

**Risk Management Program:  
Persistent, Bioaccumulative, and Toxic Chemicals Proposed Rule,  
and Common Sense Initiative**

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*This column summarizes three recent developments in the environmental regulatory arena. First, revisions to the Risk Management Program Rule addresses confidential business information, classification of regulated processes, and additional mandatory and optional data elements. Second, the Persistent, Bioaccumulative, and Toxic (PBT) Chemicals Proposed Rule looks at lowering the reporting thresholds of certain PBT's and adding other PBT chemicals to the Emergency Planning and Community Right to Know Act (EPCRA) Toxic Release Inventory (TRI) reporting requirements. Finally, the Environmental Protection Agency's (EPA's) Common Sense Initiative (CSI) charter expired in February 1999 and its impact represents a core move toward common sense at all levels of the regulatory process.*

**Revisions to the Risk Management Program Rule**

Under the chemical accident prevention rule codified in 40 CFR Part 68, facilities with stationary sources of air emissions exceeding the threshold for a regulated substance are required to submit a risk management plan (RMP). On January 6, 1999 (64 FR 963), the Environmental Protection Agency (EPA) issued a final rule revising the requirements for EMPs, which establishes a specific procedures to protect confidential business information, identifies data elements that cannot be claimed as confidential, adopts a new system to classify regulated processes, and adds mandatory and optional data elements to the RMP.

***Background***

Section 112(r) of the Clean Air Act provides for the prevention and mitigation of accidental chemical releases. The EPA established two rules under Section 112(r): a list of regulated substances and thresholds (the List Rule), and the accidental release prevention regulations that created the risk management program requirements (the Risk Management Program Rule). The two main goals of the regulations are to prevent accidental chemical releases, and to provide the public and local governments with information about the potential for chemical accidents in their area. The Risk

Management Program rule requires that facilities exceeding the threshold for a regulated substance develop and implement a risk management program to address potential chemical releases. The program includes development of a five-year accident history, an offsite consequence analysis, a prevention program, and an emergency response program. In addition, the facility is required to submit an RMP summarizing its risk management program. The RMPs are to be made available to the public.

### ***Confidential Information Claims***

The public disclosure of the RMP generated concern among industrial facilities that trade secrets or confidential information contained in the plan would be disclosed. The EPA addressed these concerns by allowing facilities to claim certain data as confidential business information (CBI). Data can be claimed as CBI if a facility can demonstrate that “trade secrets could be divulged, either directly or through reverse engineering.” The identities of chemicals and the maximum quantities used in processes are two of the RMP data elements that may be so claimed. To be considered CBI, the information must meet several criteria:

- It must not be available to the public through any other medium.
- It must not be required to be disclosed by any statute.
- The facility must have taken steps to prevent disclosure of the data.
- Its disclosure is likely to significantly harm the facility’s competitive position.

Facilities must substantiate their claim of CBI and submit a sanitized RMP. The sanitized RMP must identify each data element claimed as CBI, using generic chemical categories or class names in place of the actual chemical names. Any information provided to substantiate a claim may be claimed as confidential; however, if all or a part of the substantiation is claimed as CBI, the facility must submit a sanitized version of the substantiation. Substantiation claims must be certified as accurate by an owner, operator, or senior official of the facility. Information that is not claimed as CBI will be considered public information, and be releases accordingly.

In the final rule, the EPA also identified certain RMP data elements that cannot be claimed as CBI. These elements are:

- Registration data
- Offsite-consequence analysis data
- Accident history data
- Prevention program data

- Emergency response program data

### ***New Classification System***

Facility processes covered under Part 68 are divided into three categories (Programs 1-3), with requirements ranging from minimal to extensive. Standard Industrial Classification (SIC) codes were formerly used to determine which requirements applied to a particular facility. In the revisions to the RMP rule, the EPA replaced the SIC codes with the newer North American Industrial Classification System (NAICS) codes.

### ***Additional Data Elements***

In the Risk Management Program rule revision, the EPA added four mandatory and five optional data elements in the registration section of the RMP. The mandatory data elements are:

- latitude and longitude method description
- Clean Air Act Title V permit number
- Percentage weight of a toxic substance in a liquid mixture in the offsite consequence analysis, and five-year accident history
- NAICS code for each process that had an accidental release reported in the five-year accident history.

The five optional data elements are:

- local emergency-planning committee (LEPC) name
- facility or parent company e-mail address
- facility Internet home page address
- phone number at the facility for public inquiries
- facility's status under the Occupational Safety and Health Administration's (OSHA) Voluntary Protection Program (VPP).

### ***Submission of the RMP***

Facilities required to prepare and implement an RMP must submit the final document to a local EPA office by June 21, 1999. Electronic submission of RMPs via the Internet may be made using a program called RMP\*Submit™. The program can be downloaded from the Internet, or ordered on CD-ROM or diskette ([www.epa.gov/ceppo/rmpsubmit.html](http://www.epa.gov/ceppo/rmpsubmit.html)).

### ***Additional Information***

The Chemical Emergency Preparedness and Prevention Office of the EPA has numerous publications available online ([www.epa.gov/swercepp](http://www.epa.gov/swercepp)) to assist in the development of RMPs. The publications range from Federal Register notices containing the proposed and final rules to specific guidelines for facilities required to prepare and implement RMPs.

### **The Persistent, Bioaccumulative, and Toxic Chemicals Rule**

In his speech on Earth Day 1998, Vice President Al Gore conveyed the Clinton Administration's continued commitment to expanding the public's right to know about toxic chemicals released in local communities. In response, the EPA proposed to increase reporting of toxic chemical releases by 25 percent, through rulemaking that would lead to more reporting of certain persistent, bioaccumulative, toxic chemicals. Currently, a facility is subject to the annual reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act (EPCRA), codified under 40 CFR 372 (Toxic Release Inventory; Community Right-to-Know), if it meets all three of the following criteria for a calendar year:

- It has 10 or more employees.
- It is included in the designated SIC codes.
- It manufactures or processes 25,000 pounds or otherwise "uses" 10,000 pounds of a toxic chemical listed under Section 313 of EPCRA.

Facilities must submit a Form R for each listed chemical manufactured, processed, or used at or above the 25,000 pounds or 10,000 pounds reporting thresholds. The data reported include the amount of the chemical released or transferred for the purpose of treatment or disposal. Additionally, the facility must report efforts geared toward chemical-use reduction and chemical recycling under Section 6607 of the Pollution Prevention Act of 1990. If a facility manufactures, processes, or otherwise uses less than 500 pounds of a listed chemical, it is eligible to use an alternative reporting threshold of 1 million pounds and submit Form A, a simpler version of Form R.

On January 5, 1999, the EPA published the Persistent, Bioaccumulative, and Toxic (PBT) Chemicals Proposed Rule (64 FR 687). Under this rule, the EPA proposes to lower the reporting thresholds of certain PBTs, including dioxin and dioxin-like substances, and add additional PBT chemicals to the EPCRA Section 313 list.

The current Toxic Release Inventory (TRI) reporting requirements do not account for small quantities of PBTs released to the environment. Moreover, many PBTs are not listed under Section 313. Releases of small quantities of these compounds are of concern to the EPA because they accumulate and persist in the environment and concentrate in the tissues of organisms exposed to them. The proposed rule increases the reporting on PBT compounds by industry.

### ***Addition of PBT Chemicals***

Under Section 313(d)(2) of EPCRA, the EPA has the authority to add chemicals to the Section 313 list, provided that they meet certain criteria, which include having specific adverse health effects in humans and significant adverse effects on the environment because of toxicity or persistence in the environment, or both. Based on the hazard assessment conducted for the proposed chemicals, the EPA determined that they “can reasonably be anticipated to cause a significant adverse effect on the environment of sufficient seriousness to warrant reporting.”

The seven chemicals and one chemical category identified in the proposed rule are: benzo(g,h,I)perylene, benzo(j,k)fluorene (fluoranthene), 3-methylcholanthrene, octachlorostyrene, pentachlorobenzene, tetrabromobisphenol A, vanadium and vanadium compounds. With the exception of vanadium, all of the proposed PBTs are not currently listed in Section 313. Vanadium is listed with the qualifier “fume and dust”; however, the EPA is proposing to remove the qualifier.

The EPA previously proposed to add a category of dioxin and dioxin-like substances (62 FR 24877, May 7, 1997) to the Section 313 list. This proposal has been amended to exclude planar polychlorinated biphenyls, and to add a manufacturing activity qualifier to the category.

### ***Lowering of Thresholds***

Under Section 313(f)(2), the EPA has broad authority to establish thresholds for chemicals, chemical categories, and categories of facilities. In determining lower thresholds for PBT chemicals, the EPA considered their persistence and bioaccumulation, and the potential reporting burden on facilities. Two thresholds were developed: one for persistent and bioaccumulative chemicals. Although the EPA initially proposed reporting thresholds of 10 pounds and 1 pound, respectively, the burden this would impose on industry prompted the EPA to increase the thresholds to 100 pounds and 10 pounds.

The proposed threshold for the dioxin and dioxin-like substances category is an exception because dioxins tend to be processed, manufactured, and otherwise used in extremely small quantities. Thus, the EPA proposed a threshold for this category at 0.1 gram.

**Table 1** shows the reporting thresholds for the PBT chemicals in the proposed rule.

Benzo(j,k)fluorene and 3-methylcholanthrene, proposed additions to the Section 313 list, are not listed individually in Table 1. They are both included in the polycyclic aromatic compounds category based on their carcinogenicity. In addition, the threshold for vanadium was not lowered, because the EPA determined the persistent and bioaccumulative data for the compound to be insufficient.

### ***Additional Requirements***

To expand PBT reporting under the lowered thresholds, the EPA has proposed modifying several reporting requirements. The EPA has proposed to exempt PBTs from the *de minimis* principle,<sup>1</sup> and to exclude them from the alternative threshold of 1 million pounds (Form A reporting). In addition, the EPA has proposed that PBT releases and waste-management activities be reported in numerical values as opposed to ranges or whole numbers. Currently, in Form R, facilities report quantities in whole numbers and are permitted to round releases of 0.5 lb. or less to zero. Under the proposed rule, all PBT and dioxin releases, and waste-management activities greater than or equal to 0.1 lb. and 100 µg, respectively, would be reported. Quantities at or above 10 pounds would be reported in whole numbers, while fractional reporting would be required for quantities less than 10 pounds.

(Insert table)

### ***Proposed Changes to Other EPCRA Reporting Requirements***

The EPA proposed two other modifications to EPCRA reporting requirements. One modification would require facilities to submit a separate Form R for tetraethyl and tetramethyl lead if the facility meets certain requirements. Currently, all lead compounds are reportable under the lead compounds category in Section 313. Under the proposed rule, if the manufacture, process, or other use of lead compounds at a facility exceeds the

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#### **Note**

<sup>1</sup> The *de minimis* principle (exemption) allows facilities to “disregard certain chemicals in mixtures or other trade name products they import, process, or otherwise use in making threshold calculations and release and other waste management determinations for Section 313 reporting.” The chemical in the mixture may be exempted if it is less than 1% of the mixture (or less than 0.1% for carcinogenic chemicals).

reporting thresholds, and if tetraethyl or tetramethyl lead contribute 1 pound or more to the threshold determinations, then the facility will be required to submit a separate Form R for each compound.

The second proposed modification to Section 313 involves vanadium and cobalt alloys. The EPA proposed to include a qualifier with the new vanadium listing, which excludes reporting of vanadium contained in alloys. Additionally, in the proposed rule, the EPA requests comments on cobalt persistence and bioaccumulative data. If the EPA determines that there are sufficient data, cobalt reporting thresholds may be lowered. If this occurs, cobalt-containing alloys would be excluded from the lowered thresholds and existing thresholds would be maintained (25,000 pounds for manufacture and process, and 10,000 pounds for use).

### **EPA and Common Sense—Where Are We Now?**

Is common sense at work at the Environmental Protection Agency? This question arose four years ago, with industry evaluation of the potential effects of natural resource damage claims on environmental reform. It came up again a year later when examining the future land use and remedy selection process under Superfund and its impact on the chemical industry. It also popped up in evaluation of the EPA's efforts at ECRA and Superfund reforms and their impacts on the manufacturing and environmental industries. In every instance it appeared that common sense was developing, but at a rate that would likely take years before it matured sufficiently to infiltrate into their relationships with the regulated community. EPA's Common Sense Initiative (CSI) is a recent experiment, representing a core move toward common sense at all levels of the regulatory process.

This section provides a brief overview of the current state and future impact of the CSI whose charter was initiated in 1994 and expired in February 1999. The CSI approach is a shift away from a media-specific and end-of-the-pipe management system of regulating industry, and toward allowing a forum for collaboration between industry, EPA, and special-interest groups to create smarter, cleaner, and cheaper strategies to protect the environment. As with any experiment, the CSI produce varying results. For example, while the process was generally slow and sometimes tedious, the benefits included "environmental management systems that are more efficient and effective because those ultimately charged with implementation have a voice in the development." As a result, EPA has developed sector-based and EPA stakeholder-involvement action plans that will allow common-sense initiatives and directives to evolve into the regulatory process.

## ***Background***

The CSI was established as an experiment to evaluate alternatives other than the historical command-and-control approach taken by the EPA to protect the environment. The historical approach included regulating pollution by media (i.e., air, land, and water) only and usually through end-of-the-pipe, nonnegotiable court orders, stipulated fines and penalties, and drawn-out environmental litigation. When the CSI program was rolled out in 1994, its objective was to “establish a collaborative forum for testing innovative ideas and creating new tools and incentives that EPA and its partners (stakeholders) could use to build smarter, cleaner, and cheaper environmental management strategies for entire sectors of the nation’s economy.” Taking on this challenge was no easy task, considering the sheer volume of environmental regulations, EPA’s current organizational structure, current enforcement programs, different positions of industry and special-interest groups, and state and local level involvement.

The CSI program covers six markets, ranging from highly regulated large industries to small businesses. The industries consisted of automobile manufacturing, computers and electronics, iron and steel, metal finishing, petroleum refining, and printing. The participants in this experiment were drawn from environmental organizations, environmental-justice groups, labor unions, government regulators, and industry personnel. A council comprised of senior leaders from each of the stakeholder organizations, operating as a forum, guided the group.

Subcommittees were created within each sector to identify key environmental issues facing that business sector, such as life-cycle management, brownfield redevelopment, and pollution prevention. These issues were then evaluated in project work groups, and recommendations were generated and submitted to the CSI council for discussion. These recommendations were then evaluated and referred to EPA for action or sent back to the work group for modifications. In some cases, the recommendations indicated that the time had come to change a standard business practice by the industry sector or regulatory agency to achieve the goal of smarter, cleaner, and cheaper approaches.

## ***Findings***

As might be expected, the stakeholders’ different viewpoints caused the CSI to get off to a rocky start. According to a two-year review of the CSI by EPA, the initiative did not provide specific objectives and expectations for the program, causing subcommittees to struggle to figure out what the EPA would accept, instead of examining what the committees and sectors would prefer. Each stakeholder was required to concur with decisions or recommendations made by the group; anyone could veto a suggestion or

alternative. Also, instead of subcommittees and the council working together, they often entered into an adversarial relationship, reviewing what had been done and not serving a continuous and supportive role, thus hindering progress. As frustrations grew, individuals or companies often chose not to participate, or declined to consider new approaches or alternatives.

Even with these obstacles, successes emerged. For example, in a document titled “Understanding the Common Sense Initiative,” developed by EPA, the metal finishing industry and its CSI subcommittees recommended environmental-performance goals that could cut toxic emissions to air and water by 70 percent. These reductions would exceed what the law currently requires. The metal-finishing industry intends to pursue pollution-prevention strategies to achieve these cleaner options. To date, more than 250 companies, 17 states, and 34 local wastewater facilities are participating. In return for achieving these efforts, the subcommittees agreed to provide incentives for companies to improve performance. These incentives include reduced reporting and monitoring requirements, faster response on regulatory decisions, and enforcement discretion for companies testing new pollution-prevention technologies.

Overall, those involved with the CSI believed the program was a step in the right direction, but that fundamental operating conditions needed to be resolved. Clear goals and objectives need to be established up front. Support for change had to be built into the program, including rewarding innovation and testing new ideas even if they were not completely successful. Only through continuous monitoring and evaluation would the parties learn from both successes and mistakes.

### ***Future Impact of CSI***

Several positive suggestions have come out of the CSI effort. For example, the CSI council recommended to EPA the creation of an organizational unit to coordinate, facilitate, and support CSI and other reinvention initiatives in the future. In January, the EPA announced the transfer of a large portion of its regulatory reinvention initiatives to the National Advisory Committee for Environmental Policy and Technology (NACEPT) and establishment of its information office. CSI will be folded into NACEPT’s standing committee and continue the work of the sector subcommittees. The information office will be used as a central repository for data collection and analysis of different initiatives throughout the agency to support future reform efforts.

Additionally, as a result of CSI recommendations, the EPA has completed work on its “Sector Based Environmental Action Plan,” a set of principles used to guide the sector-

based approach to environmental protection. As outlined in the December 1, 1998, draft version of this plan, “The goal of this plan is to incorporate the use of sector strategies into the core functions of the agency and ensure that they are applied where they are appropriate to help us find efficient, effective solutions to environmental problems. This will include the full range of regulatory activities from rulemaking through research and development and international cooperation.” The plan goes on to discuss the value of sector-based environmental protection (SBEP), identifies management principles for evaluating SBEP, and identifies categories and action items to implement sector-based approaches within core agency functions, build management capacity to conduct SBEP, and craft sector-based solutions with external stakeholders.

The EPA also finished work on its “Stakeholder Involvement Action Plan” (another CSI outcome), which it hopes will “be a more thoughtful and skillful approach to our stakeholder involvement efforts—tailoring the activity to the need more effectively and ensuring that the resources devoted to stakeholder involvement activities, by EPA and other participants, are well spent.” This plan outlines a list of action items to enhance planning and management of stakeholder involvement activities and enhances internal and external capacity of stakeholder involvement.

### **Conclusions**

It is fair to conclude, based on the foregoing review, that common sense is working at EPA. The sector-based approach outlined in the CSI is one successful experiment showing that the EPA is committed to integrating new approaches in its regulations and programs at every level. Based on this success, EPA is continuing the CSI experiment through NACEPT and creating an information office to act as a central information center for future common-sense reform projects. However, the EPA is faced with integrating these approaches into numerous media specific regulations, enforcement provisions; future, existing, and historical pollution scenarios; its existing regulatory structure; its decentralized structure; industry; special interest groups; and the public. Therefore, it is hard to determine how long it will take to see the global, full-scale impacts of CSI on the current regulatory system.