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GR Works with Several Federal Agencies on Efforts to Control the Use of Chemicals with Different Approaches

DHS Issues Revised List of Chemical and Threshold Levels for Chemical Facility Security Regulations

The Department of Homeland Security (DHS) recently released its much-awaited final "Appendix A" list of chemicals to be regulated under the new Chemical Facility Anti-Terrorism Standards (CFATS). The Appendix A list of chemicals provides Screening Threshold Quantities (STQ) that trigger reporting requirements for facilities that possess chemicals of interest that may pose a potential security threat.

In finalizing the Appendix A list of chemicals, DHS made several significant changes to the regulation such as:

- deleting some chemicals from the list,
- providing an STQ for all chemicals,
- creating specific security issue categories,
- identifying minimum concentration levels for chemicals in mixtures and
- providing further clarification on how the STQ should be calculated for chemicals and mixtures in a specific security issue category.

Specifically, DHS identified three primary security issue categories, including: release, threat/diversion and sabotage/contamination. The release and threat/diversion categories were further subdivided into additional security issues. Some chemicals were also given more than one STQ to reflect different potential risks for the different security issue categories.

DHS also addressed the issue of mixtures than contained the chemicals listed in Appendix A by setting minimum concentration levels of the chemical in a mixture that would trigger the reporting requirements. The Department also provided guidance on how the STQ should be calculated for chemicals and mixtures for each security issue listed in Appendix A. Specialized approaches for propane, chlorine and ammonium nitrate were identified in the final rule.

All facilities that possess chemicals listed in the rule's revised Appendix A at or above the STQ must submit a Chemical Security Assessment Tool (CSAT) Top-Screen. The Top-Screen is an easy-to-use online tool, through which a facility, by answering a series of simple questions, will allow DHS to preliminarily determine if the facility presents a high level of security risk. The Top-Screen is part of the Chemical Security Assessment Tool (CSAT) process. To register to use the CSAT Top-Screen, facilities should visit www.dhs.gov/chemicalsecurity. The CSAT Top-Screen Questions and User Manual are also available online at the DHS website at www.dhs.gov/xprevprot/programs/gc_1169501486197.shtm. Failure to submit the Top-Screen may result in civil penalties, a DHS audit and inspection or an order to cease operations. .

The initial CSAT Top-Screens must be submitted within 60 days of the final Appendix A being published in the Federal Register. The final Appendix A was expected to be published in the Federal Register by mid-November 2007, so facilities that possess chemicals over the applicable STQ would have to submit their Top-Screens before mid-January 2008.

It is important to note that each facility that is required to complete the Top-Screen possesses a potentially dangerous chemical in a quantity that suggests DHS should further inquire as to whether the facility presents a high level of security risk. Based on the information provided in the Top-Screens, DHS will determine whether a facility should be classified as "high-risk." All "high-risk" facilities would then be required to conduct vulnerability assessments and submit site security plans that meet the appropriate performance standards. DHS will validate the information provided by the facilities through audits and inspections.

Recognizing that final rule will reach facilities not traditionally considered part of the chemical sector, DHS has indicated that it had attempted to strike an appropriate balance of including chemicals in quantities that might present a high level of risk without being overly inclusive and capture facilities that were unlikely to present a high level of risk. The purpose of this regulation is to determine if a chemical that is used for a legitimate industrial or commercial purpose at a facility could present a potential high risk of being employed in a terrorist attack to harm others. To protect against such a possibility, facilities are asked to provide DHS with information on chemicals of interest at or above the STQ, so that a critical security risk determination can be made.

More information on the chemical facility security regulatory requirements and the revised Appendix A is available on the DHS website at http://www.dhs.gov/xprevprot/laws/gc_1166796969417.shtm. For additional information on the applica-

bility of this new regulation to your facility, contact The Policy Group at jhannapel@thepolicygroup.com or crichter@thepolicygroup.com.

EPA Proposed Area Source Rule for Paint Stripping and Miscellaneous Surface Coating

On September 17, 2007, EPA proposed national emission standards for hazardous air pollutants (NESHAP) for area sources at paint stripping and miscellaneous surface coating operations. While the proposed rule is not applicable to plating processes, it does cover a variety of painting operations.

To reduce hazardous air pollutant (HAP) emissions, the proposed GACT standard focuses on reducing or eliminating the use of methylene chloride (MeCl) for paint stripping. For paint spraying operations, EPA proposed the following controls: (1) improve transfer efficiencies of spray painting, (2) conduct spray painting in a spray booth with at least three walls, (3) use fiberglass or polyester fiber filters for the ventilated air from the spray booth and (4) training and certification for workers that are doing the spray painting. HAP emissions reductions from paint stripping operations will result from the elimination of MeCl. Similarly, for painting operations HAP emissions are reduced by decreasing the amount of over spray through the use of proper spray-gun technology, spray booths and worker training and control of the vented air with filters.

For more information on this proposed rule, visit the EPA website at http://www.epa.gov/ttn/atw/area/arearules.html#current.

Editor's Note: See related article on this issue on page 12.

EPA Issues Exclusion for Continued Use of PFAS Fume Suppressants

On October 9, 2007, the U.S. Environmental Protection Agency (EPA) issued a final rule imposing restrictions under Section 5 of the Toxics Substances Control Act (TSCA) on the manufacture, import and use of 183 perfluoroalkyl sulfonate (PFAS) chemical compounds. These PFAS compounds are used as fume suppressants for controlling emissions from several metal finishing operations such as chromium plating.

Exclusion language

In response to comments and data submitted by the NASF and numerous discussions with EPA staff, EPA provided exclusions for the continued use of PFAS fume suppressants in plating processes. The exclusion language is provided below.

(1) Use of the following 7 chemicals: CAS No. 3872–25–1; CAS No.67584–53–6; CAS No. 67584–62–7; CAS No.68259–07–4; CAS No. 68957–62–0; CAS No. 68958–60–1; or CAS No. 70225–16–0 as a component of an etchant, including a surfactant or fume suppressant, used in the plating process to produce electronic devices.

(2) Use of tetraethylammonium perfluorooctanesulfonate (CAS No.56773–42–3) as a fume/mist suppressant in metal finishing and plating baths. Examples of such metal finishing and plating baths include: hard chromium plating; decorative chromium plating; chromic acid anodizing; nickel, cadmium,or lead plating; metal plating on plastics and alkaline zinc plating.

EPA's exclusion for the use of PFAS compounds in metal finishing operations is consistent with similar actions taken by the European Union and Canada. These agencies have indicated that they will reconsider the exclusion in another five to ten years based on the availability of effective alternative fume suppressants that do not contain PFAS compounds.

Recent developments on PFAS in waste water discharges

In granting the exclusion, EPA, as expected, also included references to recent developments in Minnesota regarding PFAS in waste water discharges. Specifically, EPA noted that: "since the close of the public comment period, [the Agency] learned from a 2007 survey by Minnesota of over 30 wastewater treatment plants that PFOS, which is the anionic counter ion of this PFAS surfactant, is appearing in wastewater treatment plant influent, effluent and sludge associated with the fume/mist suppressant use in metal finishing and plating baths. As a result of these concerns, although outside the scope of this rule, EPA will continue to work with state agencies and industry to identify best management practices for minimizing the release of this PFAS surfactant."

EPA further stated that the continued use of PFAS fume suppressants in the metal finishing industry is warranted because "[t]he releases and exposures to PFAS associated with the industry are comparably of much less concern than those related to nickel (Ni) and hexavalent chromium (Cr(VI)) which result when PFAS fume suppressants are not used."

Continuing industry efforts on PFAS compounds

As EPA works with states and industry on establishing best management practices for using PFAS compounds, the NASF will also be working on identifying options, progress and barriers to selecting alternatives to PFAS fume suppressants and hexavalent chromium plating processes, where feasible. The goal is to minimize emerging concerns on potential environmental and health impacts from the use of PFAS fume suppressants in finishing operations and continue the industry efforts to find appropriate alternatives with similar or superior performance capabilities. The exclusion will allow the continued use of the effective PFAS fume suppressants until suitable alternatives can be developed.

EPA also discussed in the final rule several other issues that were summarized in the NASF comments, including industry R&D efforts, competitive pressures on U.S. plating operations and related issues. We will be engaging in further discussions with the Agency on these and other key topics to ensure that the continued use of PFAS fume suppressants in finishing operations is protective of human health and the environment.

Next DOD Metal Finishing Conference Scheduled for February 26-28, 2008

The Department of Defense (DOD) and the surface finishing industry will continue its cooperative technology information exchange on metal finishing applications at a conference to be held February 26-28, 2008 at the Fiesta Resort and Conference Center in Tempe, AZ. The conference is the next step in the evolution of workshops and discussions on surface finishing, repair and maintenance issues related to new military aircraft – *i.e.*, aircraft in which DOD has implemented clean materials and coatings, or incorporated new materials that present potential environmental, health and safety challenges of their own for sustainment. It will be critical to have continued participation and technical input from the surface finishing industry at this conference.

As you may recall, the Environmental Security Technology Certification Program (ESTCP) sponsored the Hard Chrome Alternatives Team (HCAT) over the past ten years. The HCAT program has been very successful and has achieved its primary aim of validating and qualifying HVOF as a hard chromium alternative for most applications. ESTCP and the Strategic Environmental Research & Development Program (SERDP) also sponsored a series of Metal Finishing Workshops (May 2006, December 2006 and May 2007). These efforts have now evolved into a more broad approach to other surface finishing and materials-related environmental and health issues in military applications.

Although the focus of this workshop is aircraft engineers, chemical suppliers and other surface finishing industry and DOD experts in other types of coating applications and weapons systems are encouraged to attend and share information related to technology development and implementation. In addition, because some technologies, such as HVOF and trivalent chromium finishes, are already showing up on legacy systems and being used at depots, finishing professionals maintaining legacy aircraft will also find the workshop valuable.

Please mark your calendar for February 26-28, 2008, and make plans to attend this conference. More details will be forthcoming soon, including a registration site and the specific topics to be covered.

If you are interested in attending the conference and/or making a presentation on your experiences with new technologies, successful applications, repair methods or performance data, please contact Hillary Legg at 847-680-9420 or hlegg@rowantechnology.com. If you have any questions or would like to discuss this further, you may also contact Christian Richter or Jeff Hannapel of The Policy Group at crichter@thepolicygroup.com or jhannapel@thepolicygroup.com. *P&SF*