

AIR/COMPLIANCE NEWS



RISK MANAGEMENT PROGRAM – GENERAL DUTY CLAUSE

NANCY M. HIRKO, SENIOR ENGINEER, ACCI

Most are aware of USEPA's Risk Management Program [112(r)] that requires sources having more than a threshold quantity of a listed hazardous substance to comply with certain requirements to prevent accidental chemical releases. But if you are not over the thresholds.....do you have to pay attention to this program??

The answer is YES!!! Because of the General Duty Clause listed in 112 (r)(1). The General Duty Clause basically states that any source that produces, processes, handles or stores a chemical listed in 40 CFR Part 68 [or any other extremely hazardous substance (EHSs)] has a general duty to identify the hazards which may result from releases and to take steps to design and maintain a safe facility and to minimize the consequences from any accidental releases which do occur. This requirement is similar to the general duty clause in OSHA requirements. The list of EHSs is found in the EPCRA rules at 40 CFR Part 355.

Last September, a large petrochemical company in the U.S. was fined \$1.8 million to settle alleged General Duty violations. Included in the complaint were inadequate training programs, written operating procedures, and emergency response program, and the lack of a management system for dealing with the potential risk. No process hazard analysis was performed that would have identified and evaluated potential hazards. Accidental chemical releases occurred in 1999 and 2000 that resulted in three fatalities and several injuries. Among other requirements in the Consent Decree, the facility must update its Risk Management Plan and include the natural gas system in an updated process hazard analysis.

For more information regarding the General Duty Clause, link to <http://yosemite.epa.gov/oswer/>

and stationary internal combustion units that are small NO_x sources in five Philadelphia-area Counties and the rule also establishes ozone season NO_x emission limits for stationary internal combustion engines and Portland cement kilns across the Commonwealth. The ozone season NO_x limitations take effect beginning on May 1, 2005. In Chapter 145, Subchapter B establishes ozone season emission requirements for NO_x from large stationary internal combustion (IC) engines that emitted or emit more than 153 tons of NO_x per ozone season in 1995 or any ozone season thereafter. Subchapter C establishes ozone season emission requirements for NO_x from statewide Portland cement kilns.

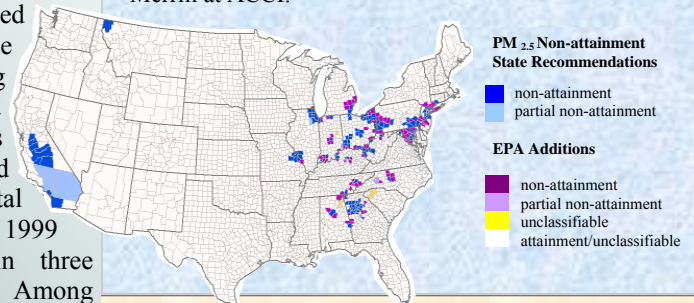
Large stationary IC Engines may be affected. The amendments establish methods for determining NO_x "allowable emissions." A calculation of the difference between NO_x allowable and NO_x actual emissions must be performed. The rule requires the surrender of NO_x allowances for actual emissions that exceed allowable emissions. There will be a 3 to 1 NO_x allowance penalty for failure to surrender NO_x allowances in accordance with the rule. CEMS data or an alternate calculation will be allowed based on emissions testing. This latter method will have to be approved by Pennsylvania Department of Environmental Protection (PADEP) first.

HOW WILL USEPA'S NEW PM_{2.5} DESIGNATIONS AFFECT YOU?

JILL W. MERRILL, PRESIDENT, ACCI

That's a question shrouded in uncertainty if you have a facility located in one of the non-attainment regions. USEPA finalized the PM_{2.5} designations on December 17, 2004, declaring numerous counties "non-attainment areas" in the Northwest, Midwest, South, and California. States have until 2008 to adopt rules and until 2010 to achieve attainment. USEPA has yet to issue guidance to the many affected sources and states. Nevertheless, new or modified major sources in the non-attainment areas will be subject to "LAER" control requirements and stricter permitting as soon as April 5, 2005. PM_{2.5} has been shown to consist largely of ammonium sulfates, ammonium nitrates, and organic carbon, but it is uncertain how USEPA will regulate it. In addition to particulate sources, LAER controls could be required on sources of ammonia, NO_x, SO_x, and organic carbon, as precursors to PM_{2.5}.

For more information as the mystery unfolds, contact Jill Merrill at ACCI.



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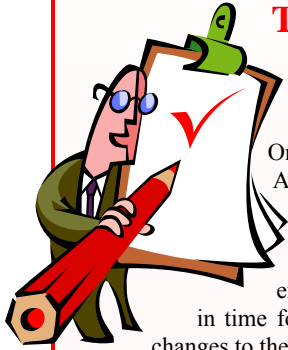
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PENNSYLVANIA FINALIZES NO_x RULES FOR SMALL SOURCES, CEMENT KILNS AND LARGE INTERNAL COMBUSTION ENGINES

NANCY M. HIRKO, SENIOR ENGINEER, ACCI

On December 11, 2004, final amendments to Chapters 121, 129, and 145 dealing with nitrogen oxides (NO_x) emission limits were published in the PA Bulletin. The rule establishes NO_x emission limits for certain boilers, turbines,

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TOXICS RELEASE INVENTORY REPORTING FORMS MODIFICATION RULE

SHARON S. DIDAY, PROJECT ENGINEER, ACCI

On January 10, 2005, the United States Environmental Protection Agency (USEPA) proposed changes to the Toxics Release Inventory Reporting Forms (Form A and R). Comments to the proposed changes identified by the Docket ID No. TRI-2004-00001, must be received by the USEPA on or before March 11, 2005. The USEPA expects to complete comment review and adoption of the new changes in time for the 2006 reporting year. The following are the list of proposed changes to the current TRI Form A and R:

- ◆ Replacement of Certain Facility Data Reporting Requirements With Existing USEPA Data from the USEPA Facility Data Registry (Section 4.6 and 4.8 through 4.10 of Forms A and R)
- Removal of the Reporting Requirement for Facility Data (latitude/longitude coordinates, permit and environmental program identification numbers other than the TRI facility identification number) from the TRI Forms.
- Removal of the Latitude/Longitude Reporting Requirement.
- Removal of Reporting Requirement for the USEPA Permit and Program Identification Numbers (Sections 4.8, 4.9, and 4.10 of Forms A and R).
- ◆ Removal of the Reporting Requirement for Determining the Percentage of the Total Quantity of Toxic Release Contributed by Stormwater (Part II, Section 5.3 Column C of Form R)
- ◆ Modifications to the Reporting Requirement for On-Site Water Treatment Methods and Efficiency (Part II, Section 7 of Form R)
 - Section 7A – On-Site Waste Treatment Methods and Efficiency, Column B – Waste Treatment Method(s) Sequence. The current codes would be replaced by the 18 hazardous waste treatment codes currently used in the USEPA biennial Hazardous Waste Reports.
 - Section 7A – On-Site Waste Treatment Methods and Efficiency, Column C – Range of Influent Concentration. This section is proposed to be eliminated or made optional.
 - Section 7A – On-Site Waste Treatment Methods and Efficiency, Column D – Waste Treatment Efficiency Estimate. USEPA is proposing to allow facilities to report their treatment efficiency as a range instead of an exact percentage.
 - Section 7A – On-Site Waste Treatment Methods and Efficiency, Column E – Based on Operating Data. USEPA is proposing to remove this data field.
 - Section 7C – On-Site Recycling Processes. USEPA is proposing to eliminate the current recycling codes and replacing them with three reclamation and recovery management codes used in USEPA's biennial Hazardous Waste Report.
- ◆ Removal of Reporting Data Field for Optional Submission of Additional Information (Part II, Section 8.11 of Form R). USEPA is proposing to modify the Form R to include an optional checkbox allowing facilities that provide additional information to check "yes", if they use the test box feature or send USEPA additional information in hardcopy. Reporting facilities that do not wish to provide additional information would no longer need to check "no", in Section 8.11.

USEPA is also proposing the following technical corrections to the Title 40 Code of Federal Regulations (CFR), Part 372.85.

- ◆ Giving reference to the TRI Web site to obtain the Form R instead of publishing in the regulations an address from which to request copies of TRI forms.
- ◆ Deletion of Title 40 CFR, Part 372.85(b)(18) because the regulation has expired and has no effect on the current reporting obligations.

A second rulemaking, to be proposed later in 2005, will examine the potential for more significant reporting modifications with greater potential impact on reducing reporting burden. To obtain a copy of the proposed changes or submit comments to the above proposed changes, please refer to the following: <http://epa.gov/EPA-TOX/2005/January/Day-10/>

NEW AP-42 DRAFT SECTION 12.5.1 MINIMILLS

SHARON S. DIDAY, PROJECT ENGINEER, ACCI

On December 16, 2004, the United States Environmental Protection Agency (USEPA) drafted a revision to Section 12.5 "Iron and Steel Production" in its Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources, EPA Publication No. AP-42 (AP-42). The revision focuses on emission factor data gathered for facilities known as "minimills."



In a minimill, scrap metal is melted and refined in an electric arc furnace (EAF) to make steel products. Generally, molten steel is produced in an EAF and then tapped from the EAF to a ladle. The molten steel is then usually further refined with the addition of alloys. Semi-finished product is then produced using continuous casting or ingot casting. Multiple finishing processes may then be used to produce finished steel products.

Emission factors in AP-42 Section 12.5.1 are given for particulate matter (PM), oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), lead, volatile organic compounds (VOCs), fluoride, and beryllium.

Comments to this revision must be received by the USEPA by March 1, 2005. To review the Draft Section 12.5.1 or submit comments please refer to: <http://www.epa.gov/ttn/chief/ap42/ch12/>

Please contact Sharon Diday at 412-826-3636 for further information.



2005 IMPORTANT DATES

March 1: Tier II and Pennsylvania Emission Statements

March 12: Initial Notification due for Boiler MACT

March 15: Allegheny County Emission Statements

April 15: Ohio and New York Emission Statements

May 15: New Jersey Emission Statements

July 1: WVDEP Emission Statements and TRI (Form R) Reports

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Pennsylvania Finalizes NO_x Rules

Chapter 145, Subchapter C will apply to all existing and new Portland cement kilns. There are approximately 21 Portland cement kilns currently in operation across Pennsylvania. Sources will be required to monitor NO_x emissions continuously, meet the quality assurance requirements for the CEMS, develop a monitoring plan, submit quarterly federal-standard electronic data reports (EDRs), manage a NO_x allowance account, and submit an annual allowance reconciliation report. In general, they must meet 40 CFR Part 75 monitoring requirements.

The final amendments to Chapter 129 apply during the ozone season to existing and new small sources of NO_x in the five-county Philadelphia area – boilers and stationary CTs with greater than 100 MMBtu/hr heat inputs and stationary IC engines rate at greater than 1,000 horsepower. The amendments establish similar calculation methods as noted above for IC engines, as well as use of CEMS or alternate calculation methods. The Chapter 129 amendments will also allow a NO_x credit in exchange for zero emission renewable energy production.

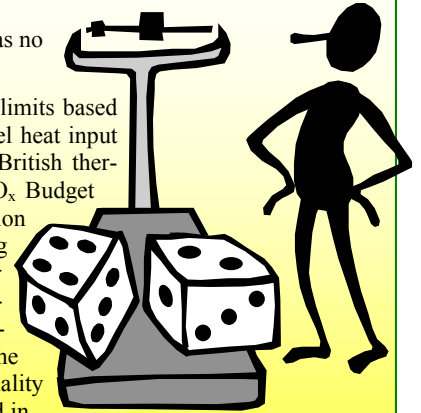
Please contact Nancy Hirko at nhirko@air-comp.com or 412-826-3636 if you have any questions on the new rules or assistance with EDR or Part 75 CEM requirements.

HOW DO YOU MEASURE HEAT INPUT??

NANCY M. HIRKO, SENIOR ENGINEER, ACCI

Do you meter all fuels? Or do you SWAG it? One meter for all five boilers? Or is it “we use about ½ a coal bin per day”?? Perhaps you burn a fuel that has no established F-Factor?

Many new regulations have emission limits based on pounds of pollutant emitted per fuel heat input – or lb/MMBtu (pounds per million British thermal units). Programs such as the NO_x Budget Trading Program allow NO_x emission rates to be determined by measuring the heat input to the boiler or other combustion source. 40 Code of Federal Regulations (CFR) Part 75, Appendix D has rigid requirements for the installation, initial certification, and quality assurance of all fuel flowmeters if used in the trading program.

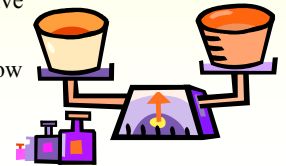


Other new rules, such as the upcoming Boiler/Process Heater NESHAP (or MACT) defines the limits for several pollutants such as particulate matter (or total selected metals), hydrogen chloride, and mercury on a lb/MMBtu basis. Although not to be used in a trading program (not yet, anyway), it is possible that sources will become subject to additional regulatory scrutiny in the determination of their heat input measurements.

Heat input to a combustion device is generally estimated or measured based on the gross calorific value (GCV) of the specific fuel (coal, No. 2 fuel oil, No. 6 fuel oil, natural gas, propane, coke oven gas, blast furnace gas, process gas, etc.) and the fuel consumption rate (tons per hour, gallons per hour, standard cubic feet per hour, etc.) Weigh scales, fuel flow metering equipment such as orifice, venturi, vortex, Coriolis meters, and others are routinely used to monitor fuel consumption. Pressure and temperature measurements are also necessary for most fuel flowmeter measurements. Instrumentation is utilized, calibrations are performed and data are logged in order to measure and record heat input.

But how accurate is that fuel meter or equipment to analyze for gross calorific value? Have you looked at it lately? Is it routinely calibrated? Do you keep calibration records? Is it NIST traceable? Is the metering location sufficient to meet ASME or AGA installation guidelines? How often do you sample to determine gross calorific value? Do your sources share a common stack? How will you apportion heat input to the respective combustion device?

It may be worthwhile to review how YOU measure heat input!!

**LOCATING SAMPLE PORTS AND DUCTWORK AROUND CONTROL SYSTEMS**

WILLIAM A. STANZIANA, SENIOR SCIENTIST, ACCI

ACCI testers often find that existing sample ports do not meet USEPA siting criteria, or are not large enough at the facilities, adding delay time and costs. USEPA Test Methods contain specific criteria for positioning sample ports. Round ductwork has different requirements than rectangular ductwork. At least 3 straight “Duct Diameters” should be available (but more distance means less traverse points) at the inlet and outlet of a control system.

When designing ductwork for an oxidizer or other emission control system, it is wise to consider possible source testing. Source test costs are strongly affected by the number of ducts requiring measurement and accessibility to the sample ports. By minimizing the number of ducts and providing easy access to sampling locations, source test costs can be reduced by thousands of dollars.

Should you desire further details or simply to discuss further, please contact Bill Stanziana at 412-826-3636.

JOHNSON ACTING ADMINISTRATOR AS LEAVITT MOVES TO HHS

SHERRY L. LINDQUIST, ADMINISTRATIVE MANAGER, ACCI



Stephen L. Johnson became Acting Administrator of the U.S. Environmental Protection Agency on January 26, 2005 as outgoing Administrator Mike Leavitt was confirmed to be Secretary of Health and Human Services (HHS). Mr. Johnson has served as Deputy Administrator since he was sworn in on August 2, 2004. Mr. Johnson has been a part of the USEPA for 24 years and has also received the USEPA’s Excellence in Management Award, seven bronze medals, and the silver medal for superior service as well as the Vice President’s Hammer Award for streamlining the pesticide registration program.

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- ◆ Control Equipment Evaluation and Troubleshooting
- ◆ BACT/MACT/RACT and LAER Analysis
- ◆ SARA Form R and Tier I/Tier II Reporting
- ◆ Storm Water Management Plans
- ◆ Soil and Water Sampling
- ◆ Risk Management Plan Development
- ◆ Emission Control and Monitoring Assistance
- ◆ NESHAP Planning (SSM Plans)