Part 201-3.2. To assist the applicant in fulfilling this requirement, a separate form is available for use. The form includes prefilled rule citations defining the exemption and a description of each exempt activity. The applicant must provide the number of each exempt activity occurring at the facility and the general building location(s) of each group of activities which occur at the facility. For any listed activity that does not occur at the facility, leave the appropriate column blank.

**Plot Plan:** All permit applications for new facilities require a plot plan, to scale, which includes the following information at a minimum:

1. North orientation and property lines of the facility where the installation is located;
2. NYTM coordinate location grid with the ability to estimate location down to the nearest two decimal places (i.e. 10 meters), unless a less precise degree of detail is approved by the Department;
3. Location of all existing and proposed emission points. The plan should distinguish between existing and proposed emission points and assign an emission point identification number using the convention cited in the main instructions;
4. Identification of significant land marks, such as highway intersections, roads, lakes and rivers in the vicinity of the facility. **Note:** This information may be provided using any one or combination of the following: to scale plot plan, aerial photo and/or satellite map.
5. Identification of the nearest building at or beyond the property line. If applicable, a description of the normal use of such buildings; e.g. residence, retail store, school, etc., should be provided. **Note:** This information may be provided using any one or combination of the following: to scale plot plan, aerial photo and/or satellite map.

The following information is optional in most cases but may be required on the plot plan depending on the specific application requirements:

1. Elevation above mean sea level and the height above ground of all emission points (e.g., stacks or other points which emit regulated air pollutants to the outdoor atmosphere);
2. Shortest straight line distance from each emission point to the property line of the facility where the installation is located;
3. Direction of prevailing winds and other pertinent meteorological or topographical factors that would affect dispersion of air contaminants
4. Plan and elevation drawings which show:

- a. Design, dimensions and arrangement of all emission sources and stack sampling ports.
- b. Details and arrangements of related equipment which affect the performance of the installation.

**Process Flow Diagram:** Applications for Title V permits must include a process flow diagram that illustrates process flow at the facility. The diagram should include each emission source and any associated controls, and also indicate how each emission point is connected to its associated emission source(s). Each piece of equipment and each emission point should be identified by the ID number used in the attached application, and each piece of equipment described in the application should be included on the diagram.

It is not necessary to include a process flow diagram with applications for minor permit modifications. Applications for significant permit modifications should include a diagram that indicates any changes to the previously submitted diagram as a result of the proposed modification.

**Methods Used to Determine Compliance:** Applications for Title V permits must provide descriptions of the methods used to determine the compliance status of the facility of each emission unit for each regulated pollutant and applicable requirement. A form for this submittal is available and must be provided with this application form. The statement of methods must include a description of all required monitoring, records or tests as well as any other information which the applicant uses to determine whether its facility is complying with the applicable requirements.

**Calculations:** Sample or actual calculations used to determine input or production rate, emission rate potential (ERP), potential to emit (PTE) and actual emissions for regulated air pollutants emitted from a process on a short term or annual basis or to explain any emissions related information listed on the application forms must be provided. The calculation data and examples provided must be sufficiently detailed to allow Department staff to reproduce the results shown in the application. The Department reserves the right to request additional calculation data if necessary. The general format for providing calculations is listed as follows:

1. At the top of each calculations page, enter the ID for the process and emission unit, if applicable.
2. List the contaminant name and CAS No.
3. Define and include all necessary operational parameters from the process such as pressure, temperature, moisture content, gas flow rate, etc., that are used in the calculations.
4. Detail any additional engineering design parameters used in estimating emissions. This may include furnace/process/unit design capacity, maximum hourly/yearly design, fuel information (i.e. heat, sulfur and ash content), percent annual throughput (e.g. on a quarterly basis) and normal plant operating schedule (hours/day, days/week, weeks/year).
5. Define and document any control efficiencies used in the calculations.
6. Define all mathematical constants, unit conversions, formulas, physical and chemical properties of the contaminant and any other reference material used to determine emissions.
7. Reference any emission estimation methods which are being utilized. This may include:
  - a. stack tests of the emission source under review;
  - b. stack tests of a furnace/process identical to the emission source under review;
  - c. stack tests of a furnace/process geometrically similar to the source under review;

- d. manufacturer's guarantee;
- e. published emission factors;
- f. mass balance calculations;
- g. continuous emissions monitoring data; and
- h. air dispersion modeling results.

If a stack test, manufacturer's data or modeling report is used in the calculations, copies of the reports or written materials must be provided. Specific references should also be listed for any emission factors used in determining emissions.

- 8. Calculate emission rates in the units listed and in such terms as to establish compliance consistent with the applicable standard.
- 9. Describe in detail all operating scenarios and other assumptions used to calculate emissions. This would include the specific conditions under which the process is expected to operate both at normal and maximum rates.
- 10. Include emission estimates, if necessary, for a worst-case malfunction episode scenario.

**Optional Supporting Documentation:** The following supporting documentation is only required when necessary to support the methods of compliance proposed in the application.

**Air Quality Model:** An air quality impact evaluation or dispersion model may be required for a variety of emission sources including: major sources, particularly those subject to Part 231, air toxic sources, and any sources that appear likely to contravene an applicable ambient air quality standard. The Department has developed the *DAR-10: Impact Analysis Monitoring* guidance document to describe the recommended procedures for conducting ambient impact analyses.

Any facility that is required to conduct an ambient impact analysis by the Department must submit a modeling protocol to the Department for review prior to conducting that analysis. The protocol should describe the procedures that will be used to conduct the analysis, including specific information regarding the sources location and operating parameters, land use characteristics, and existing air quality and meteorological conditions consistent with the guidance provided in DAR-10. Once approved, the applicant should use the protocol to perform the modeling analysis and submit a report to the Department.

Given the complexity and unique nature of air quality evaluations, the applicant is encouraged to contact the appropriate NYSDEC Regional Air Pollution Control Engineer for further guidance regarding protocol and modeling analysis requirements and emission inventory development for establishing background air quality.

**Note:** The Department will provide the applicant with the appropriate processed meteorological data to be used when conducting the impact analysis.

**Confidentiality Justification:** The applicant may request that certain information submitted as part of a permit application be kept confidential. Such requests must be made in accordance with requirements set forth in 6 NYCRR Part 616. Any requests for confidentiality must:

- 1. Be made in writing and state the reasons for excepting the information from public disclosure;

2. Specifically identify which information is to be designated as proprietary; and
3. Detail the reasons why the information should be considered proprietary or why its release would cause substantial injury to the competitive position of the business.

If the request itself contains confidential information, it will also be considered confidential if requested. It should be noted that if information is submitted to the Department under a claim of confidentiality, particularly for a Title V facility permit, the Department may require the facility to submit this information to the USEPA directly. In addition, information that is deemed confidential by the Department may not be considered confidential by the USEPA unless a formal confidentiality request is also approved by that agency.

**Ambient Air Monitoring Plan or Reports:** Facilities which use or propose to use either onsite or offsite ambient air monitoring of selected contaminants in order to verify compliance with applicable regulations must meet certain minimum requirements for acceptability by the Department. Most of the technical requirements are codified in the following federal regulations and references:

1. National Primary and Secondary Ambient Air Quality Standards, 40 CFR 50;
2. Requirements for the Preparation, Adoption, and Submittal of Implementation Plans, 40 CFR 51;
3. Ambient Air Monitoring and Equivalent Methods, 40 CFR 53;
4. Ambient Air Quality Surveillance, 40 CFR 58;
5. List of Designated Reference and Equivalent Methods as periodically updated by the USEPA. EMSL, RTP, N.C. 27711
6. Quality Assurance Handbook for Air Pollution Measurement Systems Vols. I, II, III, IV (as revised).  
Volume I, Principles, EPA 600/9-76-005  
Volume II, Ambient Air Specific Methods, EPA 600/4-77-027a  
Volume III, Stationary Source Specific Methods, EPA 600/4-77-027b  
Volume IV, Meteorological Measurements, EPA 600/4-82-060
7. Ambient Monitoring Guidelines for Prevention of Significant Deterioration, EPA 450/4-80-012
8. The Quality Assurance Bibliography EPA 600/4-80-009, February 1980

The above regulations define USEPA acceptable measurement techniques and data handling procedures. In most cases the references will provide more detail and background, including discussions on properly siting air monitors for special purpose monitoring. The Department is available for limited consultation if a written monitoring plan is submitted as per this attachment.

In general any monitoring plan should address items 1-7 including the following topics:

1. Monitoring siting: the location of the monitor should meet federal requirements and/or be suited to the purpose for which the sampling is being conducted.
2. Instrumentation: Use of USEPA designated reference or equivalent methods and instruments is

mandatory. These instruments must be operated in a manner consistent with the USEPA approved operator's manual.

3. Data storage, retrieval and reporting: the data acquisition and reporting system must be suitable to the data being collected. Data retrieval should exceed 90% for short term and 75% for long term monitoring.
4. Quality assurance: a written QA protocol must exist and must be followed. This document will detail all aspects of the data collection system (i.e. operation and control charts, maintenance, calibration, accuracy auditing, precision checks, data editing and reporting QA reports including data completeness, and data precision and accuracy).

**Stack Test Protocol:** If the applicant intends to demonstrate compliance with one or more proposed emission standards via stack testing, attach a stack test protocol for review by the Department. Such a protocol should describe the reference test methods that will be used to conduct the test, the data collection and quality assurance procedures, and any other pertinent information. The protocol should be prepared in a manner that is consistent with the requirements of 6 NYCRR Part 202-1, and all other applicable test methods and requirements. Once the testing protocol is approved by the Department, the applicant may proceed with the stack test.

Each stack test protocol should include the following information at a minimum:

1. A brief facility description including:
  - a. the DEC ID (if known);
  - b. a process flow diagram; and
  - c. a description of normal emission source operation.
2. A summary of the applicable regulations and emission standards that the stack test will be used to demonstrate compliance with.
3. A description of the stack test location including:
  - a. a site description (with drawings);
  - b. the number of duct diameters from flow disturbances; and
  - c. the number and location of sampling points.
4. A description of the reference test methods that will be used including:
  - a. the make, model, size, etc. of testing equipment;
  - b. equipment calibration data or provisions for calibration data acquisition at the test site;
  - c. the proposed sampling procedures and a description of any differences from standard methods;
  - d. the proposed laboratory analysis procedures and a description of any differences from standard methods;
  - e. appropriate laboratory certifications; and
  - f. calculations of expected emissions.
5. The chain of custody procedures that the facility or testing contractor will follow for the collected samples
6. Emission source operating conditions anticipated during the test, including any emissions control equipment operating data that will be monitored and recorded during the test.

**Note:** Stack testing protocols must be submitted to the Department for approval at least 30 days prior to the



scheduled testing date.

**Stack Test Report:** If any data in the application or supplemental calculations is based on the results of an approved stack test report, the applicant should attach a copy of that report to the application. The emission test report must be submitted to the Department within 60 days after the completion of the test. In the event such time is not sufficient, the facility owner may request an extension in writing. Because test reports may be used as legal evidence of compliance, all stack test reports must be certified by a Professional Engineer licensed in the State of New York.

The emission test report should contain all of the pertinent data leading up to the test, a description of the process and the operating conditions under which tests were made, the results of the tests, and the test procedures that were used. The report should enable a technically trained person to understand what was done and what the results were. Summaries of field test data should be included in order to allow a knowledgeable person to check the results and obtain an idea of their accuracy.

**Note:** Previously submitted stack test reports may not need to be attached. The applicant is encouraged to contact the appropriate NYSDEC Regional Office to determine if the referenced report is already on file.

**Continuous Emissions Monitoring Plan:** If one or more applicable requirements or proposed compliance certification sections require the use of a continuous emissions monitoring (CEM) system, the applicant should develop and attach a continuous emissions monitoring plan. The monitoring plan should briefly describe the basic approach that will be used to comply with the applicable CEMs requirements. It should include:

1. The identification, location, and description of the specific emission point(s) (e.g. emission unit ID, emission source ID, design capacity and units, general type of control system (if applicable), etc.);
2. Identification of the applicable regulation(s) and CEM requirement(s) the CEM will be used to demonstrate compliance with (e.g. NSPS, NESHAP, state regulations etc.);
3. Identification of the type of monitor (e.g., extractive, point in-situ, etc.), the CEM's manufacturer or vendor, and the model number or other identifying feature of the equipment to be installed;
4. Identification of the analytical technique for each analyzer that will be used (e.g., NDIR, UV absorption, chemiluminescence, etc.);
5. Identification and description of the proposed monitoring location(s) (i.e., position along the effluent path) and identification of the specific measurement point(s) at each monitoring location from which samples will be obtained;
6. Discussion of plans for time-sharing of extractive monitoring systems between two or more monitoring locations either as a permanent installation or as a back-up provision when a particular monitor is inoperative;
7. Identification of the procedures that will be used to convert measurement data to units of the standard, including specific conversion factors, assumptions, and equations as applicable;
8. Description of any mathematical procedures that will be used to correct emission measurement data for calibration drift, interference of other constituents, quenching, or other measurement phenomena applicable to the proposed measurement system;

9. Brief description of the data acquisition system and data recording devices; and
10. Identification of any exceptions to the performance specifications or other applicable monitoring requirements and any alternate procedures that may require the approval of the Department.

Because specific monitoring conditions may vary considerably from location to location, further questions regarding quality control/quality assurance, operating and reporting requirements should be discussed with the Regional Air Pollution Control Engineer.

**Note:** If an identical Continuous Emission Monitoring Plan/QA/QC was previously submitted to the Department, the applicant may avoid resubmitting the entire document by listing the date the specific Continuous Emission Monitoring Plan/QA/QC was originally submitted to the Department.

**LAER Demonstration:** Lowest Achievable Emission Rate (LAER) refers to the most stringent emission limitation achieved in practice, or which can be reasonably be expected to occur in practice for a category of emission sources taking into consideration each air contaminant which must be controlled. A LAER demonstration must be prepared and submitted as part of any application for a new major facility or NSR major modification which is subject to the requirements of Subparts 231-5 and 231-6. Further questions regarding LAER requirements may be discussed with the Regional Air Pollution Control Engineer.

**Note:** If an identical LAER Demonstration was previously submitted to the Department, the applicant may avoid resubmitting the entire document by listing the date the specific LAER Demonstration was originally submitted to the Department.

**BACT Demonstration:** Best Available Control Technology (BACT) refers to an emissions limitation based on the maximum degree of reduction for each pollutant subject to regulation under the Clean Air Act which would be emitted from any proposed major facility or major modification. The maximum degree of reduction is determined by the Department on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, that are judged to be achievable for such source or modification through application of production processes or available methods, systems, and techniques. A BACT demonstration must be prepared and submitted as part of any application for a new major facility or major modification which is subject to the requirements of 6 NYCRR Subparts 231-7 and 231-8. Questions regarding BACT requirements may be discussed with the Regional Air Pollution Control Engineer.

**Note:** If an identical BACT Demonstration was previously submitted to the Department, the applicant may avoid resubmitting the entire document by simply listing the date the specific BACT Demonstration was originally submitted to the Department.

**RACT Demonstration:** Reasonably Available Control Technology (RACT) refers to an emissions limitation based on the lowest emission limit that a particular source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. The Department has developed the *DAR-20: Economic and Technical Analysis for Reasonably Available Control Technology* guidance document to assist facility owners in reviewing all possible control technologies and strategies to determine RACT. A RACT demonstration must be prepared and submitted as part of the permit application for all emission sources that are subject to one or more applicable RACT requirements. Questions regarding RACT requirements or determinations should be directed to the appropriate regional office.

**Toxic Impact Assessment:** The Toxic Impact Assessment (TIA) is an inhalation risk assessment that is used to demonstrate that a process emission source emitting one or more high toxicity air contaminants, as defined in 6 NYCRR Part 212, that is subject to a federal National Emission Standard for Hazardous Air Pollutants (NESHAP) is in compliance with the requirements of Part 212. Such a risk assessment must be developed using the procedures specified in the following guidance documents: *DAR-1: Guidelines for the Evaluation and Control of Ambient Air Contaminants Under Part 212* and *DAR-10: Impact Analysis Monitoring*. Additional information on the preparation of ambient air impact analyses can be found in the Air Quality Model section above.

**Environmental Rating Demonstration:** An environmental rating must be assigned to each contaminant emitted from a process emission source that is subject to the requirements of 6 NYCRR Part 212. While the Department is the final arbiter of the assigned environmental rating, the applicant must propose a rating as described in the *DAR-1: Guidelines for the Evaluation and Control of Ambient Air Contaminants Under Part 212* guidance document and 6 NYCRR Part 212, and provide a demonstration supporting the chosen rating as part of the permit application. Such a demonstration should include all data, calculations, ambient impact analyses and other information used to develop the proposed environmental rating. The applicant is encouraged to contact the appropriate NYSDEC regional office with any questions on the development of environmental ratings.

**Operational Flexibility Protocol/Description of Alternative Operating Scenarios:** The operational flexibility provisions in 6 NYCRR Part 201-6.4(f) allow Title V facilities to make certain physical and operational changes without the need for a permit modification. In order to qualify as operational flexibility, the proposed change must not exceed, or cause the facility to exceed, an emissions limitation or cap specified in the permit, and must not meet the definition of ‘modification’ at 6 NYCRR Part 200.1(aq).

In order to account for possible future changes at the facility, the applicant may develop and propose a protocol that specifies the methods that will be used to evaluate proposed changes to the facility’s operations for conformance with applicable requirements. If approved, the operational flexibility protocol will be incorporated into the facility’s Title V permit.

The owner or operator of a facility that is proposing to make a change under operational flexibility must notify the Department in writing at least fifteen days in advance of making any changes. Each notification must contain the following information:

1. Identification of the emission units, processes, emission sources, and/or emission points that are affected by the proposed change, as well as any revisions to the existing emission unit structure within the permit;
2. A description of the proposed change, including any operating parameters that are affected;
3. Identification and description of any emission control device or technology that will be used;
4. Documentation demonstrating the proposed change’s compliance with all applicable requirements, including calculations demonstrating the emission rate potential of the change and that the change is not subject to the requirements of 6 NYCRR Part 231;
5. Identification and evaluation of all applicable state and federal regulations;

6. A description of any additional operating, record keeping, or reporting procedures necessary to demonstrate compliance with applicable requirements; and
7. Any other relevant information used for the evaluation of the proposed change under the operational flexibility protocol in the facility's permit.

6 NYCRR Part 201-6.4(f) also provides for the specification of alternate operating scenarios at Title V facilities. An alternate operating scenario is a set of operating conditions and associated regulatory requirements that allow the facility the flexibility to operate in more than one way. The facility may switch between each alternate operating scenario without first obtaining a permit modification provided all necessary applicable requirements are included in the permit. The facility owner or operator must maintain appropriate records and submit reports for each operating scenario, and must maintain a log indicating the date and time of changes from one operating scenario to another.

Each alternate operating scenario should be described using the process information section of the application. A separate process description should be provided for each operating scenario that includes all necessary data to describe the proposed operating conditions. The applicant should also include all applicable requirements that correspond to each operating scenario in the facility and/or emission unit compliance certification sections, and note which scenario those requirements apply to in the description field.

**Title IV Permit Application:** The acid rain program established under Title IV of the 1990 Clean Air Act Amendments requires emissions reductions of Sulfur Dioxide and Oxides of Nitrogen from facilities in the power sector. Each affected source, as defined in 6 NYCRR Part 201-2.1(b)(3), that is subject to the provisions of Title IV and the corresponding regulations implementing these provisions (40 CFR Part 72 through 78) is required to apply for and obtain an Acid Rain Permit. The standard Title IV permit application form and instructions developed by the USEPA is to be used to obtain the Title IV permit. Each affected source should complete this form and submit it along with the Title V application. The acid rain requirements will be maintained as a discrete segment in the operating permit differing from other permit requirements.

**ERC Quantification Form:** The ERC Quantification Forms are used to quantify the amount of an emission reduction resulting from facility shutdown, curtailment, source reduction or over control that can be approved as an ERC in accordance with the provisions of Subpart 231-10. This form must be completed and submitted as part of any application requesting approval of emission reduction credits. They are available from any DEC Regional office upon request and can be found on the Department's website.

**Baseline Period Demonstration:** Subparts 231-6 and 231-8 require that an applicant use an appropriate baseline period for determining the baseline actual emissions necessary for calculating ERCs or creditable emission increases. The baseline period consists of any 24 consecutive months within the five years immediately preceding either the date the Department receives an application calculating the modification's project emission potential or the date the emission reduction or increase actually occurred for determining ERCs or creditable emission increases.

**Use of ERC(s) Form:** Facilities intending to use ERCs must submit a Use of ERCs form complete with signatures from authorized representatives of both the owner of the ERCs and the facility using the ERCs. This form is to be provided as an attachment to the application submitted by the facility using the ERCs. It is available from any DEC Regional office upon request and can be found on the Department's website.

**Analysis of Contemporaneous Emission Increase/Decrease:** A net emission increase applicability determination under the provisions of Subparts 231-6 and 231-8 requires that an analysis of contemporaneous emission increases

and decreases (ERCs) be performed. Subpart 231-4 establishes the definition of contemporaneous period, which depends upon the nonattainment status of the facility's location, within which emission increases and decreases must be analyzed.

**Other Documents:** If any document(s) other than those listed above are to be submitted in support of the application form, check the Other Documents box and identify each individually. If an individual document has been previously submitted to the Department, the applicant may forego resubmitting the identical information by simply listing the document name and the date it was originally submitted to the Department.