



**Department of Energy**  
Washington, DC 20585  
September 17, 1999

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Office of Pollution Prevention and Toxics  
U.S. Environmental Protection Agency, Rm G-099  
401 M St., SW.,  
Washington, D.C. 20460

Docket Number OPPTS-400140

Dear Sir or Madam:

Re: [64 FR 42222](#), "Lead and Lead Compounds; Lowering of Reporting Thresholds; Community Right-to-Know Toxic Chemical Release Reporting; Proposed Rule"

On August 3, 1999, the Environmental Protection Agency (EPA) published a Notice of Proposed Rulemaking and request for comments regarding lowering the reporting thresholds for lead and lead compounds subject to reporting under section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and the Pollution Prevention Act (PPA). As indicated in the Notice, comments were to be presented to EPA on or before September 17, 1999.

The enclosed package represents supplemental comments received from field operations offices after DOE's original comment package (under signature of Mark Mazur, Director, Office of Policy) had already been put into the concurrence process. Some of the comments contained in the enclosed package supplement DOE's original comments with additional information provided by DOE field elements, while others are new comments.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Traceski", followed by a vertical line.

Thomas T. Traceski  
Director, RCRA/CERCLA Division  
Office of Environmental Policy and Assistance

Enclosure

*Supplemental*  
United States Department of Energy  
Comments on Lead and Lead Compounds; Lowering of Reporting Thresholds;  
Community Right-To-Know Toxic Chemical Release Reporting

Proposed Rule  
(64 FR 42222, August 3, 1999)

**SPECIFIC COMMENTS**

**IV. Explanation for Lowering Reporting Thresholds**

**B. Why Should EPCRA Section 313 be Used to Focus on Chemicals that Persist and Bioaccumulate?**

**1. p. 42226, col. 3**

**EPA states that for PBT chemicals, releases and other waste management activities that occur at facilities that manufacture, process, or otherwise use such chemicals even in relatively small amounts are of concern. Under current reporting thresholds, a significant amount of the releases and other waste management activities involving lead and lead compounds are not being captured. The public, therefore, does not have the information needed to determine if lead and lead compounds are present in their communities at levels that may pose a *significant risk* (emphasis added). By lowering the section 313 reporting thresholds for lead and lead compounds, EPA would be providing communities across the United States with access to data that may help them in making this determination. The Department does not believe that EPA has sufficiently stated how the lead and lead compound release information that might be provided under the proposed lower reporting threshold would be valuable to communities in helping them make this determination.**

*EPA has not shown how TRI reporting of lead and lead compounds at the proposed ten pound threshold would assist (benefit) the public in understanding how newly reported lead and lead compounds may affect their health.*

EPA has not established that current industrial releases of lead and lead compounds that are reported under TRI are a significant contributor to human lead uptake. EPA cites the National Health and Nutrition Examination Surveys (NHANES) (64 FR 42231) in the proposed rule and states that while childhood blood-lead concentrations have dramatically declined, "...it leaves nearly 900,000 children with unacceptably high blood-lead levels." The Department does not dispute the fact that lead is toxic and does cause adverse affects in children. However, *the NHANES studies do not identify ongoing industrial facility air or water emissions or waste management to any media as a source of exposure to*

adults or children. These Surveys identify dust from deteriorated lead-based paint, residual lead fall-out from vehicle emissions, occupational exposures to lead and lead dust brought home on work clothes, lead used in some hobbies, lead in ‘folk’ medicines and cosmetics, lead in plumbing, and lead in crystal and ceramic containers as sources of exposure for children and adults.<sup>1</sup> ***TRI reporting does not capture any of these sources of lead.***

*EPA does not consider the existing background levels of lead in soils, nor has EPA adequately shown how TRI reporting under the current or the proposed reduced threshold levels would add to the public’s knowledge of whether or not lead releases from reporting point sources are affecting soil lead levels.*

During the interagency review process, as well as in the proposed rule, EPA has stated their concern of direct soil ingestion by children (as a source of lead). The Department believes that EPA has not adequately considered the substantial existing background levels of lead and lead compounds in establishing the proposed threshold. The USGS indicates that the average lead concentration in soil is 15 ppm with a range of < 10 to 300 ppm.<sup>2</sup> In a 1993 EPA report, it states that the geometric mean background lead concentration in soil in residential areas is 47 ppm with a range of 1.45 to 6951 ppm.<sup>3</sup> The former widespread use of lead-based paint and lead as a gasoline additive is suggested as the most significant contributor to this background. EPA has not demonstrated that the current manufacture, process, or otherwise use of lead or lead compounds at the current reporting threshold or the proposed reporting threshold substantially affects these background levels.

A third source of lead contamination, point source emitters (e.g., manufacturing facilities as opposed to fugitive emission sources) presumably would be characterized by their TRI estimates. However, it would be necessary to have actual analytical data to see if elevated levels of lead in the soil have occurred, since any TRI estimates of air releases, no matter how accurate, could not predict how the lead would fall and be distributed in the environment.

*Existing and future statutory and regulatory controls already capture lead and lead compound release information.*

Unlike most of the approximately 650 chemicals and chemical classes in the TRI, lead (including lead compounds) has long been subject to extensive monitoring and

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<sup>1</sup>*Morbidity and Mortality Weekly Report*, Centers for Disease Control and Prevention, February 21, 1997.

<sup>2</sup>*Elemental Concentration in Soils and Other Surficial Materials of the Conterminous United States*, U.S. Geological Survey Professional Paper 1270, U.S. Government Printing Office, 1984.

<sup>3</sup>*Data Analysis of Lead in Soil and Dust*, EPA Report 747-R-93-011, September 1993.

environmental rulemaking along with detailed occupational health standards. It also continues to be the subject of additional future controls under a variety of statutory and regulatory requirements. These include standards under the Clean Air Act, the Occupational Safety and Health Act, Clean Water, Safe Drinking Water Act, the Toxic Substances Control Act, and Resource Conservation and Recovery Act. Several of these regulations require reporting of lead releases to various media and community members would have access to these reports.

Considering this existing reporting along with the declining blood-lead levels, ambient air levels of lead meeting health based standards, and with future regulatory requirements to include more stringent control technology, DOE questions the usefulness and benefit to the public of the release information that would be provided by the proposed lowered TRI reporting threshold.

## **VI. What Changes Is EPA Proposing to Make to the Reporting Requirements for Lead and Lead Compounds?**

### **A.1.b. Was burden considered in threshold selection and what is the proposed threshold for lead and lead compounds?**

#### **1. p. 42232, col. 3**

**EPA requests comment on its consideration of industry burden in establishing lower reporting thresholds for lead and lead compounds. The Department believes that EPA has not adequately captured the burden of the proposed threshold for lead and lead compounds.**

The Department believes that the proposed 10 pound threshold would necessitate significant effort to characterize small release levels of lead and lead compounds. One non-manufacturing DOE facility stated that they would face a unique set of challenges in complying with this significantly reduced threshold. This site estimates that "literally hundreds of lead-containing products used by thousands of employees would potentially be subject to reporting. Despite a sitewide chemical tracking system, the ability to measure small usages would be extremely difficult. Since EPCRA requires reporting based upon use of existing information the degree of uncertainty will be such that the emissions data would be of questionable value."

They continue by stating that "the diminishing returns from this effort along with the associated increased costs would not be warranted, particularly for a facility such as ours where the lack of material balance information characteristic of a manufacturing facility would require tracking of hundreds or thousands of small amounts of lead-containing products."

**EPA also seeks comments on reason for selecting reporting thresholds of 100 pounds and 1,000 pounds.**

The Department believes that to adequately address the impact of lowering reporting thresholds and resulting industry burdens, the incremental cost should be considered relative to the *added* benefit. Each level of reporting threshold reduction will increase the number of reports, amount of lead reported and the cost. The major benefit, as described in the proposed rule, is the additional reporting of lead and lead compounds that **could be released** to the environment. To show the incremental cost and benefit associated with four reporting threshold reduction levels, the following table was developed using Table 4 of the proposed rule:

Reduction From - To (lbs)	Maximum Difference (lbs)	Number of New Reports	Maximum Newly Reported Pounds	Maximum Newly Reported Tons	Estimated New Cost First Year (millions)	Cost Benefit (\$ per Newly Reported Ton)
10,000 - 1,000	9,000	<b>2905</b>	26,145,000	13,072.50	<b>22</b>	\$1,683
1,000 - 100	900	8762 - 2905 = <b>5857</b>	5,271,300	2,635.65	67 - 22 = <b>45</b>	\$17,074
100 - 10	90	15043 - 8762 = <b>6281</b>	565,290	282.65	116 - 67 = <b>49</b>	\$173,362
10 - 1	9	22623 - 15403 = <b>7580</b>	68,220	34.11	174 - 116 = <b>58</b>	\$1,700,381

This table shows the incremental maximum possible benefit (newly reported lead) and associated cost by assuming each new report is for the maximum difference. This is a maximum benefit analysis, in most cases it is likely that less than the maximum difference would be reported. The table shows the incremental cost and benefit for each step individually because each step down in reporting threshold will affect facilities that would otherwise not be required to report for lead or lead compounds. The incremental increase in cost as proposed is the added cost of the paperwork alone. In Table 4 of the proposed rule, EPA shows the industry cost and number of reports for four reporting threshold levels. Using the EPA cost values and number of reports, the following approximations can be drawn directly to estimate the cost per pound for additional TRI reporting of lead or lead compounds:

- Option 4(1,000 pound threshold)..... approximately..... \$1 per additional pound reported
- Option 3(100 pound threshold)..... approximately..... \$9 per additional pound reported
- Option 2(10 pound threshold)..... approximately..... \$87 per additional pound reported
- Option 1(1 pound threshold)..... approximately..... \$850 per additional pound reported

Given the above analysis, the Department believes that a threshold of 100 pounds versus the proposed 10 pound threshold would be a more cost-effective regulatory approach.

**D. What is Range Reporting and What Changes is EPA Proposing to Make to the Use of Range Reporting?**

**&**

**E. What is the Half-Pound Rule and Whole Numbers and What Change is EPA Proposing to Make to the Use of the Half-Pound Rule and Whole Numbers?**

**1. p. 42235, col. 3 -- 42236, col. 1**

**For releases and off-site transfers for further waste management of less than 1,000 pounds of the toxic chemical, EPA allows facilities to report the amount either as a whole number or by using range codes. EPA requests comment on its proposal to discontinue the use of range reporting in Forms Rs for lead and lead compounds.**

**EPA requires that facilities report numerical quantities in sections 5, 6 and 8 of Form R as whole numbers. EPA currently allows facilities to round releases of 0.5 pounds or less to zero. EPA requests comment on the proposed requirement that all non-zero releases of lead and lead compounds greater than one tenth of a pound be reported. EPA also requests comment on using fractional quantities for reports under 10 pounds.**

The Department believes that EPA's proposal to eliminate range reporting, the half-pound rule, and the use of whole numbers for quantities less than ten is inconsistent with the data currently available for reporting, which is often data generated for other environmental statutes. EPA's estimated impact analysis of these changes and the proposed change to the *de minimis* exemption presume that reports will be based on the best reasonably available information or on reasonable estimates. Yet it appears that EPA is seeking precision in reporting down to the one-tenth of a pound. Without significant effort (i.e., monitoring or measuring), it is unlikely that such information or estimates will have the precision implied by the proposed changes (as small as one tenth of a pound for an estimate covering an entire year of facility operation). DOE recommends that EPA not eliminate these current methods for reporting, but rather keep them available so that reporters can best depict the level of precision represented by their best available information.

**F. What Limitation is EPA Proposing for the Reporting of Lead in Certain Alloys?**

**1. p. 42236, col. 2**

**EPA is proposing to exclude lead contained in stainless steel, brass, and bronze alloys from the lower reporting threshold and retain the current reporting thresholds for lead when contained in stainless steel, brass, and bronze alloys.**

Stainless steel, brass and bronze are not the only materials containing lead as an alloying element. Other steels, copper alloys, zinc alloys, aluminum alloys and tin alloys contain lead to improve

material properties.<sup>4 5</sup> In addition, lead can be found as an impurity in nickel, zirconium, and hafnium alloys. The Department recommends that EPA consider including these other alloys in its proposal to retain the current reporting thresholds for lead contained in alloys.

## **VII. What Are the Results of EPA's Economic Analysis.**

### **C. What Are the Potential Costs of this Proposal?**

#### **1. p. 42237, col. 2**

**EPA presents the potential costs of the proposed rule in this section. The Department believes that EPA has not adequately captured the costs of the proposed threshold for lead and lead compounds.**

A DOE field site states the proposed reporting threshold would require them to report the use of lead bullets at their firing range. They estimate that to develop and administer a procurement, inventory and tracking program for lead-containing bullets, modify their existing Chemical Tracking System, modify and formalize their lead recycling program, and evaluate their site operations, determine which uses of lead are reportable and learn to fill out the Form R would take approximately 850 hours per report for the first year. Subsequent years' costs would be lower.

This estimate far exceeds the man-hour estimate prepared for the proposed rule. In EPA's Economic Impact Analysis (Table 4-2 of EPA's *Economic Analysis of the Proposed Rule to Modify Reporting of Lead and Lead Compounds Under EPCRA Section 313*), EPA estimates the unit cost for first year activities, (i.e., rule familiarization, compliance determination, Form R completion, recordkeeping/mailing) to be 125 hours per report.

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<sup>4</sup>Metals Handbook, Ninth Edition, American Society for Metals.

<sup>5</sup>Materials Engineering, December 1992.