



**FOR APPLICANT'S USE**

Revision #: \_\_\_\_\_  
 Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 Source Designation: \_\_\_\_\_

<b>COMPLIANCE ASSURANCE MONITORING (CAM) PLAN</b>	<b>FOR AGENCY USE ONLY</b>
	ID NUMBER: _____
	PERMIT #: _____
DATE: _____	

FOR INFORMATION ABOUT THE CAM RULE AND THIS FORM, PLEASE REFER TO 40 CFR PART 64. ADDITIONAL INFORMATION (INCLUDING GUIDANCE DOCUMENTS) MAY ALSO BE FOUND AT <http://www.epa.gov/ttn/emc/cam.html>

<b>SOURCE INFORMATION</b>	
1) SOURCE NAME: _____	
2) DATE FORM PREPARED: ____ / ____ / ____	3) SOURCE ID NO.: _____

<b>BASIS OF CAM SUBMITTAL</b>
4) MARK THE APPROPRIATE BOX BELOW AS TO WHY THIS CAM PLAN IS BEING SUBMITTED AS PART OF AN APPLICATION FOR A CAAPP PERMIT:
<input type="checkbox"/> <b>RENEWAL APPLICATION.</b> <u>ALL</u> PSEUs (POLLUTANT-SPECIFIC EMISSIONS UNITS CONSIDERED SEPARATELY WITH RESPECT TO EACH REGULATED AIR POLLUTANT) FOR WHICH A CAM PLAN HAS <u>NOT</u> YET BEEN APPROVED NEED TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL.
<input type="checkbox"/> <b>INITIAL APPLICATION</b> (SUBMITTED AFTER 4/20/98). <u>ONLY</u> LARGE PSEUs (PSEUs WITH POTENTIAL POST-CONTROL DEVICE EMISSIONS OF AN APPLICABLE REGULATED AIR POLLUTANT THAT ARE EQUAL TO OR GREATER THAN MAJOR SOURCE THRESHOLD LEVELS) NEED TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL.
<input type="checkbox"/> <b>SIGNIFICANT MODIFICATION TO LARGE PSEUs.</b> <u>ONLY</u> LARGE PSEUs BEING MODIFIED AFTER 4/20/98 NEED TO BE ADDRESSED IN THIS CAM PLAN SUBMITTAL. FOR LARGE PSEUs WITH AN APPROVED CAM PLAN, <u>ONLY</u> ADDRESS THE APPROPRIATE MONITORING REQUIREMENTS AFFECTED BY THE SIGNIFICANT MODIFICATION.

<b>CAM APPLICABILITY DETERMINATION</b>
5) TO DETERMINE APPLICABILITY, A PSEU MUST MEET <u>ALL</u> OF THE FOLLOWING CRITERIA. COMPLETE PAGES 2 AND 3 FOR <u>ALL</u> PSEUs AT THIS SOURCE. (USE THESE IDENTIFIERS TO INDICATE REASON FOR NON-APPLICABILITY IN BOX 6b, PAGE 3):
a. THE PSEU IS LOCATED AT A MAJOR SOURCE THAT IS REQUIRED TO OBTAIN A CAAPP PERMIT;
b. THE PSEU IS SUBJECT TO AN EMISSION LIMITATION OR STANDARD FOR THE APPLICABLE REGULATED AIR POLLUTANT THAT IS <u>NOT</u> EXEMPT;
<u>LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:</u>
<ul style="list-style-type: none"> <li>• NSPS (40 CFR PART 60) OR NESHAP (40 CFR PARTS 61 AND 63) PROPOSED AFTER 11/15/1990.</li> <li>• STRATOSPHERIC OZONE PROTECTION REQUIREMENTS.</li> <li>• ACID RAIN PROGRAM REQUIREMENTS.</li> <li>• EMISSION LIMITATIONS OR STANDARDS FOR WHICH A CAAPP PERMIT SPECIFIES A CONTINUOUS COMPLIANCE DETERMINATION METHOD, AS DEFINED IN THE CAM RULE.</li> <li>• AN EMISSION CAP THAT MEETS THE REQUIREMENTS SPECIFIED IN 40 CFR 70.4(B)(12).</li> </ul>
c. THE PSEU USES AN ADD-ON CONTROL DEVICE TO ACHIEVE COMPLIANCE WITH AN EMISSION LIMITATION OR STANDARD;
d. THE PSEU HAS POTENTIAL PRE-CONTROL DEVICE EMISSIONS OF THE APPLICABLE REGULATED AIR POLLUTANT THAT ARE EQUAL TO OR GREATER THAN MAJOR SOURCE THRESHOLD LEVELS; AND
e. THE PSEU IS <u>NOT</u> AN EXEMPT BACKUP UTILITY POWER EMISSIONS UNIT THAT IS MUNICIPALLY-OWNED.

THIS AGENCY IS AUTHORIZED TO REQUIRE AND YOU MUST DISCLOSE THIS INFORMATION UNDER 415 ILCS 5/39. FAILURE TO DO SO COULD RESULT IN THE APPLICATION BEING DENIED AND PENALTIES UNDER 415 ILCS 5 ET SEQ. IT IS NOT NECESSARY TO USE THIS FORM IN PROVIDING THIS INFORMATION. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

**6a) BACKGROUND DATA AND INFORMATION – UNITS SUBJECT TO CAM**

COMPLETE THE FOLLOWING TABLE AND PAGES 4 AND 5 FOR **ALL** PSEUs THAT ARE SUBJECT TO CAM. THIS SECTION IS TO BE USED TO PROVIDE BACKGROUND DATA AND INFORMATION FOR EACH PSEU IN ORDER TO SUPPLEMENT THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS **EXHIBIT 464-6a**. FAILURE TO COMPLETE THIS SECTION IN ITS ENTIRETY MAY RESULT IN THE CAAPP APPLICATION BEING DEEMED INCOMPLETE OR DENIED.

PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	<sup>a</sup> EMISSION LIMITATION OR STANDARD	<sup>b</sup> MONITORING REQUIREMENT
<b>EXAMPLE</b>					
COATER #1	METAL PARTS COATING LINE #1	VOM	THERMAL AFTERBURNER #1	(REG) 35 IAC 218.207(b)(1) - 81% OVERALL EMISSIONS REDUCTION (PERMIT) 24.9 TPY OF VOM	35 IAC 218.105(d)(2)(A)(i) - MONITOR AFTERBURNER COMBUSTION CHAMBER TEMPERATURE

<sup>a</sup> INDICATE THE EMISSION LIMITATION OR STANDARD FOR ANY APPLICABLE REQUIREMENT THAT CONSTITUTES AN EMISSION LIMITATION, EMISSION STANDARD, OR STANDARD OF PERFORMANCE. EXAMPLES OF EMISSION LIMITATIONS OR STANDARDS MAY INCLUDE PERMITTED EMISSION LIMITATIONS (**PERMIT**), APPLICABLE REGULATIONS (**REG**), WORK PRACTICES (**WP**), PROCESS OR CONTROL DEVICE PARAMETERS (**PAR**), OR OTHER FORMS OF SPECIFIC DESIGN, EQUIPMENT, OPERATIONAL, OR OPERATION AND MAINTENANCE REQUIREMENTS (**OTHER**).

<sup>b</sup> INDICATE THE MONITORING REQUIREMENTS FOR THE CONTROL DEVICE THAT ARE REQUIRED BY AN APPLICABLE REGULATION OR PERMIT CONDITION.

**6b) BACKGROUND DATA AND INFORMATION – UNITS NOT SUBJECT TO CAM**

COMPLETE THE FOLLOWING TABLE FOR ALL PSEUs THAT ARE NOT SUBJECT TO CAM. THIS SECTION IS TO BE USED TO PROVIDE BACKGROUND DATA AND INFORMATION FOR EACH PSEU IN ORDER TO INDICATE THE REASON FOR NON-APPLICABILITY AND JUSTIFY THAT CAM DOES NOT APPLY. YOU MAY ABBREVIATE BY USING THE CRITERIA IDENTIFIERS FROM BOX 5 ON PAGE 1. FOR UNITS NOT SUBJECT TO CAM DUE TO EMISSION LEVELS (i.e., CRITERIA "5d"), INDICATE THE POTENTIAL PRE-CONTROL DEVICE EMISSIONS AND PROVIDE CALCULATIONS AND LABEL AS EXHIBIT 464-6b WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT. IF NECESSARY, MULTIPLE PSEUs WITH SIMILAR DATA AND INFORMATION MAY BE INCLUDED ON THE SAME LINE TO SAVE SPACE. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 464-6b. FAILURE TO COMPLETE THIS SECTION IN ITS ENTIRETY MAY RESULT IN THE CAAPP APPLICATION BEING DEEMED INCOMPLETE OR DENIED.

PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	REASON(S) FOR NON-APPLICABILITY
EXAMPLE  COATER #1	METAL PARTS COATING LINE #1	VOM	THERMAL AFTERBURNER #1	DOES NOT MEET CRITERIA "5d" (PRE-CONTROL PTE IS 15 TONS PER YEAR). SEE EXHIBIT 464-6b FOR PRE-CONTROL PTE CALCULATIONS

<sup>a</sup> **CAM MONITORING APPROACH CRITERIA**

COMPLETE THIS SECTION FOR EACH PSEU THAT IS SUBJECT TO CAM. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE MONITORING DATA AND INFORMATION FOR EACH INDICATOR SELECTED FOR EACH PSEU IN ORDER TO MEET THE MONITORING DESIGN CRITERIA SPECIFIED IN 40 CFR 64.3 AND 64.4. IF MORE THAN TWO INDICATORS ARE BEING SELECTED FOR A PSEU OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS **EXHIBIT 464-8** WITH THE APPROPRIATE PSEU DESIGNATION, POLLUTANT, AND INDICATOR NOS. FAILURE TO COMPLETE THIS SECTION IN ITS ENTIRETY MAY RESULT IN THE CAAPP APPLICATION BEING DEEMED INCOMPLETE OR DENIED.

7a) PSEU DESIGNATION:	7b) POLLUTANT:	7c) <sup>b</sup> INDICATOR NO. 1:	7d) <sup>b</sup> INDICATOR NO. 2:
<p>8a) GENERAL CRITERIA</p> <p>DESCRIBE THE <u>MONITORING APPROACH</u> USED TO MEASURE THE INDICATORS:</p> <p><sup>c</sup> ESTABLISH THE APPROPRIATE <u>INDICATOR RANGE</u> OR THE PROCEDURES FOR ESTABLISHING THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:</p> <p><sup>d</sup> PROVIDE <u>QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS</u>:</p>			
<p>8b) PERFORMANCE CRITERIA</p> <p>PROVIDE THE <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u>, SUCH AS DETECTOR LOCATION AND INSTALLATION SPECIFICATIONS:</p> <p>PROVIDE <u>VERIFICATION PROCEDURES</u>, INCLUDING MANUFACTURER'S RECOMMENDATIONS, <u>TO CONFIRM THE OPERATIONAL STATUS</u> OF THE MONITORING:</p> <p>PROVIDE <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> THAT ARE ADEQUATE TO ENSURE THE CONTINUING VALIDITY OF THE DATA, CONSIDERING MANUFACTURER'S RECOMMENDATIONS:</p> <p><sup>e</sup> PROVIDE THE <u>MONITORING FREQUENCY</u>:</p> <p>PROVIDE THE <u>DATA COLLECTION PROCEDURES</u> THAT WILL BE USED:</p> <p>PROVIDE THE <u>DATA AVERAGING PERIOD</u> FOR THE PURPOSE OF DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:</p>			

<sup>a</sup> IF CEMS, COMS, OR PEMS ARE USED, THEN THIS SECTION NEED NOT BE COMPLETED ONLY FOR THE CEMS, COMS, OR PEMS, EXCEPT THAT THE SPECIAL CRITERIA INFORMATION OF 40 CFR 64.3(d) MUST BE PROVIDED AS **EXHIBIT 464-CEMS, COMS, PEMS**.

<sup>b</sup> DESCRIBE ALL INDICATORS TO BE MONITORED WHICH SATISFIES 40 CFR 64.3(a). INDICATORS OF EMISSION CONTROL PERFORMANCE FOR THE CONTROL DEVICE AND ASSOCIATED CAPTURE SYSTEM MAY INCLUDE MEASURED OR PREDICTED EMISSIONS (INCLUDING VISIBLE EMISSIONS OR OPACITY), PROCESS AND CONTROL DEVICE OPERATING PARAMETERS THAT AFFECT CONTROL DEVICE (AND CAPTURE SYSTEM) EFFICIENCY OR EMISSION RATES, OR RECORDED FINDINGS OF INSPECTION AND MAINTENANCE ACTIVITIES.

<sup>c</sup> INDICATOR RANGES MAY BE BASED ON A SINGLE MAXIMUM OR MINIMUM VALUE OR AT MULTIPLE LEVELS THAT ARE RELEVANT TO DISTINCTLY DIFFERENT OPERATING CONDITIONS, EXPRESSED AS A FUNCTION OF PROCESS VARIABLES, EXPRESSED AS MAINTAINING THE APPLICABLE INDICATOR IN A PARTICULAR OPERATIONAL STATUS OR DESIGNATED CONDITION, OR ESTABLISHED AS INTERDEPENDENT BETWEEN MORE THAN ONE INDICATOR.

<sup>d</sup> THE QIP THRESHOLD LEVEL IS A LEVEL AT WHICH THE TOTAL DURATION OF EXCURSIONS OR EXCEEDANCES AT THE PSEU IS GREATER THAN 5% OF THE PSEU'S TOTAL OPERATING TIME DURING THE REPORTING PERIOD. (EXAMPLE: 5 OF 90 OPERATING DAYS WERE OUTSIDE THE INDICATOR RANGE DURING THE REPORTING PERIOD.)

<sup>e</sup> AT A MINIMUM, LARGE PSEUs MUST COLLECT FOUR OR MORE DATA VALUES EQUALLY SPACED OVER EACH HOUR AND THOSE VALUES AVERAGED. ALL OTHER PSEUs MUST COLLECT DATA AT LEAST ONCE PER 24-HOUR PERIOD.

**RATIONALE AND JUSTIFICATION**

COMPLETE THIS SECTION FOR **EACH** PSEU THAT IS SUBJECT TO CAM. THIS SECTION MAY BE COPIED AS NEEDED FOR EACH PSEU. THIS SECTION IS TO BE USED TO PROVIDE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF **EACH** INDICATOR AND MONITORING APPROACH AND **EACH** INDICATOR RANGE IN ORDER TO MEET THE SUBMITTAL REQUIREMENTS SPECIFIED IN 40 CFR 64.4. FAILURE TO COMPLETE THIS SECTION IN ITS ENTIRETY MAY RESULT IN THE CAAPP APPLICATION BEING DEEMED INCOMPLETE OR DENIED.

9a) PSEU DESIGNATION:

9b) POLLUTANT:

10) **INDICATORS AND THE MONITORING APPROACH.** PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATORS AND THE MONITORING APPROACH USED TO MEASURE THE INDICATORS. ALSO PROVIDE ANY DATA SUPPORTING THE RATIONALE AND JUSTIFICATION. EXPLAIN THE REASONS FOR ANY DIFFERENCES BETWEEN THE VERIFICATION OF OPERATIONAL STATUS OR THE QUALITY ASSURANCE AND CONTROL PRACTICES PROPOSED AND THE MANUFACTURER'S RECOMMENDATIONS. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS **EXHIBIT 464-10** WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

11) **INDICATOR RANGES.** PROVIDE THE RATIONALE AND JUSTIFICATION FOR THE SELECTION OF THE INDICATOR RANGES. THE RATIONALE AND JUSTIFICATION SHALL INDICATE HOW **EACH** INDICATOR RANGE WAS SELECTED BY EITHER A **COMPLIANCE OR PERFORMANCE TEST**, A **TEST PLAN AND SCHEDULE**, OR BY **ENGINEERING ASSESSMENTS**. DEPENDING ON WHICH METHOD IS BEING USED FOR EACH INDICATOR RANGE, INCLUDE THE SPECIFIC INFORMATION REQUIRED BELOW FOR THAT SPECIFIC INDICATOR RANGE. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS **EXHIBIT 464-11** WITH THE APPROPRIATE PSEU DESIGNATION AND POLLUTANT):

- **COMPLIANCE OR PERFORMANCE TEST** (INDICATOR RANGES DETERMINED FROM CONTROL DEVICE OPERATING PARAMETER DATA OBTAINED DURING A COMPLIANCE OR PERFORMANCE TEST CONDUCTED UNDER REGULATORY SPECIFIED CONDITIONS OR UNDER CONDITIONS REPRESENTATIVE OF MAXIMUM POTENTIAL EMISSIONS UNDER ANTICIPATED OPERATING CONDITIONS. SUCH DATA MAY BE SUPPLEMENTED BY ENGINEERING ASSESSMENTS AND MANUFACTURER'S RECOMMENDATIONS). THE RATIONALE AND JUSTIFICATION SHALL **INCLUDE** A SUMMARY OF THE COMPLIANCE OR PERFORMANCE TEST RESULTS THAT WAS USED TO DETERMINE THE INDICATOR RANGE AND DOCUMENTATION INDICATING THAT NO CHANGES HAVE TAKEN PLACE THAT COULD RESULT IN A SIGNIFICANT CHANGE IN THE CONTROL SYSTEM PERFORMANCE OR THE SELECTED INDICATOR RANGES SINCE THE COMPLIANCE OR PERFORMANCE TEST WAS CONDUCTED.
- **TEST PLAN AND SCHEDULE** (INDICATOR RANGES WILL BE DETERMINED FROM A PROPOSED IMPLEMENTATION PLAN AND SCHEDULE FOR INSTALLING, TESTING, AND PERFORMING ANY OTHER APPROPRIATE ACTIVITIES PRIOR TO USE OF THE MONITORING). THE RATIONALE AND JUSTIFICATION SHALL **INCLUDE** THE PROPOSED IMPLEMENTATION PLAN AND SCHEDULE THAT WILL PROVIDE FOR USE OF THE MONITORING AS EXPEDITIOUSLY AS PRACTICABLE AFTER APPROVAL OF THIS CAM PLAN, BUT IN NO CASE SHALL THE SCHEDULE FOR COMPLETING INSTALLATION AND BEGINNING OPERATION OF THE MONITORING EXCEED 180 DAYS AFTER APPROVAL.
- **ENGINEERING ASSESSMENTS** (INDICATOR RANGES OR THE PROCEDURES FOR ESTABLISHING INDICATOR RANGES ARE DETERMINED FROM ENGINEERING ASSESSMENTS AND OTHER DATA, SUCH AS MANUFACTURERS' DESIGN CRITERIA AND HISTORICAL MONITORING DATA, BECAUSE FACTORS SPECIFIC TO THE TYPE OF MONITORING, CONTROL DEVICE, OR PSEU MAKE COMPLIANCE OR PERFORMANCE TESTING UNNECESSARY). THE RATIONALE AND JUSTIFICATION SHALL **INCLUDE** DOCUMENTATION DEMONSTRATING THAT COMPLIANCE TESTING IS NOT REQUIRED TO ESTABLISH THE INDICATOR RANGE.

RATIONALE AND JUSTIFICATION: