



**Department of Energy**  
Washington, DC 20585

MEMORANDUM

March 22, 1999

To: Miss Susan H. Wayland, Acting Assistant Administrator  
Pollution Prevention, Pesticides, and Toxic Substances  
Environmental Protection Agency

From: Dr. Mark Mazur, Senior Policy Advisor  
Office of the Secretary  
Department of Energy

Subject: Proposed EPA Persistent Bioaccumulative Toxic (PBT) Chemicals  
Rulemaking on the Toxic Release Inventory (TRI)

The Department of Energy would like to offer additional comments on the Proposed Rule ([64 FR 688](#)) under the Emergency Planning and Community Right to Know Act (EPCRA) of 1987. This Rule proposes to add reporting requirements for certain PBT chemicals and to dramatically reduce reporting thresholds for others. It would also add a new reporting category for dioxin compounds and requests comments on certain potential future TRI actions.

We continue to recognize that the TRI provisions have proven to be among the most successful stimuli for reducing the amount of toxic materials entering the environment. Moreover, the TRI program has resulted in significant pollution prevention gains for numerous industries.

The Department recognizes that the intent of lowering reporting thresholds in the proposed rule is to extend these gains. However, for this phase of the TRI rulemaking, we still feel the methodology for determining industry burden and setting reporting thresholds should be focused on the amount of additional emissions reported and consequent reductions likely to be achieved rather than the number of reports expected to be filed. We also continue to be concerned that the addition of several substances or compounds to the reporting regime and some of the newly proposed reporting thresholds are premature or inappropriate. Moreover, we feel that certain routine maintenance (reporting) exemptions should be retained and that future PBT candidate substances should exhibit *all three* of the relevant characteristics (persistence, bioaccumulativity, and toxicity) before being added to the TRI. Our views are further detailed in the attached comments.

We would be pleased to provide additional information if needed.

Attachment

## Department of Energy (DOE) Comments on the Proposed EPA Rule:

### **"Persistent Bioaccumulative Toxic (PBT) Chemicals; Lowering of Reporting Thresholds for Certain PBT Chemicals; Addition of Certain PBT Chemicals; Amendments to Proposed Addition of a Dioxin and Dioxin-Like Compounds Category; Toxic Chemical Release Reporting; Community Right-to-Know" (64 FR 688)**

#### ***1. DOE supports the use (and development) of a methodology based on releases rather than the number of reports.***

The Department is resubmitting this comment made on the draft proposed rule because DOE still feels the methodology for determining industry burden and setting reporting thresholds should be focused on the amount of additional emissions reported and on consequent reductions likely to be achieved rather than the expected number of reports to be filed.

DOE supports the use (and development) of a methodology based on releases rather than the number of reports in order to:

- o *Better determine the degree to which burden should be taken into account*

The Department believes that a more accurate way to make a judgement on burden versus capturing more information or a "substantial majority" of information would be to estimate the quantity of releases (pounds/year or grams/year for dioxin) that may be reported, rather than estimating the possible number of reports.

In an April 21, 1998 White House release, Vice President Gore announced that he was directing EPA to "review PBTs and determine whether they should be subject to Toxic Release Inventory (TRI) reporting or lower reporting thresholds." He also directed that any regulatory changes are to "be fashioned in a way that minimizes cost and other burdens on business." [Emphasis added.] DOE is concerned that EPA's method for determining the proposed reporting threshold levels does not comply with this standard.

The EPA is proposing to dramatically lower the reporting thresholds for certain persistent bioaccumulative toxic (PBT) chemicals from current thresholds of 25,000 pounds (manufacture and process) and 10,000 pounds (otherwise use) to 10 pounds (highly PBT chemicals), 100 pounds (PBT chemicals), and 0.1 gram (dioxins and dioxin-like compounds). In EPA's Economic Analysis of the proposed rule, EPA estimates the cost of filing the number of reports that may be necessary under their preferred threshold Option. EPA calls this the cost of the proposed rulemaking. The costs are based solely on EPA's estimates of industry cost to understand, complete, and file the required reports (i.e., Form R). The cost of developing the reports does not reflect the true cost or burden on industry of TRI. The true cost of the TRI process includes the cost of responses to the public pressures that arise with respect to reported releases. The public pressure is to not emit or not release the substance even if it poses no harm to human health and/or the "release" of the substance happens to be in a permitted landfill. *If EPA is going to follow the Vice Presidential directive of April 1998 and consider burden on industry or even the relevance of reporting at various thresholds to the public involved, then an estimate of the possible quantities released at various threshold levels should be considered in setting the applicable threshold. The number of reports required under the various options proposed is*

*clearly of secondary importance with respect to both the intent of TRI for the public and the cost of TRI to the affected industries.*

The EPA requests comment on the propriety of the degree to which burden should be taken into account in this rulemaking, and which set of thresholds EPA should adopt. (Section III.C., page 12, 2nd paragraph, also requested at VII A. 1.b., page 49). The EPA states that in selecting potential lower reporting thresholds for PBT chemicals, EPA considered not only the related technical and policy issues but also the potential burden that might be imposed on the regulated community by four sets of reporting thresholds (Options). Based on potential burdens, EPA believes that "it is appropriate to lower the reporting thresholds to a level that would capture significantly more information [emphasis added] about PBT chemicals than current thresholds, but that would not be unduly burdensome on industry" (page 49, proposed rule). The EPA chose to make this evaluation by estimating the number of reporting facilities, reports, and associated costs for each threshold Option. Setting thresholds by the number of additional reports required at various levels does not necessarily translate into capturing significantly more release information. That is, 40 percent more reports could be filed going from the 100- to the 10-pound threshold and EPA could decide that this is "significantly more" information and determine that the 10-pound level is appropriate. But if in estimating emissions or releases, EPA finds that less than 5 percent more releases (pounds) would be reported under the 10-pound threshold, EPA might have some basis to decide that the 100-pound level is appropriate. The following table for mercury releases from the coal-fired electric power industry illustrates the utility of estimated quantity of releases versus number of reports to assess burden versus the capture of more information [EPA Mercury Study Report to Congress, December 1997].

<b>Regulatory Options/ Thresholds</b>	<b>Percent of Facilities Required to Report Mercury Releases</b>	<b>Tons/yr of Mercury Releases Reported*</b>	<b>Percent of Total Mercury Releases from Coal-Fired Power Plants</b>
<b>1. 1 lb for highly PBT chemicals, 10 lb for PBT chemicals</b>	100	73.1	100
<b>2. 10 lb for highly PBT chemicals, 100 lb for PBT chemicals</b>	98.3	73	99.9
<b>3. 100 lb for highly PBT chemicals, 1000 lb for PBT chemicals</b>	71	70.4	96.3
<b>4. 1000 lb for all PBT chemicals</b>	7.4	24.1	33

\* Estimate of mercury releases based on current electric power plant configuration and current mercury inventory (DOE and EPRI data). Again, the term "releases" must be kept in perspective. Approximately 40 percent of the mercury input of 73.1 tons/yr (termed "releases" in the table) is captured (EPA under TRI refers to "captured" as "releases", even when the mercury is collected in the ash, flue gas desulfurization wastes, etc.) within the associated utility configurations and is not emitted with the flue gas exiting the stack. DOE, in this table, is being consistent with EPA's terminology under TRI.

DOE believes this type of information needs to be considered when weighing burden and the capture of significantly more information. In this example, Option 2 would require 27.3 percent (of the 404 total facilities) more reports than Option 3, but would capture only an additional 2.6 tons/year (3.6 percent) of the quantity of mercury released from coal-fired electric utilities.

o *Better set threshold reporting levels*

A methodology that considers release quantities would also be appropriate in determining thresholds for each PBT chemicals. In the example above, a more reasonable threshold would probably exceed 100 pounds per year for mercury. DOE believes EPA should examine release inventories that exist within EPA to make additional estimates for all PBT chemicals for affected industries. EPA could then determine an appropriate threshold for each PBT chemical, that would weigh quantity of chemical reported versus the burden of reporting. Alternatively, if inventories/data do not exist, an overall methodology for development of estimated release data should be developed.

o *Reduce unknown future burdens on reporters*

The EPA states that this is only EPA's first effort to review chemicals for their persistence and bioaccumulation properties and that they intend to review additional chemicals in the future to determine if they should be considered persistent and bioaccumulative under section 313 and, if not already on the section 313 list, whether they should be added. This unknown burden could be tremendous, as there are currently over 600 chemicals on EPCRA's Section 313 list of toxic chemicals. The EPA's current methodology used to arrive at the suggested Option 2 is, therefore, extremely important and one which could cause a large burden on reporting firms (current and future industries) with no significant public health benefit. The current methodology would also distort future reports of releases as EPA determines additional threshold reductions (for other chemicals EPA may determine are PBT chemicals).

o *Better analyze how well TRI data meets users needs*

The GAO recently evaluated pending EPA initiatives to expand the amount and type of information collected under EPCRA. A September 24, 1998, GAO report, *Environmental Information: Agencywide Policies and Procedures are Needed for EPA's Information Dissemination* (GAO/RCED-98-245), states that EPA does not have in place procedures for analyzing whether the information it has assembled "meets users' needs." DOE believes this is consistent with the Department's position supporting the development or use of a methodology based on releases rather than reports. DOE does not believe that the public is as concerned about the number of reports that are made as they are with the amount of toxic chemical releases that are reported.

In responding to the criticisms of the GAO report, and the requirements of the Government Performance and Results Act (GPRA), EPA has recently announced a new data management plan to reorganize all EPA data management efforts into a single, centralized office, as part of a broader effort to dramatically improve data access and quality, and assure that data meets users needs. The TRI program has been identified as being an important element of this new reorganization. The GPRA demands increased government accountability, and would *shift the focus from measures of outputs*, i.e. number of TRI reports, *to environmental outcomes* like toxic chemical releases.

DOE believes that EPA's proposed methodology is not consistent with the GPRA or the announced EPA reorganization for improved data management. DOE believes a methodology based on releases is consistent with EPA's new direction and compliance with the GPRA and EPA's ability to meet data users' needs.

o *Better provide for equitable capture of "substantial majority" of releases*

The Department believes that information regarding the total quantity of the chemical being released by all covered facilities and the quantity anticipated to be reported at the various proposed lowered thresholds is needed to satisfy the substantial majority test. The Department believes that statutory language supports this position and questions EPA's statement in the draft proposed rulemaking that the "substantial majority" standard can operate to constrain EPA's action only when the Agency is raising a chemical threshold. The Department believes that it is reasonable to interpret the EPCRA language to mean that EPA must demonstrate that they are capturing a "substantial majority" of total releases from all facilities that would have to report under the proposed rule for each chemical for which an alternative threshold is proposed. Section 313(f)(2) provides that EPA "may establish a threshold amount for a toxic chemical different from the amount established by paragraph (1)." If a chemical threshold is to be changed, Congress requires that "the revised threshold shall obtain reporting on a substantial majority of total releases of the chemical at all facilities subject to the requirements" of section 313. [42 U.S.C. Section 11023(f)(2)] The "substantial majority" requirement applies to the total releases of individual chemicals from all facilities required to report.

The Department also questions EPA's statement that "when EPA lowers thresholds, however, the substantial majority test is met as a matter of logical necessity, because the lower thresholds are almost always likely to result in increased rather than decreased, reporting" and therefore the required findings "can be made without the need for quantitative support." (pages 5-6, proposed rule). *The substantial majority test refers to chemical releases, not the number of reports submitted. The Department believes that an estimate of total releases for each chemical from all covered facilities is needed to determine if the substantial majority test has been met.* For example, in the case of dioxin, at the current threshold of 25,000 pounds for manufacture, no facilities would be reporting. If the threshold was reduced to 1 pound, it is anticipated that still no facilities would report. At a 0.2 gram threshold, perhaps a few facilities would report, but it would not be a matter of logical necessity that a substantial majority, or even a majority, of the total releases from all facilities covered under EPCRA section 313 would be reporting. Just reducing thresholds does not, as a matter of logical necessity, satisfy the substantial majority test.

Since the term "substantial majority" can be interpreted to include a wide range of values, the Department believes EPA should, for purposes of the proposed rule, quantify its interpretation and provide quantitative percentage values or a percentage range, for example, 85 percent or between 75 percent and 90 percent of total releases of the chemical. The Department also believes that if EPA seeks to establish a threshold that is intended to result in exceeding the substantial majority test for reported releases, that the justification and EPA's authority for the higher standard be provided.

**2. *The Department believes lowering the TRI threshold for mercury is premature and should be deferred.***

The Department is resubmitting this comment made on the draft proposed rule because DOE continues to believe the comment has technical merit. DOE also has added information pertaining to the ongoing mercury Information Collection Request (ICR) for the utility industry.

DOE believes that, given the current state of science (with regard to levels of concern for mercury in blood, to actual mercury levels in the population, and to the relation between mercury and fish, and in blood from fish consumption), the Agency is being premature in lowering the TRI threshold for mercury. Lowering the TRI

threshold for mercury would require utilities, petroleum bulk storage facilities, and petroleum refiners to have to report to TRI while other branches (e.g., Office of Air Quality Planning and Standards) of EPA are still exploring whether or not mercury, a naturally-occurring element that has always been ubiquitous in the environment, constitutes a health problem in the United States at current levels, particularly from utility emissions. This action may put public pressure on the utilities to reduce mercury releases before other reviews of the effects of mercury (the National Health and Nutrition Examination Survey (NHANES) on fish consumption and mercury ingestion, and the National Academy of Science (NAS) review) have been completed. In a recent appropriations report, Congress stated their intention that "EPA not issue any regulatory determination for mercury emissions from utilities until EPA reviews the results" of an 18-month National Academy of Science comprehensive review of mercury health research (105th Congress Report, House of Representatives 2nd Session, Report 105 769, October 1998). Given this direction by Congress, DOE suggests that EPA's inclusion of mercury on this list of PBT chemicals is premature. Further, should the NAS study conclude that mercury emissions from utilities are not linked to increased human health risk, or that only a few specific facilities are so linked, then the value of this proposed rule is questionable. When populations around a facility face either no risk or no significant risk from emissions, the value of this proposal is not apparent. The Department also notes that EPA has stated that TRI information requirements are important to the local community, even if only small amounts are released. Unlike most TRI releases, however, a majority of the mercury exiting coal-fired power plant stacks enters the regional and global pool, but collaborative efforts between DOE, EPRI, and EPA are planned to investigate this issue and the impact of mercury emissions on local areas.

Additionally, EPA has set guidelines and procedures for the utility industry to embark on a \$30 to \$40 million effort to collect information on mercury in coal and flue gas under their ICR. The ICR began January 1, 1999 and will end January 1, 2000. EPA went forward with this ICR to collect data to address what they believe are inconsistencies in and lack of accurate mercury inventories for the utility industry. EPA wants to obtain data on the capture of mercury by each category of air pollution control device utilized in the utility industry. This database would lead to more accurate emission modification factors for these categories of air pollution control devices. When the ICR data are evaluated, EPA will have a better knowledge base with which to set thresholds. Therefore, the Department believes that EPA should not set thresholds for mercury until the data collected under the utility ICR are evaluated. Until this is completed, the burden of a 10 pound/year reporting threshold under the TRI does not appear to be justified.

***3. The Department believes the decision to add dioxin to the Section 313 list under EPCRA should await the results of ongoing testing to determine if dioxins are generated by certain combustion systems at levels of concern.***

The Department is resubmitting portions of the original comment made on the draft proposed rule for two reasons. First, the Department is resubmitting the comment on the upcoming joint EPA/DOE polychlorinated dibenzo-p-dioxins (PCDDs)/polychlorinated dibenzofurans (PCDF) sampling effort on a utility equipped with hot-side electrostatic precipitators (ESP) because the test is imminent and has technical merit. Second, regarding the reference in the preamble (64 FR 712) to the use of Method 23 in determining dioxin releases, we offer a clarification to correct a minor inaccuracy.

DOE believes the EPA should use special care in adding dioxins to the Section 313 list. DOE's primary concerns are that adding dioxins would require entities to report under the TRI prior to a determination that

certain combustion systems can generate dioxins. Moreover, DOE has concerns about how EPA will require reporting of emission measurements below minimum detection limits (MDL).

The Dioxin Policy Office and ORD of EPA believe that hot-side electrostatic precipitators (ESPs) in the utility industry have the potential to form dioxin and furan compounds. The EPA has stated for the record, "The data currently available to EPA on coal-fired utilities does not indicate they are a major source of dioxin. Unfortunately, this data does not include testing of utilities equipped with hot-side ESPs", (September 30, 1998, memorandum from Dwain Winters, EPA Office of Pollution Prevention and Toxics).

Data collection related to investigating this mechanism have been primarily based on studies on municipal waste combustors (MWCs) equipped with hot-side ESPs. EPA has postulated that the same mechanisms may be working in coal-fired systems equipped with hot-side ESPs, where the temperature windows are conducive to this low temperature PCDD/PCDF formation as experienced in waste combustion systems. It should be noted that utility units equipped with hot-side ESPs represent only about 13 percent of the total capacity, and this number will continue to decrease due to the utility industry's general dislike for hot-side ESPs from an operational standpoint. The EPA has agreed to provide funding to DOE in order to conduct a PCDD/PCDF sampling effort on a utility equipped with a hot-side ESP. The utility industry (specifically, Wisconsin Electric Power Company, which is providing the site for this testing) and EPRI also fully support this effort to establish whether or not hot-side ESPs can contribute to the formation of dioxin and furan compounds. No regulation under TRI is appropriate until this work is completed. In addition, DOE believes even in the event that hot-side ESPs are determined to create PCDD/PCDFs, the respective emission factors should only be applicable to hot-side ESPs.

EPA's *Method 23 - Determination of Polychlorinated Dibenzop-dioxins and Polychlorinated Dibenzofurans from Stationary Sources* (Method 23) states: "Any PCDD's or PCDF's that are reported as nondetected (below MDL) shall be counted as zero for the purpose of calculating the total concentration of PCDD's and PCDF's in the sample." Based on the November 24 discussion, it is our understanding that EPA will reaffirm their commitment to the use of Method 23 in the implementation of the proposed rule, the Economic Analysis of the proposed rule, and the existing Section 313 Guidance for Electricity Generating Facilities. The language in the preamble is similar to that developed in the interagency review process but contains one error in the sentence ending "..., including Method 23 (Ref. 77) developed for electric utilities." Method 23 is used for determination of dioxins and furans from stationary sources, including coal-fired utility boilers. Therefore, we suggest "in the case of" be substituted for "developed for."

***4. The Department believes lowering the threshold for Cobalt and Vanadium to 10 pounds/year is not warranted.***

The Department is resubmitting this comment made on the draft proposed rule because EPA has requested comments on whether cobalt and vanadium should be considered PBT chemicals. The Department feels strongly that our original comment is still pertinent and has technical merit.

DOE questions the validity of EPA's assertion that cobalt and vanadium are "highly PBT" chemicals that should be subject to reduced TRI reporting thresholds of 10 lb/yr, especially in terms of these chemicals as they exist in ashes produced by coal-fired utilities. The Department does not object to the reporting of cobalt and vanadium at the 25,000 lb/yr threshold (this includes eliminating the fume or dust qualifier for vanadium); however DOE believes the evidence provided by EPA to support the designation of cobalt and vanadium as

“bioaccumulative,” and hence subject to the reduced reporting thresholds, is weak. The Department notes that EPA did not identify either cobalt or vanadium as elements of concern in the Agency's "Study of Hazardous Pollutant Emissions from Electric Utility Steam Generating Units---Final Report to Congress." U.S. Primary Drinking Water Standards do not contain any limits on concentrations of cobalt and vanadium. Further, the EPA did not include vanadium as one of the 189 hazardous air pollutants on the Title III list of the 1990 Clean Air Act Amendments. Given this background, the Department believes EPA is obliged to demonstrate the need for inclusion of these metals in TRI as PBT chemicals.

The EPA's reference supporting the designation of vanadium as being bioaccumulative states: *"Except for a mushroom (Amanita muscaria) and some marine animals (ascidians), few plants or animals concentrate vanadium."* (see page 148, Metal Ions in Biological Systems, Volume 6, H. Sigel, ed.) While it is unclear how EPA calculated the vanadium bioconcentration factors of 100,000 to 1,000,000 listed in Table 1 of the proposed rule, DOE assumes that the values were derived from the vanadium concentrations found in the blood and tissues of ascidians coupled with an assumed concentration of vanadium in seawater. It also is important to note that the reference supplied by EPA states that not all animals in this class concentrated vanadium, and does not suggest that the elevated levels of vanadium in the ascidians actually produced any toxic effects. Based on these points, DOE believes it is inappropriate for EPA to use a "worst case" of vanadium bioaccumulation in a single class of marine animals to characterize the bioaccumulative characteristics of vanadium for TRI purposes, especially when the reference does not cite additional evidence of vanadium bioaccumulation.

To support its inclusion of cobalt as a bioaccumulative chemical, EPA provided DOE with a copy of a March, 1987 document covering Canadian Water Quality Guidelines. It appears that the cobalt bioconcentration factors listed in Table 1 of the proposed rule (1 - 2,000,000) were taken directly from the final paragraph on page 6-21 of the supplied reference, which summarizes the cobalt bioconcentration factors found for various types of organisms. This paragraph in turn, was excerpted entirely from another reference (see pages 777-924, Cole, C.J., and B.L. Carson, Cobalt in the Food Chain, in Trace Metals in the Environment, Volume 6, Cobalt, I.C. Smith and B.L. Carson, eds., 1981). As with the vanadium study, the cited reference provides no evidence to indicate that bioconcentration of cobalt, when it occurred, caused any toxic effects in the organisms. The reference also provided data to indicate that cobalt was strongly adsorbed to clay minerals, which would greatly limit its bioavailability. However, perhaps the most important statement in the reference is the last sentence of the paragraph: *"Because concentration factors generally decrease with increasing trophic status, biomagnification is not considered to be significant."* DOE believes it is inappropriate for EPA to list cobalt as a PBT chemical for TRI purposes when the reference cited by EPA opines that the biomagnification potential of cobalt is not significant.

***5. The Department believes the exemptions found at 40 CFR 372.38 should be retained for PBT chemicals.***

EPA requests comment on whether the Agency “should modify the exemptions at 40 CFR 372.38(c) (e.g., the laboratory exemption, and the otherwise use exemptions, including the structural component exemption, the routine janitorial or facility grounds maintenance exemption, the personal use exemption, the motor vehicle maintenance exemption, and the intake air and water exemption) such that they will not apply to PBT chemicals.”

The Department believes that before exemptions are modified, EPA first should establish that the uses of the

PBT chemicals covered by these exemptions will result in chemicals of concern being released or otherwise managed as waste in a manner or quantity which warrants the additional record keeping and reporting burden. For example, there would be little, if any, value in reporting the quantities of such chemicals in air or water drawn from the environment or municipal sources (covered by the intake air and water exemption in 40 CFR 372.38(c)(5)) since these chemicals are either already in the environment or, in the case of municipal water supplies, judged to be at levels acceptable for routine consumption.

The Department believes that these exemptions should be retained as they reduce the reporting burden on the regulated community while ensuring that the goals and objectives of EPCRA Section 313 are still met. For example, DOE submitted a report to EPA's Office of Pollution Prevention and Toxics in January 1997 entitled *EPCRA Section 313 Laboratory Activity Exemption: Assessment of Impact on DOE TRI Reporting*. DOE collected information during a two year period (1993 -1994) to determine the range of toxic chemical usage in exempted laboratory activities. The analysis confirmed DOE's belief that large quantities of toxic chemicals are not going unreported at our sites because of the use of the laboratory exemption. The analysis also shows that the exemption provides appropriate and effective reporting burden relief at many sites. In particular, relief is provided at those sites that are reporting section 313 chemical releases for other non-exempted uses; these sites do not have to track and determine release contributions from numerous, small amounts used in exempted laboratory activities.

While EPA is considering eliminating the reporting exemption for activities comparable to routine consumer usage (covered by the routine janitorial or facility grounds maintenance exemption in 40 CFR 372.38(c)(2) or the personal use exemption in 40 CFR 372.38(c)(3)), EPA has not indicated any consideration of eliminating a similar exemption to notification requirements applicable to suppliers of consumer products in 40 CFR 372.45(d)(2), the "supplier notification." This creates a potential for users of consumer products, e.g., cleaning products, to be unaware that a product being used contains toxic chemicals which should be counted towards TRI threshold determinations and reported.

EPA also requests comment on its proposed elimination of the de minimis exemption (40 CFR 372.38(a)). The Department is concerned about the proposal to eliminate the de minimis exemption. One of the principal sources of information for products used or processed is the manufacturer's Material Safety Data Sheets (MSDS). The manufacturer is only required to list chemical constituents at or above 1 percent or 0.1 percent levels according to the Occupational Safety and Health Administration's Hazardous Communication Standard (HAZCOM) (29 CFR 1910.1200). If the de minimis exemption is eliminated, reporters will no longer be able to use MSDS as a source for screening products for PBT chemicals below current de minimis levels. For example, at one large DOE site, chemical information is entered into a computer system to track the thousands of chemical products used at the site. Chemical constituents in those products are identified from MSDS information. Most MSDS do not provide information on constituents that are below the de minimis level. The site's computer system does not flag PBT chemicals that are in products below a de minimis level, and the site does not have the manpower to track products on an individual basis looking for PBT chemicals at trace concentrations. This limited ability to screen products for PBT chemicals, coupled with the fact that EPA is proposing to lower the reporting threshold for most PBT chemicals to 10 or 100 pounds per year, increases the likelihood that products that contain PBT chemicals will go undetected and, thus, unreported.

There does not appear to be another consistent source of information for determining whether a product contains a PBT chemical below de minimis levels. If EPA decides to eliminate the de minimis exemption for PBT chemicals, the Department recommends that EPA also provide information on those products that will

potentially have PBT chemicals at or below de minimis levels.

***6. The Department believes that a chemical should meet all three criteria (persistent, bioaccumulative and toxic) to be identified as a PBT chemical.***

EPA requested comment on whether it should consider lowering the reporting thresholds of EPCRA section 313 chemicals that are either persistent or bioaccumulative. EPA's proposal requires an EPCRA section 313 chemical to meet both the persistence and bioaccumulation criteria, with no specific degree of toxicity set; i.e., if a chemical is on the section 313 list it has met the toxicity criteria. DOE believes that a chemical should have to meet all three criteria (persistence, bioaccumulation and toxicity) to be listed as PBT. DOE feels that lowering thresholds based on a persistence/toxicity criteria or a bioaccumulation/toxicity criteria risks taking the focus off the priority PBT chemicals by effectively lowering the standards for classifying a toxic chemical as "PBT." This would greatly expand the number of chemicals with lower thresholds, and would not serve EPA's goal of focusing on those chemicals that present the most significant risk (or "hazard").

***7. The Department believes that EPA should carefully evaluate the bioaccumulation of lead and lead compounds before proposing to list them as PBT chemicals.***

EPA stated in the proposed rule that it intend to review available bioaccumulation data for elemental lead and other lead compounds to determine if these materials should be considered PBT chemicals and whether to establish lower reporting thresholds for them. While such determinations would be part of a future rulemaking activity, the Department believes that lead, or any other potentially toxic metal, should not be added to the list of PBT chemicals unless EPA can demonstrate that (1) the metal bioaccumulates in a variety of plant and/or animal species; (2) the metal bioaccumulates progressively within higher orders of an identified food chain; and (3) in species where evidence of bioaccumulation is available, the metal causes toxic or adverse effects.

During the interagency review process, DOE noted that evidence presented by EPA for cobalt and vanadium for listing as PBT chemicals failed to meet at least two of these three criteria.