

Air/Compliance News Update

Issue No. 4

April 2001

IN THIS ISSUE

PBT CHEMICAL DATA DUE THIS YEAR UNDER TRIPage 1

LOWER THRESHOLD FOR LEADPage 1

ETHYLENE GLYCOL BUTYL ETHER - POSSIBLE DELISTING AS A GLYCOL ETHER.....Page 2

NO PLANS OF REGULATING CO₂ EMISSIONS ANY TIME SOONPage 2

SURFACE COATING COMPLIANCE UNITS ARE CHANGINGPage 2

PAINFUL END FOR ERGONOMICS REGULATIONPage 2

INTRODUCTION TO THE NEW EPA ADMINISTRATORPage 3

EPA PROPOSES AMMENDMENTS TO NESHAP GENERAL PROVISIONSPage 3

HISTORIC DECISION TO UPHOLD EPA'S POSITION ON PROPOSED AIR QUALITY STANDARDSPage 3

EPA FINALIZES COMPLIANCE CERTIFICATION REQUIREMENTSPage 3

FEDERAL NO_x BUDGET TRADING PROGRAM (aka SECTION 126 RULE)Page 4

HAVE YOU UNKNOWINGLY TRIGGERED NEW SOURCE REVIEW?Page 4

PBT CHEMICAL DATA DUE THIS YEAR UNDER TRI

The final rule for persistent bioaccumulative and toxic (PBT) chemicals was promulgated on October 29, 1999 and begins with the reporting year 2000 (i.e., due July 1, 2001). Under the PBT rule, seven chemicals and two chemical compounds were added to the list of toxic chemicals:



- Benzo(g,h,i)perylene
- Octochlorostyrene
- Vanadium
- Fluoranthene
- Pentachlorobenzene
- Vanadium Compounds
- 3-Methylchloanthrene
- Tetrabromobisphenol
- Dioxins/Dioxin-like Compounds

Note that vanadium is not to be included in applicability determinations if it is contained in alloys. Furthermore, the PBT rule lowered the reporting threshold for 18 chemicals and chemical categories:

- Aldrin
- Dioxin/Dioxin-like Compounds
- Isodrin
- Pendimethalin
- PCBs
- Trifluralin
- Benzo(g,h,i)perylene
- Heptachlor
- Methoxychlor
- Pentachlorobenzene
- Tetrabromobisphenol A
- Mercury
- Chlordane
- Hexachlorobenzene
- Octachlorostyrene
- PACS
- Toxaphene
- Mercury Compounds

The reporting threshold for the PBT chemicals is either 10 or 100 pounds, except for dioxins and dioxin-like compounds, which have a reporting threshold of 1 gram. EPA is still investigating dicofol, cobalt, and cobalt compounds to determine if they meet the PBT criteria.

The PBT rule does not permit the use of the de minimis exemption or range reporting for PBT chemicals, nor can the PBT chemical be eligible for Form A Reporting. Furthermore, if PBT chemicals are contained in other SARA compounds and reporting thresholds are exceeded for both, releases and waste management activities must be reported for the SARA compound as well as the PBT contained in the SARA compound.



LOWER THRESHOLD FOR LEAD

On January 17, 2001, the EPA published the final rule to lower the reporting threshold for lead and lead compounds under the Toxic Release Inventory (TRI) Reporting requirements (66 FR 4500). Under the new rule, the annual reporting threshold of lead and lead compounds was lowered from 25,000 pounds for manufacturing and processing and 10,000 pounds for otherwise used to 100 pounds for all categories. Lead was not addressed in the October 1999 PBT rules because, at the



time of proposal, limited technical data was available. Therefore, EPA elected to address lead under a separate proposal after determining that lead is a PBT chemical.

The Bush Administration, however, delayed the effective date of the new rule to April 17, 2001 (66 FR 10585) to further review and investigate the regulations.

ETHYLENE GLYCOL BUTYL ETHER – POSSIBLE DELISTING AS A GLYCOL ETHER

The EPA is getting closer on a decision to delist ethylene glycol butyl ether (EGBE) (CAS Number 111-76-2) from the list of hazardous air pollutants. EGBE is a member of the glycol ethers category, which is defined as a HAP. In fact, a decision may come by the end of the summer this year. The potential delisting stems from a HAP Delist Petition submitted to the EPA by the Chemical Manufacturer's Association (now known as the American Chemical Council [ACC]) on August 29, 1997, as permitted under Section 112(b)(3)(A) of the Clean Air Act. EPA concluded that air releases of EGBE are not likely to cause adverse environmental effects.

EGBE is the largest volume glycol ether used in the United States. The majority of EGBE is used as a solvent in paints, coatings, and industrial cleaners and a smaller amount is used as a chemical intermediate.



NO PLANS OF REGULATING CO₂ EMISSIONS ANY TIME SOON

Remember the Kyoto Protocol? Back in December 1997, the United Nations Framework Convention on Climate Change adopted the Kyoto Protocol, which contains legally binding commitments for industrialized nations to reduce greenhouse gas emissions by 5% below 1990 levels between 2008-2012. The U.S. specifically was to meet an emission reduction of 7%, which most likely would have led to carbon dioxide reduction regulations targeted at coal-fired electricity generating plants. Scientists claim that if nothing is done to reduce the gases, world temperatures could increase by up to 6 °C in the next 100 years.

As of March 2001, the Bush Administration has decided, however, not to propose any greenhouse gas regulations for coal-fired electricity generating plants. The Administration fears the restriction on emissions would increase the demand for natural gas, creating energy problems and further increasing the price of natural gas.

The fight is not over. Many U.S. supporters still intend to regulate greenhouse gases by 2007, and international concerns are rising. Germany's environmental minister, Juergen Trittin, is urging the U.S. to follow the original agreement and is awaiting more discussions that are to occur in July 2001 in Bonn, Germany.

SURFACE COATING COMPLIANCE UNITS ARE CHANGING



Regulated surface coating facilities have traditionally seen VOC limitations in units of pounds of VOC per gallon of coating, minus water, pound-per-pound of solids and other similar units. However, since the proposal of numerous Maximum Achievable Control Technology (MACT) rules, the EPA has determined that limitations in pounds of HAPS per gallon of **solid** represent a more accurate and flexible approach to industry. In terms of flexibility, the EPA believes this will allow facilities to choose the means of compliance specific to their industry, such as possible coating reformulations, use of lower HAP or non-HAP coatings, use of high solid coatings, solvent elimination, work practice standards, or add-on control devices. The volume of solids basis was selected because it is directly proportional to the surface area coated and provides an equal basis for all coatings, regardless of differences in coating densities. The two source categories currently proposing standards using pound of HAP per gallon of solids is Large Appliances (40 CFR 63 Subpart NNNN) and Metal Coil (40 CFR Subpart SSSS). Others to follow may include Miscellaneous Metal Parts, Metal Can, Metal Furniture, Plastic Parts and Automobile and Light Duty.

It appears that the EPA is encouraging states to develop limitations on a mass per volume solids basis. In Pennsylvania, the regulations have currently changed to these new limits for surface coating operations because of many complaints by both industry and regulators that the pounds of VOC per gallon coating (minus water) calculations were too burdensome and unfair.

The EPA is currently developing regulations for a number of surface coating and composite operations under Section 183(e) of the Clean Air Act. Under Section 183(e), the EPA is required to regulate VOC from certain source categories. It will be interesting to see how the surface coating standards will be applied under these rules.

PAINFUL END FOR ERGONOMICS REGULATION

The Occupational Safety and Health Administration's (OSHA's) ergonomics rules were nullified in early March 2001 when both the House and Senate repealed the rule.

The ergonomic rules were aimed at preventing carpal tunnel syndrome, tendinitis, and other repetitive stress injuries (RSI). OSHA claims that the rules would have prevented 4.6 million musculoskeletal disorders and produce \$9.1 billion in savings in the first 10 years they were in effect. Opponents of the rule claim that compliance would cost them as much as \$100 billion a year. Opponents also argued that the rule was extremely complex and vague, with no specific guidelines that an employer could use to demonstrate compliance.



INTRODUCTION TO THE NEW EPA ADMINISTRATOR

On January 31, 2001, Christie Todd Whitman, now former Governor of New Jersey, was sworn in as EPA Administrator, replacing Carol Browner.

During her reign as governor of New Jersey, violations of the one-hour air quality standard for ozone were dramatically reduced, beach closings reached a record low, a new watershed management program was established, and more land was preserved. New Jersey also participated in the National Environmental Performance Partnership System (NEPPS) with the EPA, allowing the states to decide how to meet environmental policy.

Whitman stated in a speech on March 8, 2001 at the National Environmental Policy Institute, *“America is ready to move beyond the command and control model that has defined Washington’s relationship with the rest of the country on environmental policy. NEPPS gives governors the opportunity to prove that’s true.”*

EPA PROPOSES AMENDMENTS TO 40 CFR 63 SUBPART A – GENERAL PROVISIONS TO THE NESHAP STANDARDS (66 FR16317)

On March 23, 2001, EPA proposed amendments to the General Provisions to the NESHAP Standards as the result of a litigation settlement negotiation. Key proposed changes include the following:

- EPA proposed that the compliance, testing, monitoring, notification, recordkeeping and reporting, and control device requirements of the General Provisions would only apply to an individual NESHAP when specifically referenced in that NESHAP. EPA currently applies all parts of the General Provisions to NESHAP sources.
- EPA will revise the definition of “new affected source” to ensure consistency with new source MACT and reconstructed source requirements. The definitions of “affected source” and “new affected source” will include **all** the equipment in the source category, unless EPA can justify a narrower definition in the individual MACT standard. This would assure that small changes would not trigger “new source MACT” requirements.
- EPA has proposed to extend the time period for an affected source to request a compliance extension – from the current 120-day period to 1year before the compliance date. This allowance is mainly for the installation of pollution control equipment.

- EPA has proposed not to incorporate Startup, Shutdown, and Malfunction (SSM) Plans into Title V permits. Hence, changes to SSM plans will not require a time-consuming Title V permit revision. However, contemporaneous notification may be required.
- EPA has proposed to change the general duty to minimize excess emissions during SSM conditions. Compliance with the general duty will be tied to the SSM plan and not to specific emissions limits or emissions reductions. The proposed revisions will also make clear that a source need not act in an unsafe manner to meet its general duty to minimize emissions during SSM conditions.

HISTORIC DECISION TO UPHOLD EPA’S POSITION ON PROPOSED AIR QUALITY STANDARDS



On February 27, 2001, the U.S. Supreme Court, in a landmark ruling, defended the EPA’s interpretation of the Clean Air Act in the setting of tougher air quality standards for ground-level ozone and fine particulate matter. The EPA toughened the standards in 1997 after scientific research demonstrated more effort was needed to reduce emissions. In 1999, the U.S. Court of Appeals for the D.C. Circuit remanded the standards because the EPA exhibited an “unconstitutional delegation of legislative power.”

EPA claims that tens of thousands of lives will be saved, along with billions of dollars in health costs. Industry claims that billions of dollars will be spent to comply with the new standards.



EPA FINALIZES COMPLIANCE CERTIFICATION REQUIREMENTS (66 FR 12872)

In response to a U.S. Circuit Court of Appeals decision, EPA has amended the Compliance Certification requirements for sources subject to 40 CFR Parts 70 and 71 Operating Permits Programs. Compliance Certifications must now address whether the affected facility or source has been in continuous or intermittent compliance.

The Compliance Certification, signed by a facility’s responsible official, must address three main elements:

- (1) Identification of all permit terms and conditions to which the facility is subject;
- (2) Identification of the methods or other information used to determine compliance; and
- (3) Certification as to the status of compliance, including whether compliance was continuous or intermittent

Guidance on the certification of continuous or intermittent compliance is contained in the final CAM rule (62 FR 54937). This rule becomes effective on April 30, 2001.



FEDERAL NO_x BUDGET TRADING PROGRAM (AKA SECTION 126 RULE)

So you have been named in the Section 126 Rule (40 CFR Part 97) and been allocated NO_x tons. What do you do now? The compliance date is rapidly approaching. Are you prepared?

This rule was codified at 40 CFR Part 97 on January 18, 2000 (65 FR 2674) and affects combustion units that have a heat input greater than 250 MMBtu/hr and combust “fossil fuels.” The rule defines “fossil fuel” as “natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.”

EPA has expanded the fossil fuel definition for this rule to include by-product fuels such as coke oven gas and blast furnace gas. In their Response to Questions, Volume II (December 1999), EPA states that “process gas derived from fossil fuel combustion is considered a fossil fuel under both Part 96 (NO_x SIP Call) and Part 97 (Section 126). This includes coke oven gas.” They also state that it “includes blast furnace gas.”

Sources that emit less than or equal to 25 tons of NO_x per ozone season are exempt from the rule requirements. An ozone season encompasses the period from May 1 through September 30. A federally-enforceable permit will be required for exempt units as well as recordkeeping and reporting. Exempt units will not have to meet the Rule monitoring requirements.

NO_x allowances have been allocated to both Electric Generating Units (EGUs) based on a limit of 0.15 lb NO_x/MMBtu heat input and non-Electric Generating Units (non-EGUs) based on a limit of 0.17 lb NO_x/MMBtu heat input. Many states have developed or are in the process of developing regulations to meet the rule requirements. In most cases, these new state regulations will be integrated with the requirements of the NO_x SIP Call Rule (40 CFR Part 96). However, in that program, States will have the option of reducing NO_x emissions through other mechanisms than the Federal NO_x Budget Trading Program (i.e., through application of control technologies).

The Section 126 Rule monitoring requirements must be met for the ozone season beginning in 2002. The first control period begins in 2003. An affected source will be required to install equipment to monitor and record NO_x concentration emissions (PPM), fuel characteristics to determine unit heat input, and a diluent such as oxygen or carbon monoxide. Since tons of NO_x have been allocated, flow monitoring will also be necessary to allow the conversion of concentration values (as measured by

the CEM) to mass emission rates of pounds of NO_x per hour. The data acquisition system must meet certain quality assurance standards.

Each affected source will be required to name a NO_x Authorized Account Representative (AAR) and submit forms to register the NO_x budget account with the EPA. An overdraft account will also be established at the same time if you have more than one unit. These are similar to checking and savings accounts. Each ton of NO_x allocated will be given an individual serial number and will be deducted from the “checking account” in sequence. Remaining allowances can be placed in the “savings” or overdraft account.

At the end of the ozone season, the AAR has two months to reconcile actual NO_x emissions with NO_x allowances that have been allocated to the facility. The AAR may have to purchase NO_x allowances in the market if necessary. By November 30, the AAR must certify that each unit was compliant with emissions limitation and requirements of the trading program and a report must be submitted to EPA. The first Compliance Certification Report is due November 30, 2003.

NO_x allocations will be updated every 5-year period. The first update will utilize the data obtained during the 2002-2004 control periods to calculate NO_x allocations for the 2008-2012 control periods.



HAVE YOU UNKNOWINGLY TRIGGERED NEW SOURCE REVIEW (NSR)?

Pennsylvania DEP regulations require that proposed modifications at existing major facilities undergo an applicability determination to see if potential emission increases from the modification will trigger NSR requirements. However, sources have to consider more than just the current modification’s increases. They must also include any previous increases and decreases over a specified period of time. Contrary to popular belief, this period of time is not necessarily five (5) years – it could be longer.

Buried in DEP’s publication “How to Complete a Plan Approval Application to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device,” May 2000, (available from their web site at www.dep.state.pa.us) is clear guidance on how to determine NSR applicability. The following applicability checklist for NO_x and VOC sources (based on a moderate nonattainment area for ozone, or within the Northeast Ozone Transport Area) is adapted from that guidance. For other pollutants, please refer to the actual DEP guidance.

A. Is the existing facility a major facility for NO_x (PTE = 100 tons/year) or VOC (PTE = 50 tons/year)?

- Yes: Skip B. and proceed to C.
- No: Proceed to B.

B. Is the potential to emit (PTE) from the proposed modification equal to or greater than either of the annual emission thresholds specified in A.?

- Yes: The modification is subject to NSR requirements.
- No: The modification is not subject to NSR requirements at this time.

C. Is the proposed modification by itself a major modification (NO_x or VOC PTE = 40 tons/year)?

- Yes: The modification requires NSR and the net emissions increase is based on the time period that begins five years before you start construction of the modification, and ends when the emissions increase occurs.
- No: The modification requires an NSR applicability determination. Proceed to D. to determine the appropriate *applicability accounting period* to use to calculate the net emissions increase.

D. Is the existing facility a major facility for nitrogen oxides (NO_x)?

- Yes: The applicability accounting period begins immediately after November 15, 1992. Proceed to F.
- No: Proceed to E.

E. Is this a major facility for VOC, and was it previously subjected to 25 Pa. Code Section 127, Subchapter C (currently reserved)?

- Yes: The applicability accounting period begins immediately after January 1, 1991. Proceed to F.
- No: The applicability accounting period begins immediately after November 15, 1992. Proceed to F.

F. Is the net emissions increase of either NO_x or VOC equal to or greater than 40 tons/year?

- Yes: The proposed modification is subject to NSR requirements.
- No: The proposed modification is not subject to NSR requirements (but still must apply best available technology – BAT).

Note: These same requirements apply to sources in Allegheny County, since the county's air regulations incorporate by reference the DEP NSR regulations. However, in Allegheny County, the accounting period begins July 1, 1979.

AIR/COMPLIANCE NEWS UPDATE

Contributors

Kim Coy
Mark Schooley
Nancy Hirko

Editing/Layout

Jill Merrill
Audra Ometz

Contact

Jill Merrill
Air/Compliance Consultants, Inc.
1050 William Pitt Way
Pittsburgh, PA 15238
Phone: 412-826-3636
Fax: 412-826-3640
Email: jmerrill@air-comp.com