



INSTRUCTIONS FOR FORM 260-CAAPP

AIR POLLUTION CONTROL EQUIPMENT DATA AND INFORMATION

PURPOSE OF 260-CAAPP

This form is used to provide data on a single mode of operation of air pollution control equipment or system at the source.

Help for specific items: (Note: items which are self explanatory are not addressed)

SOURCE INFORMATION

Identify the source at which the air pollution control equipment is located. This information should be identical to information on the 200-CAAPP form.

- 1) **SOURCE NAME:** The company name, or specific plant name if different from company name, must be provided.
- 2) **DATE FORM PREPARED:** This should be the date that the entire initial application is submitted to the Agency. If this form is being submitted separate from the initial application, such as additional information, then enter the actual date the form is completed.
- 3) **SOURCE ID NO.:** This is the ID number assigned to the source by the Agency. This number can be found at the top of the first page of any state air pollution control permit or at the top of the CAAPP permit (if existing). This number is unique to air pollution and should not be confused with water or land pollution ID numbers.

GENERAL INFORMATION

- 4) **NAME OF AIR POLLUTION CONTROL EQUIPMENT:** The actual name of the control equipment/system as given by the manufacturer, e.g., *DES90 thermal incinerator*.
- 5) **FLOW DIAGRAM DESIGNATION:** The designation or identifier that was assigned to this control equipment/system on the flow diagram, e.g., *afterburner #1*.
- 9) **DATES:** The commencement date for construction, operation, and/or the latest modification for this control equipment/system must be provided. If the construction, operation, or modification has not yet occurred, the anticipated or planned dates are to be entered. Construction and modification dates need only be supplied for equipment which has been constructed or modified within 7 years of the date of preparation of this form. If the equipment began operation before 1980, the best estimate of beginning operation date is appropriate. In the event that these dates are not readily accessible, then this information need only be supplied if needed to determine rule applicability or compliance (e.g., New Source Performance Standard or New Source Review).
- 11) **LIST OF OTHER EQUIPMENT:** The name and flow diagram designation of all emission units and other air pollution control equipment which duct emissions to the control equipment/system indicated on this form must be provided here.

12) **MODES OF OPERATION:** A separate 260-CAAPP form must be completed for each mode of operation of the air pollution control equipment/system. For example, if an afterburner will control emissions by two separate methods such as by either utilizing a catalyst or by direct incineration, then this is considered as two separate modes of operation. If the source desires the flexibility to switch from one to the other, then a separate 260-CAAPP form must be completed for each mode.

OPERATING SCHEDULE

14) **CONTROL MAINTENANCE AND REPAIR:** The dates and duration of control equipment down time due to scheduled maintenance and repair activities must be provided here, e.g., *July 1 - downtime = 6 hours - annual inspection and baghouse replacement; once a year - downtime = approx. 8 hours - seal replacement.*

15a) **PERIODS WHEN CONTROL NOT USED:** For example, if an afterburner on a coating line which uses both compliant and non-compliant coatings is only operated when non-compliant coatings are used, then this period when the afterburner is not used must be indicated here. Another example is if an afterburner is not used until a certain temperature is achieved (e.g., 1400 deg F) the emissions from the feeding emission unit(s) will be uncontrolled until the afterburner is activated and this must be indicated.

15b) **OTHER CONTROL DOWNTIME:** Any periods of time when the control equipment is not in operation that have not been previously provided must be indicated here. For example, if an afterburner is allowed to seasonally shut down then the purpose and duration of the shut down must be provided.

APPLICABLE RULES

Applicable state and federal rules governing emissions for the mode of operation for the control equipment/system must be provided. The regulated air pollutant, applicable rule, and requirement(s) of the rule must be provided. When citing rules, some helpful abbreviations are:

IAC = 35 Illinois Administration Code, and
CFR = 40 Code of Federal Regulations.

16) Examples of emission standards and limitations set by rule(s) would be:

<u>REGULATED AIR POLLUTANT</u>	<u>EMISSIONS STANDARD(S)</u>	<u>REQUIREMENT(S)</u>
VOM	IAC 218.207(b)(1)	81% overall reduction 90% afterburner eff.

17) An example of a recordkeeping rule would be:

<u>REGULATED AIR POLLUTANT</u>	<u>RECORDKEEPING RULE(S)</u>	<u>REQUIREMENT(S)</u>
VOM	IAC 218.211(e)(2)	coating usage & control data

18) An example of a reporting rule would be:

<u>REGULATED AIR POLLUTANT</u>	<u>REPORTING RULE(S)</u>	<u>REQUIREMENT(S)</u>
VOM	IAC 218.207(e)(1) & (3)	Test report & notice of violation

19) An example of a monitoring rule would be:

<u>REGULATED AIR POLLUTANT</u>	<u>MONITORING RULE(S)</u>	<u>REQUIREMENT(S)</u>
<i>VOM</i>	<i>IAC 218.105(d)(2)(A)</i>	<i>Continuous monitor of afterburner temp.</i>

20) An example of a testing rule would be:

<u>REGULATED AIR POLLUTANT</u>	<u>TESTING RULE(S)</u>	<u>REQUIREMENT(S)</u>
<i>VOM</i>	<i>IAC 218.105</i>	<i>Capture & control testing</i>

COMPLIANCE INFORMATION

21) **COMPLIANCE STATUS:** The compliance status of the control equipment/system with all applicable requirements must be provided. If the control equipment/ system is not in compliance with all applicable requirements then this indicates that the feeding emission unit(s) is not in compliance and a 294-CAAPP form must be completed for the noncompliant feeding emission unit(s). This form must be completed according to the appropriate instructions.

22) **INITIAL COMPLIANCE:** If compliance has not previously been demonstrated then provide the method by which compliance will be demonstrated. If compliance was previously demonstrated, then provide the method used. Initial compliance can be demonstrated through a stack test, standard emission factor (AP-42 or AIRS), material balance, or some other acceptable form of engineering calculation or test. Give all necessary information to verify that the chosen method of compliance demonstration is acceptable, including the title of any previous stack test report, the reference for any emission factor, and any other pertinent information. If a compliance demonstration is, or was, required by an applicable rule, the rule should be identified along with the method(s) by which compliance has been, or will be, demonstrated.

23) **ONGOING COMPLIANCE:** For example, ongoing compliance may be demonstrated through necessary work practices, periodic maintenance and inspections, or emission monitoring. If compliance demonstration is required by an applicable rule, the rule should be identified along with the requirement.

TESTING, MONITORING, RECORDKEEPING AND REPORTING

24a) **RECORDED PARAMETERS:** Examples of recorded parameters and frequency of such records would be as follows:

<u>PARAMETER</u>	<u>UNIT OF MEASUREMENT</u>	<u>METHOD OF MEASUREMENT</u>	<u>FREQUENCY</u>
<i>Afterburner temp.</i>	<i>Degrees F</i>	<i>Continuous monitor</i>	<i>Continuous</i>

24b) **RECORD METHODS:** The method used to create and maintain records must be described. An example of such description would be as follows:

<u>PARAMETER</u>	<u>METHOD OF RECORDKEEPING</u>	<u>TITLE OF PERSON RESPONSIBLE</u>	<u>TITLE OF CONTACT PERSON</u>
<i>Afterburner temp.</i>	<i>continuous recorder</i>	<i>Plant manager</i>	<i>Plant manager</i>

24d) **RECORD AVAILABILITY:** All records must be available at the source for inspection by the Agency, and copying or submittal to the Agency upon request.

25 a through c) MONITORS: The identification and description of any compliance monitoring devices or activities must be provided.

26) TESTS: Any stack tests performed on this unit for which the results are used to determine fees, rule applicability and/or compliance must be described here. An example of a stack test description would be as follows:

<u>TEST DATE</u>	<u>TEST METHOD</u>	<u>TESTING COMPANY</u>	<u>OPERATING CONDITIONS</u>	<u>SUMMARY OF RESULTS</u>
4/10/89	USEPA-25A	ABC, Inc.	Full Capacity	Max overall eff.= 85% Typ overall eff.= 83%

27) REPORTING REQUIREMENTS: A description of all reporting requirements must be provided. An example of a reporting requirement description would be as follows:

<u>REPORTING REQUIREMENTS</u>	<u>TITLE OF REPORT</u>	<u>FREQUENCY</u>
<i>Eff. testing report</i>	<i>Line #1 compliance report</i>	<i>Once</i>

CAPTURE AND CONTROL

28) CAPTURE SYSTEM DESCRIPTION: A description of the emissions capture system associated with this control equipment/system must be provided here.

29) CAPTURE SYSTEM & FLOW DIAGRAM: If the flow diagram for this process does not show the features of this capture system (e.g., hoods and fan location) then a sketch drawing of this capture system must be attached and labeled as exhibit 260-3.

30a and b) EFFICIENCY & DETERMINATION METHOD: The actual capture and control operating parameters and the methods used to determine these parameters must be provided here.

30c) REQUIRED PERFORMANCE: The required capture and control operating parameters and the associated applicable rules must be provided here.

EMISSION INFORMATION

31) The ACTUAL EMISSION RATE, ALLOWABLE BY RULE EMISSION RATE, and PERMITTED EMISSION RATE sections should be completed as described below.

Maximum emissions are the emissions that theoretically could be emitted by the unit if it were operated at the maximum design capacity or maximum production capacity, or the maximum rate at which the source agrees to accept as a limit. The maximum tons/yr emission rate should be calculated using the maximum hours of operation per year.

Typical emissions are the emissions that would be emitted by the unit when it is operated at normal working capacity. The typical tons/yr emission rate should be calculated using the typical hours of operation per year. Typical emissions need only be supplied if different than maximum.

DM - Determination Method - The corresponding number 1-5 of the method used to estimate emissions must be provided, the most accurate means of estimating emissions should be used;

- 1) Stack Test,
- 2) Material Balance,

- 3) Standard Emission Factor (Standard emission factors are found in the following publications from the Office of Air Quality Planning and Standards, USEPA, Research Triangle Park, North Carolina 27717:
 - Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources, No. **AP-42**.
 - **AIRS** Facility Subsystem, Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants. EPA Document Number EPA 450/4-90-003),
- 4) Engineering Estimate, or
- 5) Special Emission Factor

Emission rates must be provided in tons/yr and in such terms as are necessary to establish compliance consistent with the standard reference test method. If not already required, the Agency also requests that the emissions be provided in terms of lbs/hr. If the emission rate as determined by the applicant is in units other than pounds or tons, the emissions should be converted to these units and provided and the original units should be stated in the "Other Terms" block. Emissions in units of tons/year may be calculated by multiplying the emissions in lbs/hr by the hours of operation per year. Emissions in units of lbs/hr are requested, however, they are only required to be provided if emissions are normally calculated this way or needed to determine rule applicability or compliance.

ACTUAL EMISSION RATE: The maximum and typical emissions from the control equipment/system must be provided. Typical emissions need only be supplied if different than maximum.

ALLOWABLE BY RULE EMISSION RATE: The maximum allowable emission rate is calculated using the rated capacity of the emission unit and the most stringent of the following:

- a) Any applicable standards as adopted by the USEPA and made applicable in Illinois pursuant to the Environmental Protection Act;
- b) The applicable emission standards or limitations contained in 35 Ill. Adm. Code, Subtitle B, Chapter I.

The allowable emission rate, applicable rule, and allowable rate in units of tons/yr must be provided. The allowable emission rate must be provided in the same units as stated in the applicable rule. If the allowable emission rate is in units other than tons, the allowable emissions must be converted to tons and also stated in the "Ton Per Year" column (except for opacity).

PERMITTED EMISSION RATE: These emissions are the maximum emission rates which the applicant agrees to accept as limits in the permit. These rates must be greater than or equal to the maximum actual emission rate and less than or equal to the allowable by rule emission rate. If the Agency finds these limits to be in compliance, the CAAPP permit will contain conditions requiring that these limits not be exceeded. The annual limit will also be used in fee calculations. In general, the difference in the two limits in this section will be the time period over which the limits extend. The short term limit is to be provided on the left and the annual limit on the right. For the limits to be enforceable, and therefore acceptable, the tons/yr limit must be accompanied by a shorter term limit such as lbs/hr. These short term limits should extend over as short as time period as possible and should not exceed one month. The short term limit should be at least as stringent as the allowable by rule emission rate. Note that these may not be the only limits placed on the permit to ensure that the permitted emission rates are not exceeded.

This section need not be completed if permittee will be paying the maximum fee amount and permitted emissions are not needed for any other purpose.

THE CALCULATIONS, TO THE EXTENT THAT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED MUST BE ATTACHED AND LABELED AS EXHIBIT 260-5.

HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

32) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION: Complete the ACTUAL EMISSION RATE and ALLOWABLE BY RULE sections per instructions given in the emission information section above. This table must summarize the emissions of Hazardous Air Pollutants (HAPs) emitted by this control system. The Clean Air Act list HAPs in section 112. If there are no emissions of HAPs, then this Table should be left blank. Additionally, insignificant emissions of HAPs, as set forth in 35 Ill. Adm. Code Part 201, Subpart F, need not be included on this table. An example of an entry on this table would be:

<u>HAP EMITTED</u>	<u>CAS NUMBER</u>	<u>ACTUAL EMISSION</u>			<u>METHOD</u>	<u>RATE OR STANDARD</u>	<u>APPLICABLE RULE</u>
		<u>(LBS/HR)</u>	<u>(TON/YR)</u>				
<i>Benzene</i>	<i>71432</i>	<i>Max</i>	<i>10.0</i>	<i>1.2</i>	<i>2</i>	<i>98% by wt control device leak-tight trucks</i>	<i>CFR 61</i>
		<i>Typ</i>	<i>8.0</i>	<i>0.8</i>	<i>2</i>		<i>61.302(b)</i>
							<i>61.302(d)</i>

THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED MUST BE ATTACHED AND LABELED AS EXHIBIT 260-6.

EXHAUST POINT INFORMATION

The Agency requests that the information in this section be provided with the submittal of this application, however, this information is only required to be submitted as part of this application if it is needed to determine or regulate emissions, needed to determine rule applicability or compliance, or related to stack height limitations developed pursuant to section 123 of the Clean Air Act.

Exhaust point data should be provided for the maximum and typical operating rates of the associated emission unit(s). An applicant may note the basis of data provided for exit gas flow rate, temperature and other parameters. For example, stack test values, engineering estimates or calculations, e.g., exit gas temperature - 350 deg. F max, 300 deg. F typical, estimated values.

36) GEP HEIGHT: Good Engineering Practice (GEP) Stack Height, as defined in 40 CFR 51.100(ii), means the greater of:

- i) 65 meters, measured from the ground-level elevation at the base of the stack
- ii) For stacks in existence on January 12, 1979, and for which the owner or operator had obtained all applicable permits or approvals,
 $H_g = 2.5 \times H$
- iii) For all other stacks,
 $H_g = H + 1.5L$, where
 H_g = good engineering practice stack height, measured from the ground-level elevation at the base of the stack,
 H = height of nearby structure(s) measured from the ground-level elevation at the base of the stack,
 L = lesser dimension, height or projected width, of nearby structure(s).

40) DIRECTION OF EXHAUST: The direction that the exhaust point directs the exhaust stream be described here. For example, if the exhaust point is on the side of

the building with a cover pointing the exhaust stream towards the ground, the direction would be stated as downward.

NOTE: The applicant need only provide either item 44 or 45 on the application form, not both. Given one, the Agency will calculate the other.

44) LATITUDE AND LONGITUDE: The latitude and longitude at the center of the exhaust point must be provided here. These parameters can be determined from the United States Geological Survey (USGS) map that contains this unit. Maps can be obtained from the USGS for a fee. These maps may be found at a local library.

45) UTM: The Universal Transverse Mercator zone and horizontal (easting) and vertical (northing) coordinates of the exhaust point must be provided if the latitude and longitude were not provided. This coordinate system, which has units of kilometers, divides the globe into 60 north-south zones each covering six degrees of longitude. The State of Illinois is covered by two zones (15 & 16). Sources west of 90 degrees are in Zone 15 while sources east of 90 degrees are in Zone 16. Sources in Illinois may only have a vertical coordinate ranging from 4094.000 - 4719.000 kilometers. The allowable range of horizontal values is 616.000 - 767.000 kilometers for Zone 15 and 233.000 - 469.000 kilometers for Zone 16.

ADDENDUM FORMS 260A THROUGH 260K

For each mode of operation of the control equipment/system submit form 260-CAAPP and the appropriate pages of 260A-CAAPP through 260K-CAAPP. The information required on forms CAAPP-260A through CAAPP-260K is for specific types of control equipment;

- | | |
|-----------------------------------|------------------------|
| 260A - Adsorber | 260G - Packed Scrubber |
| 260B - Afterburner | 260H - Scrubber |
| 260C - Filter | 260I - NOx Control |
| 260D - Cyclone | 260J - Flare |
| 260E - Condenser | 260K - Other |
| 260F - Electrostatic Precipitator | |

For example, a complete 260-CAAPP form for a single mode afterburner would consist of a completed 260-CAAPP and 260B-CAAPP.

The operating parameters of control equipment required in 260A-CAAPP through 260K-CAAPP must be provided for maximum and typical operation of the feeding emission units, not for maximum and typical operation of the control equipment.

For example, if an afterburner is controlling VOM emissions from a coating line, form 260B-CAAPP requires that VOM reduction efficiency of the afterburner be provided for the period when the coating line is operating at its maximum allowable rate, not for the period when the afterburner is achieving its maximum efficiency, unless these two parameters happen to occur simultaneously.

The feeding emission units are those emission units which duct emissions to the control equipment. As in the above example, the coating line is the feeding emission unit of the afterburner.