
STARShip Newsletter

Division of Air Pollution Control

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STARShip is Being Redesigned!

It has been a long time coming, but professional IT consultants will arrive in the Division of Air Pollution Control in early 2006 to begin the design of our new Web-based permitting and reporting system. This new system will replace the existing STARShip's function and will incorporate the permit-to-install (PTI) process into a Web-based system. The entire process of re-writing and launching will take two years.

After years of business process re-engineering and preparing for the monumental task of completely re-designing, developing and deploying a brand new air permitting and reporting system, DAPC is excited that our efforts are coming to fruition. Based on the re-engineering efforts and our new system requirements, we feel confident that our new Web-based product will better serve our customers.

The success of any software development project depends on understanding customer needs. DAPC clearly understands our internal permitting system and the functions it must perform. However, we want to know what you, the STARShip user, would like to see in the new system. This is why we are forming a STARShip users' group: The group will work closely with DAPC and the contractor to help us determine customer needs for the new Web-based system.

Those who would like to be involved in the design, testing, data conversion and/or implementation of the STARShip replacement system can send an e-mail to: linda.ours@epa.state.oh.us. Please include your name, phone, company name and a brief description of your level of experience with STARShip. Also include which area of project development you are interested in and the estimated amount of time you have to assist with this project (for example, one day a week, one day a month, etc.). To ensure success, we need your valuable input and we urge you to get involved.

DAPC will send project updates to the STARShip electronic news service to keep all STARShip users informed of our progress. Thank you for your patience!

Submit PTI Applications via E-mail!

To improve customer service, Ohio EPA has developed a new option for businesses to use when applying for an air permit-to-install (PTI). In addition to the method of filling out hard copy forms and sending them by postal service, a second option of downloading forms, completing the application electronically using Microsoft Word, then e-mailing them to Ohio EPA is now available.

This improvement makes the application easier to complete and quicker to submit, helping businesses meet deadlines. Easy to follow, step-by-step instructions are available on Ohio EPA's Web site, at: <http://www.epa.state.oh.us/dapc/permits/instructions.html>

Do You Want to Continue Receiving a Hard Copy STARShip Newsletter?

This newsletter is an annual publication that is posted to the DAPC Web page and sent out in hard copy to all registered STARShip users, and included in mailings to facilities that receive a Title V reminder letter for annual emissions reporting. We send an e-mail notification to STARShip's electronic news service (listserv) making subscribers aware that the newsletter has been posted, along with a link so it can be downloaded.

If you are a registered STARShip user and would like to continue to receive a hard copy of the newsletter, please send an e-mail to dapcfeedback@epa.state.oh.us that includes your name, company and address. Please type "STARShip Newsletter" in the subject line. If you would no longer like a hard copy, please make sure you sign up for STARShip's electronic news service!

Previous Newsletters on the Web

Previous STARShip Newsletters are posted on DAPC's Web page. You may reference these newsletters for guidance that has been given on STARShip usage, emissions reporting and Title V requirements.

Compliance Assurance Monitoring (CAM) Plans Incorporated into Title V Renewal Applications

Ohio EPA is required to incorporate the CAM requirements of 40 CFR Part 64 into renewal Title V permits for certain large, controlled emissions units that meet all of the requirements specified in the table below.

40 CFR Part 64 Reference	Applicability
64.2(a)	Emissions unit is located at a major source that is required to obtain a Title V permit
64.2(a)(1)	Emissions unit is subject to an emission limitation or standard for an applicable pollutant
64.2(a)(2)	Emissions unit uses a control device to achieve compliance with this applicable limitation or standard (see section 64.1 for definition of control device)
64.2(a)(3)	Potential pre-control emissions of the applicable pollutant from the emissions unit are at least 100 percent of the major source threshold
64.2(b)	Emissions unit is not otherwise exempt

Preparation of each Title V facility renewal application should evaluate CAM applicability for each emissions unit at the facility that employs a control device. Renewal applicants should rely on the best available data for determining potential pre-control emissions. An emissions unit's potential pre-control emissions can often be determined from potential-to-emit calculations in the STARShip Title V application, past Fee Emission Reports and emission testing data. This data must usually be adjusted to exclude the efficiency values of the capture and control systems. (Note that the higher the assumed control efficiency of the capture system or control device, the greater the effect on uncontrolled emissions.) Renewal applications that include emissions units subject to CAM should specify the federal rule (40 CFR Part 64) as an applicable requirement for the appropriate emissions unit(s) in the Title V STARShip application and submit a CAM plan for that emissions unit. CAM plans can either be submitted electronically with the STARShip application or as a separate hard copy attachment.

Enhanced monitoring under CAM is intended to provide a "reasonable assurance" of compliance with applicable requirements by ensuring that the emission control system is working properly. Proper operation is established in the CAM plan by selecting representative control device operating parameters (temperature, flow, pressure drop, etc.), establishing indicator ranges for the operating parameters (accounting for site-specific factors such as margin of compliance, emissions control variability, correlation with emissions, historical data, similar sources and emission testing data) and establishing appropriate data collection and averaging times. Monitoring values during normal operations can serve as the baseline for establishing the CAM indicator ranges. Ultimately, CAM identifies potential problems in the operation and maintenance of the control device and prompts the owner or operator to take corrective action *before* there is a deviation of an applicable emission limitation/control requirement. 40 CFR Part 64 defines an "excursion" as a departure from an indicator range established in accordance with 40 CFR Part 64. Excursions are possible exceptions to compliance with applicable requirements and are not necessarily violations of an applicable emission limitation/control requirement.

Some Title V permittees are unsure of what to include in their CAM plans. Sample CAM plans and case studies can be found on U.S. EPA's CAM Web page (www.epa.gov/ttn/emc/monitoring). Ohio Title V permits already contain adequate parametric monitoring to ensure ongoing compliance with applicable requirements and in many cases the existing parametric monitoring can and should serve as the basis for CAM. An example would be for an owner or operator of a coating or

printing line that employs a catalytic incinerator to control VOC emissions and elects to demonstrate ongoing compliance with the control efficiency requirements of OAC rule 3745-21-09(B)(6) by meeting the monitoring and record keeping for catalytic incinerators in OAC rule 3745-21-09(B)(3)(l). The catalyst bed inlet/outlet temperature monitoring in the rule agrees with the sample CAM for these types of facilities in the April 2005 Technical Support Document for Title V Permitting of Printing Facilities (<http://www.epa.gov/ttn/emc/cam/tsd.pdf>) and therefore satisfies CAM for the control efficiency limitation. Unless there is an assumed 100 percent capture efficiency for the line, the CAM plan must address CAM for capture efficiency as well. Protocol A in the April 2005 guidance gives examples of CAM for capture for an unenclosed press. Duct pressure, fan amperage, or differential pressure monitoring of an enclosure are all examples of potentially acceptable CAM monitoring for a capture efficiency limitation. If the control equipment can be bypassed, the CAM plan must address CAM for Bypass Indication (Protocol F in the April 2005 guidance) as well.

Recently it has been asked whether CAM is applicable to an emissions unit subject to a MACT standard. This confusion may stem partly from the rule language in 40 CFR 64.2(b) that states, "The requirements of this subpart shall not apply to any of the following emission limitations or standards: (i) Emission limitations or standards proposed by the Administrator after November 15, 1990, pursuant to sections 111 or 112 of the Act." U.S. EPA has clarified that the CAM rule exemption for MACT rules applies only to monitoring *for the MACT emission limitation or standard*. That is, the CAM rule imposes no additional monitoring on the emissions unit for showing compliance with MACT limitations. This exemption does not extend to monitoring for compliance with other limitations that may also apply to the emissions unit.

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CAM Plans *continued from page 1*

Therefore, CAM may still apply for a criteria pollutant limitation and monitoring for the MACT emission limitation could satisfy CAM for the criteria pollutant limitation as well. This often may be the case when the MACT requires particulate or VOC control measures and the criteria pollutant is particulate or VOC. The owner or operator must make this determination initially and indicate in the permit application that the existing monitoring satisfies CAM or propose additional monitoring to meet the CAM requirements for monitoring for compliance with the criteria pollutant limitation.

Ohio EPA also has addressed CAM for industrial and utility boilers subject to the Boiler MACT (40 CFR Part 63, Subpart DDDDD), controlled by an electrostatic precipitator (ESP) and monitored with continuous opacity monitoring systems (COMs). The question is whether it would be acceptable for the MACT COMs to replace ESP parametric monitoring (for CAM purposes only) for the particulate mass emission limitation after the Boiler MACT compliance date of September 13, 2007. The Boiler MACT specifies COMs as acceptable monitoring for particulates (particulates are the surrogate pollutant for metals HAPs in the MACT). As discussed above, monitoring required under an emission limitation or standard pursuant to sections 111 or 112 of the Act is presumptively acceptable for CAM purposes. In addition, 40 CFR 64.3(d)(3)(ii) allows COMs to be used to assure compliance with a particulate emission standard. U.S. EPA has clarified that the answer depends on the data used to justify the indicator range (or MACT) operating limit. For ESPs, COM data can be effective for monitoring ESP performance. If the justification (such as, emission testing data vs. COM data) provide a reasonable assurance of compliance (such as, good margin of compliance, good confidence coefficient), then COMs or any other justifiable approach is acceptable. In U.S. EPA's experience, COMs data can be correlated with particulate emissions on the order of +/- 30 percent at the 90 percent confidence level. That means an indicator range of an opacity level corresponding to about 70 percent of the particulate emission limitation would provide about 90 percent assurance of ongoing compliance.

A lower opacity indicator range would provide more assurance. COMs data combined with ESP power data correlated to emissions would be even better.

Subscribe to STARShip's Electronic News Service

Do you want immediate updates on STARShip issues and topics relating to Title V applications, State PTO applications or emissions reports? DAPC established an Electronic News Service for STARShip in 2004. If you subscribe, you will only receive messages from DAPC, not from every list member that posts a question. Messages sent to the Listserv are posted on the STARShip Web page.

To subscribe to this news service, send an e-mail to majordomo@lists.epa.state.oh.us and place the following in the message body: **subscribe starshiphelp**

More information on DAPC's Electronic News Service can be found on DAPC's Web page.

All Title V Facilities Must Submit EIS for 2005

All Title V facilities must to file a complete Emissions Inventory Summary (EIS) every three years. Emissions reporting year 2002 was the last full inventory year for all Title V facilities. 2005 is the next full inventory year. The EIS reports for 2005 must be submitted using the same forms as the fee emissions report (FER) by April 17, 2006.

Making Changes at a Title V Facility

Question: I'm making a change at my facility, can I begin operating before I get my Title V permit revised?

Answer: Sometimes. It depends on what type of revision the change you're making qualifies for. OAC rule 3745-77-08 outlines the following revision types and the criteria that triggers each type of change: operational flexibility, off-permit, administrative permit amendment, minor permit modification, significant permit modification and reopening for cause. The most frequently used revisions that may affect the timing of commencing operation of a change are the minor permit modification and significant permit modification. First, any change that qualifies for a minor permit modification must first be initiated with the submittal of a minor permit modification application, which includes draft terms and conditions relating to the change created by the permittee. The permittee cannot begin operating the change until all application materials are "received" by Ohio EPA. Second, there are certain cases where changes that qualify for a significant permit modification cannot begin operation until the significant permit modification is issued as a final action. This would be when the current terms and conditions of the Title V permit would conflict with the terms and conditions regarding the change, in a way that would be prohibited, such as requesting an increase in an emissions limit. See the "Guidance for Incorporating Facility Changes into a Title V Permit" at http://www.epa.state.oh.us/dapc/title_v/titlev.html.

Question: I received my permit-to-install (PTI), why am I being told I can begin construction but can't commence operation in accordance with the PTI until my Title V is revised?

Answer: As discussed in the question above, certain changes being made to the facility are required to be processed through either a minor permit modification or significant permit modification procedure, both of which may affect the

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Emissions Statements Due for Facilities in Non-Attainment Counties

In Ohio, 33 counties are designated as non-attainment for the 8-hour ozone National Ambient Air Quality Standard in Ohio (Related Table 1). Emissions Statements are required by Clean Air Act section 182(a)(3)(B) for any facility located in an ozone nonattainment area that emits greater than or equal to 25 TPY of volatile organic compounds (VOC) or nitrogen oxides (NOx) during the reporting year. Ohio Administrative Code (OAC) 3745-24 also addresses Emissions Statements. This requirement is for all facilities whether they are subject to Title V permitting (OAC 3745-77) or state permitting (OAC 3745-35).

Table 1: Counties Designated as Non-Attainment for the 8-Hour Ozone Standard

Allen	Ashtabula	Belmont
Butler	Clark	Clermont
Clinton	Columbiana	Cuyahoga
Delaware	Fairfield	Franklin
Geauga	Greene	Hamilton
Jefferson	Knox	Lake
Licking	Lorain	Lucas
Madison	Mahoning	Medina
Miami	Montgomery	Portage
Stark	Summit	Trumbull
Warren	Washington	Wood

In general, facilities subject to this requirement must submit calculated actual emissions for NOx and VOC.

Note: The requirement to file an Emissions Statement is based on actual emissions of VOC or NOx each reporting year. Thus, owners or operators of NOx or VOC sources must assess actual emissions of the facility each year to determine whether the reporting requirements apply. For example, in 2005 a facility may have emitted 28 TPY of VOC or NOx and is required to submit an Emissions Statement. However, if the facility emits less than 25 TPY or either VOC or NOx in 2006, an Emissions Statement would not be required for that year.

How do I submit an Emissions Statement?

STARShip has the capability to create Emissions Statements. The form and manner in which the Emissions Statement should be submitted depends on how the Fee Emissions Report (FER) is submitted for your facility. They are summarized below. More detailed information will be included in a reminder letter sent to the facility.

Title V

If your facility is subject to Title V, you are already required to submit annual FER/EIS reports by April 15 via STARShip. On the emissions reporting form created for each emissions unit, you must first indicate the requirements for which you are submitting the report. There is a check box for Emissions Fee, Emissions Statement and Emissions Inventory. If all three boxes are checked, submit one report to meet all three requirements.

The data required for an Emissions Statement is duplicative of that required in the EIS and portions of the FER. Therefore, by checking the Emissions Statement box in the STARShip form you are not required to fill out additional information other than an Emissions Statement contact person (located in the emissions reporting form at the facility level). When you submit the STARShip export file, the receipt that is generated includes a receipt for the Emissions Statement.

Synthetic Minor Title V (SMTV)

If you are developing a fee report for an SMTV facility, you are required to submit the FER in hard copy by April 15. STARShip can be used to create these reports, however they must be printed and submitted in hard copy. If you use STARShip, the first item on the emissions reporting form indicates the requirements for which you are submitting the report. Check the Emissions Fee and Emissions Statement box to ensure that all the appropriate data elements will be available for completing the FER appropriately.

If STARShip is not used to create the SMTV report, a hard copy form may be mailed to the each SMTV facility and must also include the instructions for the Emissions Statement, as applicable.

Non-Title V

If you are completing a biannual Non Title V FER, sometimes referred to as a "Blue Card," please note that there are changes to the form supplied by Ohio EPA. The FERs for facilities in counties listed in Table 1 include a section asking for the total TPY of VOC and NOx if applicable.

If you have questions about this requirement, please call (614) 644-2270.

Making Changes continued from page 2

timing of being able to commence operation of the change. These requirements are identified in OAC Chapter 77 and in the guidance referenced above. Ohio EPA strongly urges permittees who are planning changes at their facility to assess their Title V revision obligations at the same time they are planning for new source review. This can prevent delays in commencing operation when the Title V regulations require certain procedures be performed in advance of commencing operation. Please review the regulations, guidance and discuss your changes with your field office representative early in the process so that Ohio EPA can take steps to ensure your permits are processed as efficiently as possible.

Important Deadlines

Note: This year, April 15 and April 30 fall on weekends, so the deadlines have been extended as indicated below.

- **Title V Air Fee Emissions Report, Emissions Inventory Summary, and Emissions Statement (for reporting year 2005) due 5 p.m. Monday, April 17, 2006**

Fee Emissions Report - OAC rule 3745-78-02(A)

The fee per ton for calendar-year 2005 emissions is \$39.48.

Emissions Inventory Summary - OAC rule 3745-15-03

Emissions Statement - OAC chapter 3745-24

(Related Articles: Emissions Statements Due for Facilities in Non-Attainment Counties, Increasing Accuracy of Emissions Reporting, All Facilities Must Submit EIS for 2005)

- **Synthetic Minor Title V Air Fee Emissions Report and Emissions Statement (for reporting year 2005) due 5 p.m. Monday, April 17, 2006**

Fee Emissions Report - OAC rule 3745-78-02

Emissions Statement - OAC chapter 3745-24

Hard copy submittal is required. (Note: STARShip software may be used, but must be printed and submitted by hard copy.)

(Related Articles: Emissions Statements Due for Facilities in Non-Attainment Counties, Increasing Accuracy of Emissions Reporting)

- **Title V Annual Compliance Certifications for Title V facilities that were issued Final Title V permits by December 31, 2004, due 5 p.m. Monday, May 1, 2005**

OAC rule 3745-77-07(C)

Each Final Title V permit issued by Ohio EPA contains a "Compliance Certification" requirement in the General Terms and Conditions [see term Part I (A)(12)(d)]. Additional reporting and filing information and required forms are provided on DAPC's Web page or by contacting Mike Ahern at (614) 644-3631.

Increasing Accuracy of Emissions Reporting

OAC Chapter 3745-78 requires reporting of facility-wide actual emissions for fee purposes. Ohio EPA also requires Title V facilities to report actual emissions to fulfill emissions inventory requirements. Emission Statements are required for certain facilities in ozone non-attainment areas (see page 4 [table 1]). A key component of reporting actual emissions is to ensure that reporting is based on the most accurate information available, including the most accurate data on production rates, fuel consumption and emissions factors. Thus it is important to reassess the input values that are used each year to calculate actual emissions. In STARShip, as well as the hard copy forms, the preparer may choose which method will be used to calculate the total tons per year. The list below indicates which methods typically produce the most accurate emissions reporting.

1. Continuous Emissions Monitors (CEM)
2. Source Tests
3. Material Balance
4. Emission Factors (from U.S. EPA's FIRE database or other industry factors)
5. Engineering Judgement

STARShip contains AP-42 emissions factors from 1995. The emissions factors have not been updated. Therefore if the emissions factor has been updated for a given Source Classification Code (SCC) the change will not be reflected in STARShip. **To avoid using the old emissions factors in STARShip, DO NOT select SCC Emissions Factor (autocalculate) as an Emissions Method Description as seen below.**

Emissions Reporting Form - Demo

Emissions - Emissions Unit Information

Facility Name: Demo Facility Facility ID: 01-23-45-6789

Inventory Point Information Confidential Claims

General Information SCC Information Schedule

OEPA ID(s): Boiler (B001) Form Type(s): Fee report Statement Inventory

SCC ID	Pollutant ID	Emissions Method Description	Auto-calculate Emissions? (Y/N)
1-01-002-04 (1)	Particulate	SCC Emissions Factor (autocalculate)	Yes

The "Autocalculate" function in STARShip may still be used if it is accompanied by a different emissions method description choice.

Current emission factors produced by U.S. EPA must be accessed through the Factor Information REtrieval (FIRE) database. The FIRE database, version 6.25, can be downloaded from U.S. EPA's Web page: <http://www.epa.gov/ttn/chief/software/fire/index.html>.

Once you have selected the proper Source Classification Code (SCC) and emissions factor, that number must be typed into STARShip.

STARShip Newsletter

Bob Taft, Governor
Joseph P. Koncelik, Director

Published by the
Division of Air Pollution Control

Chief: Robert Hodanbosi
Contributors: Erica Engel-Ishida,
Andrew Hall, Linda Ours and
Jennifer Nichols

Graphics and Layout:
Pattie Rhodes-Mehrle

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Division of Air Pollution Control
Lazarus Government Center
P. O. Box 1049
Columbus, Ohio 43216-1049

Get Help on the Web!

DAPC Web page: <http://www.epa.state.oh.us/dapc/>

Please use DAPC's Web page as an information resource. DAPC updates this page frequently. Use the topic list to find information about STARShip, Electronic News Service, Title V fees, Emissions Inventory Summary, Synthetic Minor Fees, District Office or Local Air Agency Directories and complete phone lists. You also may call DAPC's central office at (614) 644-2270, or your district office or local air agency representative. In order to ensure prompt service, please indicate if you are looking for help or information concerning Title V fees, the Emission Inventory System, STARShip, etc.

Title V Deviation Reporting Form

The responsible official at a Title V facility must submit quarterly and semi-annual deviation reports for all deviations from applicable requirements contained in the final Title V permit for the facility. A form and instructions for deviation reporting has been developed and is now provided as a optional reporting format on DAPC's Web page by selecting Title V from the topics list. This is in response to requests from Title V responsible officials.