Christian Richter Jeff Hannapel
The Policy Group, Washington, DC

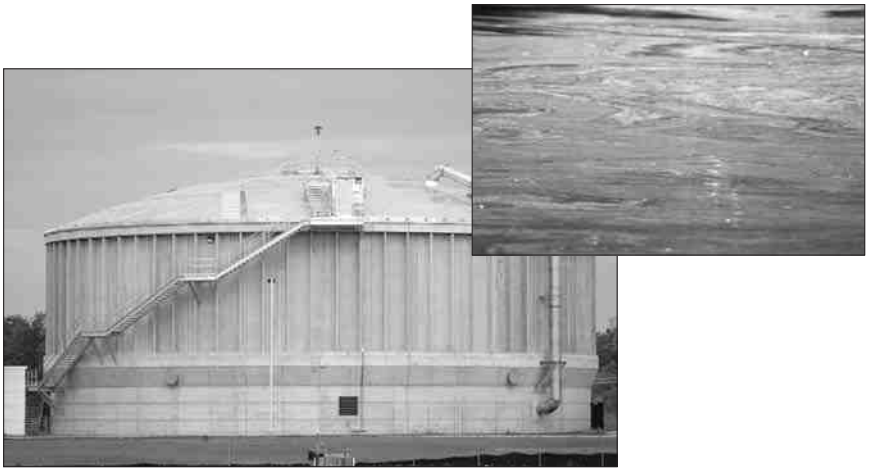
New Regulatory Options for Existing and Emerging Technologies Impact Surface Finishing Industry

Industry submits comments on EPA's new proposed definition of solid waste to facilitate recycling

The surface finishing industry submitted comments on EPA's March 26, 2007 supplemental proposal to revise the definition of solid waste to encourage the recycling of more hazardous secondary materials. The changes to the definition are in response to several court decisions that held EPA's regulatory definition was overly broad and did not clearly delineate when a material is discarded.

The proposed new definition of solid waste could facilitate more recycling of electroplating waste water treatment sludge, *i.e.*, the listed hazardous waste, F006. Under the proposal, sludge that is reclaimed for metals recovery would not be "discarded" for regulatory purposes, and would not, therefore, be subject to hazardous waste regulations, provided that plating facilities and reclamation facilities meet a set of conditions regarding the management and recycling of the sludge. Excluding the recycling of F006 sludge from the hazardous waste regulatory restrictions can encourage more recycling of the sludge and save platers money. The proposed rule is also broad in scope and could beneficially impact recycling of other hazardous secondary materials used in the finishing industry such as solvents.

The industry's comments generally agreed with EPA's proposed revisions to the definition of solid waste to facilitate recycling of valuable secondary materials such as F006 sludge. The comments emphasized the need to minimize the regulatory burdens on recycling activities because the recovery of metals in the sludge is particularly critical now when metals prices are high and scrap metal supplies are low. The industry specifically requested that EPA strike the appropriate balance of mandating appropriate environmental controls on recycling activities, removing regulatory barriers for recycling and offering effective incentives to recycling activities (*e.g.*, reduced regulatory compliance costs) so that market forces can allow recycling to occur when it is warranted and to flourish in times that it is needed most.



EPA is now in the process of reviewing and evaluating public comments and will most likely issue the final rule in 2008. After EPA issues the final regulation on the new definition of solid waste, most states will have to adopt the changes before they can be effective in that state. In its comments, the industry urged EPA to provide appropriate assistance and incentives to states to ensure that the new federal revisions to the definition of solid waste are adopted and implemented in each state as soon as possible.

The industry's comments are available on the NASF website at www.nasf.org. If you have any questions about the proposed revisions to the definition of solid waste or the surface finishing industry's comments, contact Jeff Hannapel of the Policy Group at jhannapel@thepolicygroup.com.

EPA proposes regulatory approach and stewardship program for nanomaterials

As nanotechnology applications continue to expand, EPA has focused more attention on how to assess the potential environmental and health impacts of nanoscale chemicals. On July 11, 2007, EPA issued a draft document, *TSCA Inventory Status of Nanoscale Substances - General Approach*, and proposed to use the same approach for nanoscale chemicals that it currently uses for traditional chemicals under the Toxic Substances Control Act (TSCA) to determine if the chemical is a new or existing compound.

Under TSCA chemicals that are, or have been, sold in or imported into the United States are listed on the TSCA Inventory and are considered existing chemical compounds. A chemical is considered a new substance subject to pre-manufacture review by the agency if it is not on the TSCA Inventory. If a chemical has the same molecular identity as a substance already on the TSCA Inventory, then it is an existing chemical under TSCA.

Nanoscale substances that have the same molecular identity as a non-nanoscale substance listed on the inventory would be considered the same chemical substance under this approach, despite the fact that the two substances may differ in certain physical and/or chemical properties resulting from the difference in particle size. EPA does, however, indicate that different arrangements of the same atoms of a chemical already on the TSCA Inventory could make that chemical a "new chemical" under TSCA. For example, it the spatial arrangement of the atoms creates different crystalline structures, the substances could be considered a new chemical substance.

Critics claim that the current TSCA policy is inadequate for nanoscale chemicals because it ignores the fact that the smaller particle size may produce entirely new chemical properties that pose different risks. Most nanomaterials would be considered existing substances and would not have to undergo pre-manufacture review to determine the potential environmental and health impacts. Proponents of EPA's approach state that the proposal provides clear, valuable guidance to determine how an engineered nanoscale chemical will be regulated under TSCA. This regulatory certainty will help to promote further nanotechnology research and development.

EPA also issued a draft concept paper summarizing a voluntary Nanoscale Materials Stewardship Program for chemicals regulated under TSCA. The proposed Stewardship Program would establish two levels of participation: basic and in-depth. Under the "basic" program organizations would report "all known or reasonably ascertainable information" about the nanomaterial. In addition, participants in the basic program would agree to implement a risk management program, provide risk management information to other nanomaterial manufacturers and consider risk management information provided by EPA.

Under the "in-depth" program, participants would also provide a broad scope of physical, chemical, hazard, production and other information detailed in the concept paper. The "in-depth" program would also entail the development of a long-term plan for data collection and submittal to provide a firmer scientific foundation for future policy decisions on regulating nanotechnology applications.

EPA will hold a public meeting August 2, 2007 in Arlington, Virginia on the proposed Stewardship Program and will accept comments on the proposed approach on the TSCA Inventory Status of Nanoscale Materials until August 13, 2007. Both of these documents as well as additional information on the proposed regulation and responsible development of nanomaterials are available on the EPA website at http://epa.gov/oppt/nano/nmspfr.htm.

Pentagon evaluates risk management options for DOD uses of hexavalent chromium

The Pentagon is undergoing an evaluation of its current and historic uses and management of potentially hazardous chemicals. As part of this effort, its Emerging Contaminants Program has developed a process to track and assess numerous emerging contaminants, including hexavalent chromium. Pentagon officials discussed the Department of Defense (DOD) Emerging Contaminants Program at the industry's Washington Forum in May 2007.

Following a preliminary Phase I Impact Assessment for hexavalent chromium, the DOD concluded that there are probable "high risks" to one or more of the following DOD functional areas: 1) environmental health and safety, 2) readiness and training, 3) acquisition/research, development, testing and evaluation, 4) operations and maintenance of DOD assets and 5) cleanup program. Recognizing that hexavalent chromium is a mission critical material in numerous DOD weapons systems and platforms and that the regulatory trends for hexavalent chromium are rapidly developing with potential impacts on life-cycle costs and material availability, the Pentagon has initiated a Phase II impact Assessment for hexavalent chromium. Phase II is a more intensive, quantitative assessment that includes the development of risk management options for the continued use and management of hexavalent chromium for military operations.

DOD is convening a meeting of Subject Matter Experts (SMEs) to help identify and articulate the health, financial, legal and operational implications of the risk management options for the use of hexavalent chromium for military applications. The SMEs will include representatives from DOD and the surface finishing industry, many of whom have been participating in the DOD Metal Finishing Workshops over the past two years. The workshops have provided an opportunity for DOD officials and the surface finishing industry to work collaboratively on identifying potential alternatives to hexavalent chromium finishes and/or better ways to apply hexavalent chromium finishes for military applications.

The hexavalent chromium SME meeting will be held July 25, 2007 in Crystal City, Virginia outside of Washington, D.C. This effort is another example of how the surface finishing industry is providing critical technical and regulatory policy expertise to DOD on hexavalent chromium finishing applications for military operations. Results of the meeting and details on the management options identified for hexavalent chromium will be reported as soon as they are available. For more information on this process, contact Christian Richter of The Policy Group at crichter@thepolicygroup.com. *P&SF*