



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION  
P.O. BOX 19506  
SPRINGFIELD, ILLINOIS 62794-9506

## **INSTRUCTIONS FOR FORM 600 - CAAPP (ERMS ADDENDUM)**

The information requested on Form 600-CAAPP is to be submitted to the Illinois EPA to describe the status of an existing CAAPP source with respect to the Emissions Reduction Market System (ERMS). The information on the 505 - CAAPP form, SUPPLEMENT TO CAAPP APPLICATION, must be submitted along with this information, as the ERMS Addendum is considered to be supplemental information to the CAAPP application for the source. Items which are self-explanatory are not addressed. The term "seasonal allotment period" means the period from May 1 through September 30 of each year. "Seasonal emissions" are the actual VOM emissions at a source that occur during a seasonal allotment period.

The boxes titled "FOR APPLICANT'S USE" on the application form are provided solely for the applicant's convenience. They may be left blank.

### **TITLE BOX**

The applicant must indicate if this submittal of the addendum is for the status of the source as of March 1, 1998, or if the submittal is for another date to address a change in the source's status with respect to ERMS, e.g., based on proposed construction of or operational data from a new unit.

### **SECTION 1: SOURCE INFORMATION**

The following information must be provided for the source for which the ERMS addendum is being submitted.

- 1) **SOURCE NAME:** The company name or specific plant name if different from company name.
- 2) **DATE FORM PREPARED:** This should be the date the form is prepared or other date generally representing the time period when the form is prepared, to distinguish it chronologically from any other submittal of this form.
- 3) **SOURCE STREET ADDRESS:** This must be the actual street address of the source. P.O. boxes are not allowed in this field.
- 6) **ERMS MAILING ADDRESS:** Address to which the applicant wishes correspondence regarding the ERMS be sent.
- 7) **ILLINOIS AIR POLLUTION SOURCE ID NO.:** This is the 9-digit code (6 numeric and 3 alphabetic) assigned to the source by the Agency's Division of Air Pollution Control (DAPC). This number can be found at the top of the first page of any Illinois air

pollution permit for the source. This number is unique to air pollution and should not be confused with water or land pollution ID numbers.

8) ILLINOIS AIR POLLUTION SOURCE APPLICATION NO.: The application number for the source's CAAPP permit application, if known. This information can be found on the completeness determination letter previously sent for the source.

9 & 10) SOURCE ENVIRONMENTAL CONTACT PERSON AND TELEPHONE NUMBER: Provide the name and phone number of a knowledgeable individual who is employed full-time at the source and who can be contacted by the Agency regarding questions about this ERMS application and/or source operations. This should be a person very familiar with operations and emission activities at the source.

11) Confirm whether the source will achieve compliance with applicable requirements of the ERMS on a timely basis and will continue to comply with such requirements during the permit term. If "no," the ERMS Addendum must also include a revised compliance plan/schedule (Form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAP PERMIT, form 296-CAAPP, COMPLIANCE CERTIFICATION) for emission units at the source, which describes the compliance status of the units, as related to applicable requirements of the ERMS.

## **SECTION 2: STATUS OF SOURCE**

12) Check one of the four options, as appropriate, to indicate the expected status of the source in the ERMS.

Option 1 is for sources that will be exempt because they have VOM emissions of 15 tons/season or less and are willing to accept limitations in a CAAPP permit that limit the source's VOM emissions to 15 tons/season or less.

Option 2 is for sources that have baseline emissions of less than 10 tons/season and as such are not required to participate in the ERMS.

Option 3 is for sources that will be exempt because they will reduce their actual emissions to a level that is at least 18% lower than their baseline emissions. This 18% reduction will be reflected as a seasonal emission limitation in the sources' CAAPP permit.

Option 4 is for sources that qualify as participating sources.

## **SECTION 3: CERTIFICATION THAT SOURCE IS NOT SUBJECT TO ERMS**

13) HISTORICAL EMISSIONS: Sources that will not be subject to the ERMS because baseline seasonal emissions are below 10 tons/season must submit information to the Illinois EPA on past actual seasonal emissions in the 1994, 1995, and 1996 seasons,

including supporting calculations. Only sources that will not be subject to ERMS should complete this section. Supporting calculations must be provided to generally explain how the information regarding emissions was compiled. For example, if annual VOM emission data has already been provided in an Annual Emission Report, the supporting calculations may only have to explain how the conversion was made from annual actual VOM emissions to seasonal VOM emissions.

14) **ADDITIONAL JUSTIFICATION:** If the historical emissions for the 1994-1996 seasons were less than 10 tons/season, this box should be marked not applicable. However, in the event that the source has had actual emissions of 10 tons/season or more in the seasons for which data must be provided, but, based on the provisions for baseline emissions in 35 IAC 205.320, believes its baseline emissions are less than 10 tons/season, the source must explain why its baseline emissions are less than 10 tons. For example, a new regulation became effective in 1996 that now requires more stringent control than required in 1994 or 1995, and now results in emissions of less than 10 tons/season, so that the source's baseline emissions are less than 10 tons/season.

15) **CERTIFICATION FOR SOURCES NOT SUBJECT:** In accordance with the requirements of 35 IAC 205.318, for a source that is not subject to the ERMS because its baseline seasonal VOM emissions are less than 10 tons, the owner or operator must provide certification to such effect.

#### **SECTION 4: BASELINE EMISSIONS**

Specific guidance on how to determine baseline emissions is included on the last two pages of these instructions (**GUIDANCE ON DETERMINING BASELINE EMISSIONS.**)

16) **BASELINE SEASONS:** Identify the two seasons that are being proposed for the determination of baseline emissions for the source. These seasons must generally be the same for every emission unit included in the baseline emission determination for the source. In other words, the use of seasons is on a source-wide basis, not on a unit-by-unit basis. For example, if the applicant chooses to use 1994 as one of the baseline seasons, then 1994 must be used for all of the individual emission units, except new or modified units at the source for which a construction permit was issued prior to January 1, 1998, but for which three years of operational data is not yet available. (The handling of these new or modified units is explained in Item 9 in the Guidance on Determining Baseline Emissions at the end of these instructions.)

If an applicant chooses two seasons from the 1994, 1995, and 1996 seasons to determine the baseline emissions for the source, the applicant need only provide information for the selected two seasons. If an applicant chooses to use a substitute season (season other than 1994, 1995, or 1996), then information for the proposed substitute season must be provided and, as appropriate to justify the use of the substitute season(s), other source-wide emissions data for the 1994-96 seasons (e.g., total reported on the Annual Emission

Report must also be provided); (Note: A justification for the use of a substitute season must be provided.)

17) **BASELINE SUMMARY:** Provide the proposed baseline emissions for the source, separately provide baseline emissions for emission units that are subject to further reduction (total of baseline emissions requested on form 620-CAAPP), the baseline emissions for emission units that are claimed to be excluded from further reduction (total of baseline emissions requested on form 630-CAAPP), and the total baseline for the source (the combined total). For further information refer to the instructions for the 620 - CAAPP form (EMISSION BASELINE DATA FOR EMISSION UNIT(S)) and the 630 - CAAPP form (BASELINE EMISSIONS FOR EMISSION UNIT(S) FOR WHICH EXCLUSION FROM 12% REDUCTION IS CLAIMED).

18) **SUPPORTING INFORMATION:** Sources that are required to submit baseline emission information must submit supporting information.

18A) **SEASONAL EMISSIONS DATA:** Sources must include production and emission rate information for each baseline season. That is, for the two seasons that are being used to determine the source's baseline emissions, there must be supporting data, including data such as the actual production rates and types, actual fuel usage, amounts and types of material processed, actual capture and control efficiencies, seasonal emission rates, etc. as relevant for particular emission units.

18B) **SUBSTITUTE BASELINE INFORMATION:** Sources that elect to use baseline emission information from a substitute season (a season other than 1994, 1995, or 1996) must provide a justification as to why the substitute seasons are more representative. Sources using substitute season(s) must also provide the production and emission rate information for each season chosen for the baseline emissions calculation.

18C) **BASELINE ADJUSTMENTS:** Sources seeking an adjustment to their baseline emissions based on voluntary overcompliance implemented after 1990 must provide information adequate to determine what adjustment, if any, is due for voluntary overcompliance. This information includes, but is not limited to, the information requested on form 621 - CAAPP (JUSTIFICATION FOR VOLUNTARY OVERCOMPLIANCE).

18D) **DETERMINATION METHOD:** Sources must identify the methods used to determine the baseline emissions. In many cases, this should be the same method used to calculate actual emissions for the Annual Emission Report and the method represented, for the purposes of demonstrating compliance, in the source's CAAPP application. If the methods used in the source's CAAPP application to determine actual VOM emissions were clearly explained and are now being used for the baseline emissions determination, it may be sufficient to simply make reference to the appropriate sections of the CAAPP application. However, if the applicant is deviating from the methods set forth in the source's CAAPP application or if the methods used for the CAAPP application did not

accurately represent actual emissions, or if the methods were not clearly explained in the CAAPP application, the ERMS Addendum must include detailed information regarding the methods being used now for ERMS.

The support information demonstrating how the baseline emissions were determined must include sample calculations and sample records that were relied upon to establish the baseline emissions, as well as all relevant emission rates (per emission unit, if appropriate), raw material and fuel usage, capture and control equipment efficiencies, etc.

It is important to understand that this is the VOM emission determination method that will be used to determine actual emissions on an ongoing basis. Such methods may include stack tests, material balance, emission factors, etc. It may not be the method used to determine potential or allowed emissions.

18E) IDENTIFICATION OF UNITS CLAIMING EXCLUSION FROM FURTHER REDUCTION: Sources must identify all emission units that they have proposed to be excluded from further reduction, i.e., emission units for which the sources' allotment will reflect the unit baseline emissions without 12% reduction, accompanied by appropriate supporting information.

### **GUIDANCE ON DETERMINING BASELINE EMISSIONS**

Please note the following regarding the determination of baseline emissions for an existing source:

1. The baseline emissions are determined as the average volatile organic material (VOM) emissions of two of these three seasons: 1994, 1995, and 1996. A source may use another season (or seasons) within the timeframe of 1990, 1991, 1992, 1993, or 1997 only if it is more representative of the source's operations (this option must be supported by detailed justification and verifiable through detailed records). The selected seasons must be used for all emission units included in the baseline determination, except new or modified units permitted prior to January 1, 1998 for which three years of operational data are not yet available. (These units are addressed in Item 9.)
2. Emissions from insignificant activities, as identified in the source's CAAPP application and CAAPP permit, are not included in the baseline emissions.
3. Excess VOM emissions that occur during startup, malfunction, and/or breakdown are not counted in the baseline determination. (NOTE: These emissions are, however, to be counted when providing the seasonal component of the Annual Emission Report unless the source's CAAPP permit has specific provisions that allow for these excess emissions. In the event there are emissions beyond those allowed by the permit provision, they will need to be accounted for in the seasonal component of the Annual Emission Report).

4. Emissions are counted from a level that is in no case greater than if they were in compliance with rules effective in 1996. For example, if in 1996, an emission unit was allowed to emit 0.05 tons per widget produced but actually emitted 0.06 tons per widget during the seasons selected to determine the baseline emissions, the unit's baseline emissions must be adjusted to account for the allowed 0.05 tons/widget limit. If an emission unit actually emitted less than the applicable rules, the baseline emissions are the actual emissions, except as provided Item 6.

Note: If an emission unit has received temporary relief from a 1996 rule through a Variance, Consent Agreement, or Compliance Schedule, during the term of such agreement the source need not provide ATUs for the excess emissions to the extent that such excess emissions have been addressed by such agreement.

5. The federal New Source Performance Standards (NSPS) are also rules effective in 1996, if applicable. If a New Source Performance Standard applies to a particular operation and/or emission unit(s), the baseline emissions for that operation or unit(s) shall in no case be greater than the NSPS requirement.
6. Voluntary over-compliance may also affect the baseline emissions as long as this over-compliance occurred **after** 1990. For example, if an afterburner was installed on a unit after 1990 that was only required to meet an overall efficiency of 81% but in fact achieves 97% overall efficiency, the baseline may be adjusted based on the 81% efficiency. Any voluntary over-compliance made after 1990 may result in higher baseline emissions than actual emissions, as if the extra reduction had not yet occurred. Emissions must be adjusted for compliance with reference to rules effective in 1996. Thus, if a printing line's actual emissions of VOM during the 1994 ozone season were 30 tons prior to the installation of an afterburner required to meet the 1996 requirement of Part 218 Subpart H to reduce emissions by 90%, then the source must adjust these 30 TPS for compliance with the applicable 90% control requirement (i.e., they must use the 1994 emission data corrected for the most stringent rule applicable in 1996). Thus, the baseline would use  $30 \times 0.10$ , or 3.0 TPS, for that unit's contribution in 1994.
7. Sources may not adjust baseline emissions any higher than the emissions levels that they are currently limited to by rule, or by a condition in construction and/or operating permits if such limitations were imposed for the purpose of complying with an underlying requirement such as New Source Review (NSR). For example, if a source has accepted limitations for the purposes of avoiding NSR through permit conditions established pursuant to Part 203, which are more stringent than otherwise applicable regulations, then the source can not claim over-compliance beyond these limitations.
8. The means by which a source determines its baseline emissions should be identical to that method used to calculate its actual emissions within its CAAPP application. If an approach was taken for the CAAPP application that overestimated actual emissions,

(but was sufficient to address compliance with applicable rules) or if the approach taken to determine actual emissions was not explained or was unclear, the approach to actual emissions determination for the ERMS must be addressed in depth.

Thereafter, the emission determination method used for the baseline should also be used to calculate actual emissions for purposes of complying with the ERMS. If a method other than this is used for the baseline determination, justification for the alternative approach must be included with the baseline submittal. For example, if baseline emissions were determined from annual emissions based on seasonal production (because seasonal VOM emission data was not kept) but seasonal VOM emission data will be kept in the future, this shift should be identified.

9. For new or modified emission units for which a construction permit was issued prior to January 1, 1998, but for which three years of operational data are not yet available, the baseline emissions determination for the source shall include VOM emissions from such new emission unit or the increase in emissions from the modification of such emission unit based on the two seasonal allotment periods with the highest VOM emissions from the first three complete seasonal allotment periods in which such new or modified emission unit is operational. The resulting ATUs shall only be issued after the baseline emissions have been determined. However, the source shall not be required to hold ATUs for VOM emissions attributable to such new unit or the modification of an existing unit for the first three complete seasonal allotment periods in which the unit is operational.
10. The regulatory provisions for emission baselines are found at 35 IAC 205.320.

Please note the following regarding calculation of a participating source's allocation of ATU:

1. A participating source's seasonal allocation of ATUs is generally calculated as 88% of its baseline emissions (12% reduction).
2. "Excluded units" do not require 12% reductions. The four categories of excluded units are units complying with a MACT or NESHAP standard, direct combustion units (e.g., boilers, heaters, engines, etc.), units for which Lowest Achievable Emission Rate (LAER) has been established by the Agency on or after November 15, 1990 and units utilizing Best Available Technology (BAT), as determined by the Agency.
3. If a source pursues exclusion of an emission unit, the baseline emissions must be adjusted to reflect the emission rate upon which the exclusion is based. That is, MACT, LAER, BAT and NESHAP exclusion must be adjusted to reflect compliance with these standards if actual emissions were higher in the seasons selected for the baseline.