

Meeting Compliance Schedule and Requirements for Boiler MACT

By PH Haroz

Boiler Area Source applies to a boiler in a facility with actual emissions of Hazardous Air Pollutants (HAP) less than 10 tons per year of any single HAP or less than 25 tons per year of all HAPs combined. EPA allows Boiler Area Source facilities the use of Generally Available Control Technologies (GACT) or management practices to reduce emissions of hazardous air pollutant (as compared to Boiler MACT facilities explained later requiring stricter practices). **If your facility is an Area Source, you should have submitted the Initial Notification Report and Notification of Compliance Status to the State and US EPA by May 31, 2013.**

The Boiler MACT rule applies to new and existing boilers and process heaters having actual emissions of HAPs in excess of 10 tons per year of any single HAP or 25 tons per year of all HAPs combined. If your facility possesses a Title V or Part 70 (Major Source) Air Quality Permit, this does not necessarily mean that the Boiler MACT applies to you. A Title V Air Quality Permit signifies that actual emissions of at least one criteria pollutant (e.g. particulate matter, carbon monoxide, volatile organic compounds, etc.) exceed 100 tons per year for non-HAP pollutants or the 10/25 ton per year HAP thresholds previously stated. If permitted emissions of HAPs are below the major source thresholds, Boiler MACT does not apply to you; however, Boiler GACT may. **If your facility falls under Boiler MACT, you should have submitted the Initial Notification Report and Notification of Compliance Status to the State and US EPA by May 31, 2013.**

For both Boiler MACT and Boiler Area Source, all facilities must conduct regular tune-ups and perform a onetime boiler energy assessment of at least one boiler.

The deadline to complete the Energy Assessment and Tune-up for Boiler Area Source was March 21, 2014 and for Boiler MACT it is January 31, 2016.

Many of you have already completed the one time energy assessment and boiler tune-up. That was the easy part. Now, you need to be able to meet the emission limits set out by the Boiler MACT rule. These emissions limits can be more stringent than the limits specified in your state Air Permit.

In order to meet these emission limits, you could be required to add or change your facility's pollution control equipment. The rule also requires the use of a Continuous Monitoring System (CMS) and Data Acquisition System (DAS). These systems could be expensive and complex.

Be aware that for the above, time is of the essence, even with a compliance deadline of **January 31, 2016**. The standard delivery time for these types of systems can be approximately 4 months. This does not include the time required for installation and start-up. These are not just systems that you can buy off the shelf, plug in, and you are in compliance. There is an optimization process to select the most economical and feasible CMS and DAS for your facility's requirements. The compliance deadline is fast approaching. **Contact CTI now.**

Smoke and Dye Test for Permittees under the Georgia Storm Water Permit

Permittees under the Georgia Industrial Storm Water General Permit must Document If there are any floor drains in the production area and/or sinks that are not in the bathroom, kitchen, breakroom, etc. If any of these are present at the facility, an evaluation is required.

The evaluation includes:

- Locating potential connections to your storm water system.
- Verification that floor drains and connections go to municipal sewer.

The above needs to be verified from as-built drawings and/or by conducting a smoke and dye test at least once during the term of the permit. The smoke and dye test must be conducted to evaluate for the presence of non-storm water discharges into the storm sewer system from all floor drains, and from all sinks in industrial areas excluding eye-wash stations that were installed prior to 1/1/2006.

Smoke and Dye Testing Services

Services provided by CTI:

- Locate potential connections to your storm water system
- Verify that floor drains and connections go to municipal sewer
- Prepare reports showing compliance with the General Permit



Dye Test



Smoke Test

Is Your Lockout/Tagout Program Effective? Three Tips to Developing a Compliant Program

By Chris Frendahl

Your facility's Lockout/Tagout program is essential in ensuring employee safety while performing maintenance on energized equipment. Countless workplace fatalities and severe injuries have resulted from improper Lockout/Tagout procedures. OSHA regulations listed in 29 CFR 1910.147 requires all industrial facilities to develop and maintain a written Lockout/Tagout program that lists procedures for safely isolating equipment from all energy sources prior to servicing the equipment. Here are 3 tips for ensuring that your Lockout/Tagout program is effective and compliant with OSHA regulations.

1) Develop written Lockout/Tagout procedures for each piece of equipment

There is no "one size fits all" method for developing an effective Lockout/Tagout program. Machine-specific procedures should be written and maintained in the program. These procedures should identify all energy sources. It is often assumed that electricity is the only power source for equipment; however, your Lockout/Tagout procedures should include all energy sources, including: steam, pneumatic, hydraulic lines, gravitational forces, chemical energy, mechanical energy, etc. These machine-specific procedures should list the specific steps for properly locking out the equipment at each isolation source as well as requirements for determining the procedures' effectiveness in isolating the equipment from these power sources.

2) Ensure that equipment being locked out reaches a "zero energy state"

Once a piece of equipment has been locked out, it is crucial to verify that the equipment reaches a "zero energy state." This means that there is no residual or stored energy left in the machine after it has been isolated. If equipment is not in a zero energy state, it is possible for the machine to briefly activate while maintenance is being conducted, putting employees in danger. To verify that the equipment has reached a zero energy state, the authorized employees should ensure that no one is in the machine's danger zone and attempt to operate the equipment at the on/off switch after applying all lockout devices. This will release all stored energy that may be left in the machine. Once complete, the controls should be returned to the "off" position and maintenance can begin. In the past, OSHA has cited facilities for lacking the wording specific to bringing the equipment to a "zero energy state" in the Lockout/Tagout procedures.

3) Conduct annual procedure reviews

It is not enough to simply have a written Lockout/Tagout program filed on site, the program should be reviewed and you must physically validate the procedures on at least an annual basis. In order to evaluate how effective the machine-specific procedures are, an authorized employee must observe other employees



performing the procedures, as written, at least annually. This will help to ensure that the procedures list steps to completely isolate the equipment from all energy sources and will allow employers to verify that employees are properly following the procedures. Additionally, you should conduct annual lockout/training for all employees, not just the authorized employees who will be servicing the equipment. Affected employees, those employees who operate machinery that is subject to Lockout/Tagout procedures, must also be trained. This training should include basic information of the Lockout/Tagout procedures so that they can understand why the procedures are being conducted and will know not to remove lockout devices and attempt to re-energize machinery that is locked out.

Following these three tips can help you to develop Lockout/Tagout procedures that comply with OSHA regulations and effectively protect employees from unexpected equipment startup while conducting maintenance.

If you would like help in developing a written Lockout/Tagout program or machine-specific procedures, please contact CTI.

News You Can Use

- OSHA and the Institute of Scrap Recycling Industries sign alliance to address machinery, chemical, other hazards in scrap recycling industry.
- CTI to soon celebrate 30 years in business, leading the way in Environmental and Safety Compliance.
- CTI's free webinar "NFPA 652 - The New Standard for Combustible Dust" on Dec. 3 @ 2:00 PM EST. Check the news on our website for details on how to register.

New Primary and Secondary Ozone NAAQS Requirements

By Brian Edwards, PE

The US EPA has revised the National Ambient Air Quality Standards (NAAQS) for ground level ozone. This will impact new and existing industrial facilities in some locations.

Background - The NAAQS were implemented as part of the Clean Air Act in the 1970's to protect public health from a variety of pollutants, including particulates, carbon monoxide, and ozone, among others. The ozone NAAQS were instituted to limit the health effects (e.g. reduced lung function and pulmonary inflammation) caused by ground level ozone in the atmosphere; effects that primarily impact children, older adults, and people with asthma or other lung diseases. While ozone in the stratosphere helps block harmful radiation from reaching the surface of the earth, ozone at ground level is harmful. Specifically, it is not easily removed by our upper respiratory tract and is absorbed in our lungs, where it can cause narrowing of airways and decrease lung function.

The New Standard - The EPA released a draft NAAQS in December 2014 for public comment and review that listed the revised primary and secondary ozone standards of between 0.065 ppm and 0.070 ppm. Based on public comment on the rules, the new ozone NAAQS primary and secondary ozone standard of 0.070 ppm became effective on October 26, 2015. While this is lower than the 2008 standard, it is not as low as many people thought the standard could have gone. While this shouldn't significantly affect most areas, there will be some counties that become non-attainment areas under the new standard.

With the new standard of 0.070 ppm, federal, state, and local agencies will have to begin implementing measures to limit the amount of ozone and ozone creating pollutants that are emitted in their jurisdiction. This includes designating any new non-attainment areas that do not meet the standard. Once an area has been designated as a non-attainment area, the agency with jurisdiction must devise a strategy to address the issue. Often this includes establishing lower thresholds for volatile organic compounds (VOC) and nitrous oxides (NOx) that trigger industrial facilities to be classified as major sources, thus being subject to more stringent federal air permitting standards. Additionally, new stationary sources in non-attainment areas are required to implement Lowest Achievable Emission Rate (LAER), which is the most stringent air pollution control standard.

In Georgia - Currently, the only non-attainment areas listed by the EPA are in the 15 county Atlanta metro-area. Despite being listed as non-attainment, most of these counties were under the 2008 standard (0.075 ppm) and are currently under the new standard of 0.070 ppm. The Clean Air Act requires the Georgia Environmental Protection Division (GA EPD), along with other state and

local agencies, to submit non-attainment designations to the EPA). The EPA is recommending that all 15 counties in the Atlanta metro area, including the addition of Barrow, Spalding and Walton counties, be included in the non-attainment area, since they believe that these counties directly impact the air quality in the Atlanta area and contribute to the non-attainment.

The new standard will likely make it more difficult for GA EPD to make the case that only Cobb, DeKalb, Fulton, and Henry be included as non-attainment areas, as requested in 2009 and 2011, as Gwinnett and Rockdale counties are now also in non-attainment. However, GA EPD will likely continue to make the case and that only the counties with ozone concentrations above the standard be included as non-attainment areas. Additionally, due to increases in fuel efficiency, increased pollution control on vehicles, and pollution control devices at industrial and municipal facilities, there has been a marked decrease in ozone concentrations over the last several years. It is possible that within the next 5-10 years, the Atlanta area could reach even the new ozone standard.

OSHA and the ISRI sign alliance

A new alliance between OSHA and the Institute of Scrap Recycling Industries Inc. (ISRI) was recently established in order to protect workers in the scrap recycling industry, as well as promote understanding of worker rights and employer responsibilities under the OSH Act. This new partnership will focus on the hazards present in the workplace regarding powered industrial trucks and other types of equipment, employee exposure to chemicals, hazardous energy sources, and the handling and storage of materials. OSHA and ISRI will collaborate in creating and revising informational and training resources, encouraging the use of safety and health management systems and other safety performance programs, and promoting compliance assistance resources. This joint venture is a huge leap forward for the scrap industry's commitment to a safe and healthful workplace for the employees.

OSHA will be working with unions, trade and professional organizations, faith- and community-based organizations, businesses and educational institutions to prevent workplace fatalities, injuries and illnesses. Alliance Program participants, however, will not be exempt from OSHA inspections or any other enforcement benefits.



COMPLIANCE MATTERS

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ENVIRONMENTAL

- Air Quality Permitting
- Boiler MACT/Area Source
- Environmental Compliance Audit
- Environmental Management Systems
- ISO 14001 Consulting
- Phase I & II Env. Site Assessment
- RCRA Compliance
- SARA Title III - Tier II/Form R
- Spill Prevention (SPCC)
- Stormwater Permitting
- Wastewater Permitting

PROCESS SAFETY

- Emergency Preparedness & Planning
- Employee Training
- Management of Change
- Process Hazard Analysis
- PSN Hazard Analysis (PHA)
- PSM Program Development
- RMP Development & Submission

COMBUSTIBLE DUST

- Combustible Dust Hazard Analysis
- Dust Sampling and Analysis
- Explosion Protection Design
- Hazardous Location Determination
- NFPA & OSHA Compliance Review

OCCUPATIONAL HEALTH & SAFETY

- Confined Space Entry Procedures
- Job Hazard Analysis (JHA)
- Machine Specific Lockout/Tagout Procedures
- Noise Exposure Monitoring
- Occupational Air Exposure Monitoring
- OSHA 18001 Consulting
- OSHA Compliance Audits and Mock OSHA Inspection
- OSHA Required Safety Training
- Safety Policies, Procedures and Programs