



IOWA DEPARTMENT OF NATURAL RESOURCES

LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES

Title V Operating Permits

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AWMA Iowa Environmental Conference 2015

Title V Operating Permits

- Title V Update
- New Part 2 Title V Application Forms
- Title V EZ Mod Form (draft)
- Compliance Assurance Monitoring (CAM)
- Stack Testing & Maximum Design Rate
- SPARS & SLEIS Update

Title V Update

The Title V Program

- Primarily affects the largest industries (major sources) with potential emissions of **any** of the following:
 - 100 tpy any regulated pollutant
 - 10 tpy any single hazardous air pollutant (HAP)
 - 25 tpy combination of HAPs



The Title V Program

- Incorporates ALL air requirements into a single document:
 - Federal regulations
 - State regulations
 - Pre-construction permits
 - Judicial and Administrative Orders
- Adds monitoring requirements to ensure continued compliance and to protect public health

Iowa Title V Statistics

	5-yr Average (2009 – 2013)	2013
Number of facilities	279	286
Total tons of pollution	297,238	260,809
Tons subject to fees	161,362	147,914
Fee per ton	\$56	\$56
Title V Fees paid	\$9.0 million	\$8.3 million
Percent of air program funded	77%	75%

New Part 2 Forms

Streamlining the Application Process

- New Part 2 Application forms
 - **Flexible** submittal of information
 - **Easier** for industry to use
 - Number of forms **reduced** from 20 to 6
 - Result in **faster**, more **seamless** permitting process
- Compliance Assurance Monitoring (CAM) spreadsheet
- Additional information requested (boilers & process heaters, engines, NESHAPS)



The New Part 2 Forms

- Required since August, 2014
- Part 2 Requirements & Compliance
- Part 2 Form:
 - General Facility Requirements (includes Part 63 MACT)
 - Boiler and Process Heater Information Form
 - Engine Information Form
 - Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP) Information
 - Emission Point Information
- Compliance Assurance Monitoring Calculation Form (Spreadsheet)

Part 2 reference tables moved to appendices in Title V instructions

- Appendix A: Hazardous Air Pollutants
- Appendix B: Accidental Release Prevention
- Appendix C: Part 61 NESHAP Reference List
- Appendix D: Stratospheric Ozone Depleting Chemicals
- Appendix E: Acid Rain and CAIR
- Appendix F: Prevention of Significant Deterioration (PSD) Information Worksheet
- Appendix G: Proposed Limits and Alternative Operating Scenarios
- Appendix H: NSPS Reference List
- Appendix I: Part 63 NESHAP Reference List
- Appendix J: Compliance Assurance Monitoring

EZ Mod Form

EZ Mod Form

- Result of ABI Workgroup
- Eliminates submittal of duplicate information
- Incorporates changes from construction permit modification
- Minor modifications only
- Significant modifications, compliance issues and renewals -> use standard forms
- Available for use summer 2015

Compliance Assurance Monitoring

Compliance Assurance Monitoring (CAM)

CAM applied to a unit:

- that uses control equipment
- to comply with an applicable requirement
- if the uncontrolled PTE of the emissions unit exceeds the major source threshold

Compliance Assurance Monitoring (CAM)

In general, an emission unit is subject to the CAM Rule if all of the following are satisfied:

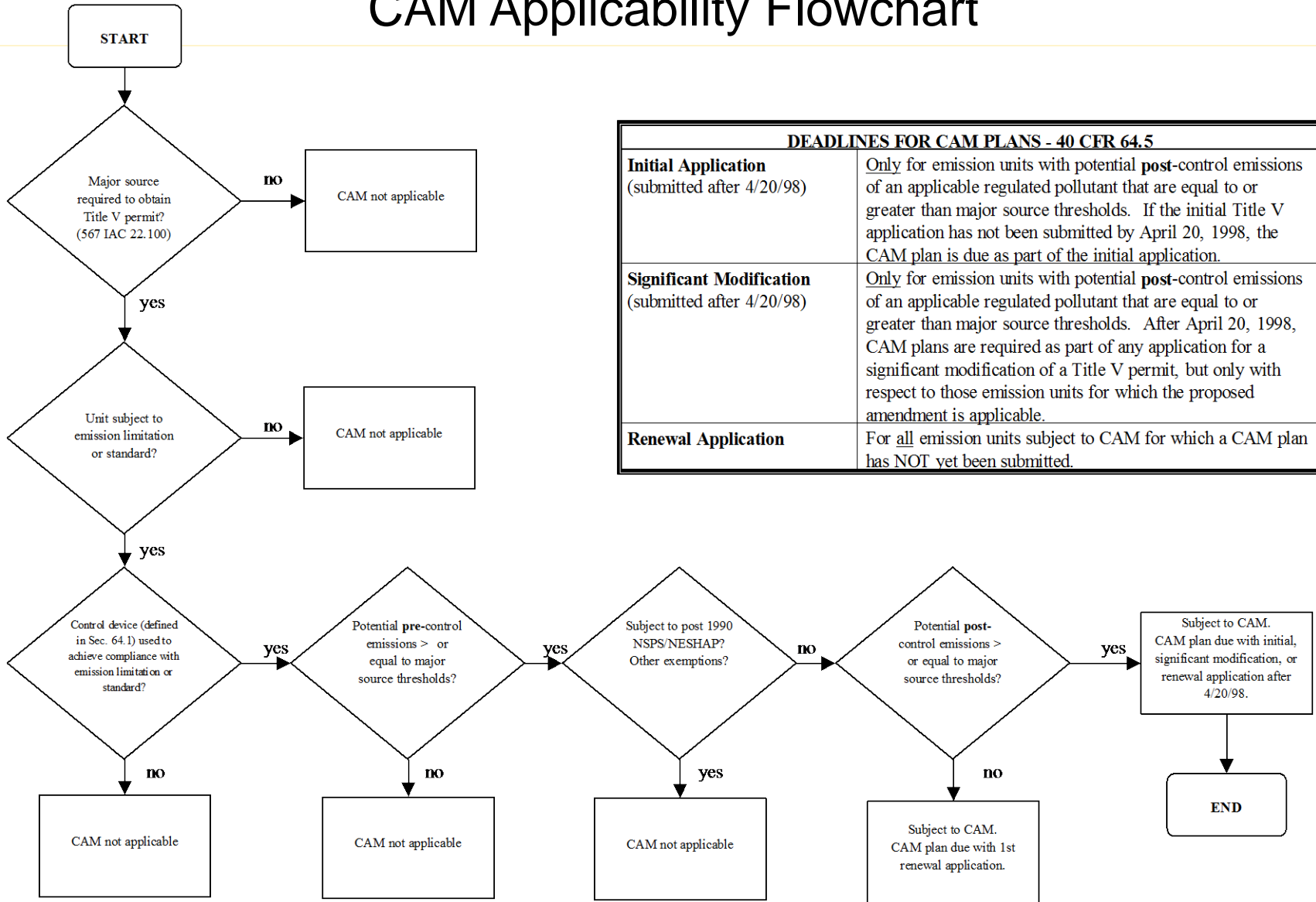
- is at a major source required to obtain a Title V Permit;
- is subject to an emission limitation or standard for a regulated pollutant;
- uses a control device to achieve compliance with the emission limitation or standard for the particular pollutant;
- has potential pre-control emissions over 100% of the level considered to be a major source, same as under the Title V Program;
- unless otherwise exempted.

Compliance Assurance Monitoring (CAM)

Exempted Emission Limitations or Standards

- Post 11-15-90 (proposed date) NSPS or NESHAP, if these standards limit the specific pollutant that is being controlled by the control device being evaluated for CAM
- Stratospheric ozone protection requirements;
- Acid Rain Program requirements;
- Requirements under an approved emission trading program;
- Emissions cap that meet the requirements of 40 CFR Part 70.4(b)(12);
- Emission limitations or standards for which a Title V permit requires a continuous compliance determination method that does not use an assumed control factor. In most cases this may be a regulation that requires the installation of a CEMS.

CAM Applicability Flowchart



DEADLINES FOR CAM PLANS - 40 CFR 64.5	
Initial Application (submitted after 4/20/98)	Only for emission units with potential post -control emissions of an applicable regulated pollutant that are equal to or greater than major source thresholds. If the initial Title V application has not been submitted by April 20, 1998, the CAM plan is due as part of the initial application.
Significant Modification (submitted after 4/20/98)	Only for emission units with potential post -control emissions of an applicable regulated pollutant that are equal to or greater than major source thresholds. After April 20, 1998, CAM plans are required as part of any application for a significant modification of a Title V permit, but only with respect to those emission units for which the proposed amendment is applicable.
Renewal Application	For all emission units subject to CAM for which a CAM plan has NOT yet been submitted.

CAM Plan

General outline of a CAM Plan, Per 40 CFR 64 is:

1. Describe the indicators to be monitored;
2. Describe the ranges or the process to set indicator ranges;
3. Describe the performance criteria for the monitoring, including:
 - a. specifications for obtaining representative data;
 - b. verification procedures to confirm the monitoring operational status;
 - c. quality assurance and control procedures
 - d. monitoring frequency
 - i. 4 times per hour (minimum) if post-control emissions are \geq MST (major source threshold); or
 - ii. 1 time per day (minimum) if post-control emissions are $<$ MST.

CAM Plan (continued)

General outline of a CAM Plan, Per 40 CFR 64 is:

4. Describe indicator ranges and performance criteria for a CEMS, COMS, or PEMS;
5. Provide a justification for the use of parameters, ranges, and monitoring approach;
6. Provide emissions test data; and, if necessary
7. Provide an implementation plan for installing, testing, and operating the monitoring.

Compliance Assurance Monitoring (CAM)

Sample CAM plans (EPA website, approved TV permits):

- Baghouse – opacity, pressure drop, bag leak detection
- Oxidizer – combustion chamber temperature
- Precipitator – opacity, power, malfunction alarms, TR sets operation status
- Capture System – flow indicator, pressure differential
- Multiclone – opacity, physical inspection
- Panel Filters – opacity, pressure drop
- Vapor Combustion Unit – presence of flame
- Water Curtain – opacity, water level

Stack Testing & Maximum Design Rate

Stack Testing & Maximum Design Rate

- When conducting compliance stack test the emission unit should be operating at or near its maximum rated design capacity.
- Stack test variables
 - Production rate during test
 - How close to the emission limit
 - Test variability
- Stack test results and the allowable emission limit
 - Compliance demonstration – margin of compliance
 - Modification request for design rate or allowable emission limit change
 - Retest

SPARS Update

SPARS Use

- Applications
 - No need to send additional copies to EPA or Polk & Linn Co.
 - No need for data entry by DNR
 - Copy data from previous application
- EIQ
 - No need for data entry by DNR
 - Copy data from previous report
- Current SPARS use
 - 153 (54%) of the 2014 EIQs were submitted in SPARS
 - 7 (30%) of the Title V applications received in 2014 were submitted in SPARS



SPARS – What's Next?

SLEIS

- State & Local Emissions Inventory System
- Funded by EPA grant
- Collaborative Approach
- Technology Standardization
- July 2015: Initial Testing by SPARS Advisory Group

Permit Application/Tracking

- Define project scope & business requirements
- Return on investment analysis
- *Collaboration opportunities*

Questions?

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