

March 18, 1999

OPPT Document Control Officer (7407)
Office of Pollution Prevention and Toxics
Environmental Protection Agency
401 M St., SW, Room G-099, East Tower
Washington D.C. 20460

Docket Control No: OPPTS-00255

Dear Sir or Madam:

This letter contains the comments from the Council of Great Lakes Industries (CGLI) regarding EPA's proposed Multimedia Strategy for Priority Persistent, Bioaccumulative, and Toxic Pollutants (the National PBT Strategy or National Strategy).

Who We Are

CGLI is an association of U.S. and Canadian industries and businesses with significant investments and facilities which produce products or provide services in the Great Lakes Region. CGLI's more than two-dozen members represent the manufacturing (forest products, chemical, automobile, vinyl products, metals), utilities, transportation, natural resource, services and trade sectors. These interests provide wide in-sight into environmental and sustainability issues. CGLI is a partner with the World Business Council for Sustainable Development.

CGLI works closely with the Chemical Manufacturers Association and the American Forest and Paper Association. These organizations are also filing comments regarding the National PBT Strategy. Their comments include many technical references which CGLI has assisted in developing, or with which CGLI is familiar and agrees. Rather than repeat those comments and references in this letter, we would like to acknowledge and incorporate these comments by this reference. The focus of the CGLI comments which follow is to help EPA develop a successful National PBT program. We offer our experience as a long time participant in the development of regional PBT policy operating under the Canada-U.S. Great Lakes Water Quality Agreement.

CGLI's PBT Experience

CGLI has substantial experience in issues relating to persistent bioaccumulative toxic pollutants (PBTs). Our representatives have contributed substantially to PBT policy

efforts in both the U.S. and Canada. CGLI participated in the International Joint Commission's efforts to define PBTs and devise management strategies through the work of the Virtual Elimination Task Force. Once the Task Force work was completed, CGLI worked closely with U.S. EPA and Environment Canada on the development of a PBT implementation strategy for the Great Lakes Basin. We serve as partners of both agencies for the task of implementing the Great Lakes Binational Toxics Strategy (BNTS). In this role CGLI is promoting awareness of the Strategy within the Great Lakes industrial community, providing information regarding potential PBT sources, cataloging PBT release reduction success stories and evaluating the significance of remaining sources.

The Need for Sound Basic PBT Program Elements

Identified during the binational PBT management deliberations described above was a chemical management strategy which recognized the need for:

- Specific PBT selection criteria,
- A chemical listing process,
- Prioritization of selected chemicals for which special management options are to be developed,
- Use of a wide range of available management options (including end of pipe treatment),
- And, an environmental impact feedback loop which will allow managers to determine, on a risk basis, when PBT quantities are below levels of significance and not of concern.¹

At a minimum, EPA should include these elements for the success of any National PBT Strategy which it seeks to implement. Strategies which short circuit these elements will prove to be overly restrictive and fraught with the establishment of unattainable goals or mandates. Unfortunately, the BNTS development process did not include the selection criteria or selection process elements included in the above list.

In addition to substance listing processes, program focus is also important. As explained later in these comments, programs built solely around "virtual elimination" or "zero discharge" ideology block attainable and reasonable forward progress.

The Need for Careful PBT Selection Criteria

¹ IJC Virtual Elimination Task Force Final Report, 1993

The very nature of PBT regulation regimes calls for stringent controls or measures which challenge the ability to meet the goals and targets set for these materials. To insure success, regulators must set PBT selection criteria carefully so as to not sweep more materials than necessary into these special programs. A long chemical list will become unmanageable when it comes time to seek the ambitious reductions in levels which PBT regulation programs demand.

In addition, not all chemicals of given persistence, or even toxicity, are created equal in terms of the ecological risk. Certain pesticides, for example, may exhibit persistence or specific toxicity characteristics which meet FIFRA registration guidelines and can be applied and used safely, but which would fail a PBT screening test if the criteria are not set properly.

In other cases, natural occurring substances - notably metals - have become branded as PBTs when hard and fast criteria are rigidly applied to substances. Naturally occurring substances, especially those for which toxicity characteristics are dependent upon chemical form or bioavailability, must be regulated with these characteristics in mind. In other words, PBT programs must include the necessary flexibility to make them "substance appropriate."

In light of the above, EPA should establish a reasonable set of PBT selection criteria and provide available off-ramps for substances which may fit selected criteria but which, when handled and used within definable guidelines, will not represent significant environmental or public health risks.

The National Strategy, as proposed, calls for use of EPA's Waste Minimization Prioritization Tool (WMPT) as the primary screening criteria to determine which materials will be listed as PBTs. In addition, EPA has selected previously listed materials from the Great Lakes Binational Toxics Strategy (BNTS) as National Strategy priority substances. Neither approach is adequate or appropriate for a newly launched National PBT Strategy. The WMPT, designed as a ranking tool for waste minimization purposes is much too arbitrary for National PBT Strategy use. As for the BNTS substances, no adequate screening study was done prior to the listing of BNTS substances. Chemicals placed on the Level I and Level II lists were selected on the basis of their previous status within other U.S. and Canadian Great Lakes programs. No independent screening criteria were established or used.

CGLI requests that EPA take in to account the policy significance of a PBT listing effort, the need to establish a workable program, the need for a risk based Strategy, and the need

for flexibility regarding when to list a substance as a PBT. Accordingly, CGLI suggests that initial screening criteria for PBTs be set as:

- Those substances with a BAF/BCF exceeding 5000,
- A half-life of six months in water (one year in soil),
- And, toxicity associated with unmanageable risk.

A chemical should meet not just one, but all three of the criteria. And, provisions must be made to recognize that some substances may meet these criteria but may not pose environmental risks significant enough to be branded as a PBT and regulated accordingly. Case by case evaluation provisions should be made available for these materials.

The Basis for PBT Management Strategies

EPA has stated objectives of the National PBT Strategy as:

- "...further reduce risks to human health and the environment from existing and future exposure to priority persistent, bioaccumulative, and toxic (PBT) pollutants."
- and "...to identify and reduce risks to human health and the environment from current and future exposure to priority PBT pollutants."

CGLI agrees that this is the proper focus for the program. The emphasis must be placed on risk.

Some persons active in PBT management strategy debates advocate virtual elimination and/or zero discharge concepts. These, of course, are centerpieces in the PBT management strategies being implemented in the Great Lakes Region. This experience has taught us that hard line zero tolerance approaches using impossible targets such as "zero" discharge and even "virtual" elimination quickly polarize interest groups, paralyze parties attempting to meet these non-definable targets, and stymie government agencies who attempt to evaluate PBT reduction progress and allocate scarce resources to provide for their most efficient use. Without definable, measurable, attainable goals, objectives, and criteria, forward progress is slowed, resources can be wasted, and it becomes impossible to determine when progress has been made, or the job is done.

CGLI strongly urges EPA to continue to build the National PBT Strategy on a basis of risk, using finite, scientifically established, peer reviewed, substance appropriate criteria compatible with worldwide PBT standards and definitions. EPA should reject the call to label this National Strategy using the Great Lakes virtual elimination rubber stamp.

How do we Know When We're Done?

Tracking progress towards PBT reductions in the environment and especially in discharges can be a challenging task. Very substantial progress has been made in analytical detection techniques. We now measure the presence of a wide variety of substances at very low concentrations. However, the push to reduce PBT levels continues to challenge even these detection limit capabilities. This situation presents the double edged dilemma of “how do we handle data sets which contain all or mostly “non-detect” (ND) test results” and, “when are we satisfied that PBT levels are low enough?”

First, EPA must develop a suitable policy for handling data sets comprised mostly of non-detects. Current common practice, and guidance from EPA, has led to the use of one-half the detection limit as a possible PBT level of presence in samples for which NDs are reported. The use of the half detection limit convention is “required” if the source being tested has ever had “hits” in the past. This practice is much too inflexible and most probably overstates PBT presence. When additional data (biota testing) also produces ND results, there is every reason to believe that actual levels are much below the half detection limit point, they may even be “zero.” Or, if the substance has not been reported previously from the source tested, it should not be necessary to presume presence unless a documented reason to do so has been identified.

Within the context of PBT management strategies, a solid policy for dealing with ND data sets is crucial. As mentioned above the nature of PBT management strategies has led to the desire to track very small quantities of certain chemical substances. If one-half the detection limit practices are required for the reporting of releases, the accomplishment of progress cannot be demonstrated, and most significantly, resources will continue to be expended trying to “chase down the last molecule.” This leads to nonproductive pursuits and wastes resources needed to address other ecosystem protection priorities.

Canadian agencies consider NDs as “zero” for computational and substances tracking purposes. EPA needs to adopt a similar reasonable policy.

The Characterization of PBT Sources

In the National Strategy proposal, EPA has said that the “...PBT strategy may also be able to identify source categories by use or release of chemicals or chemical groups.” Once “earmarked,” it will be possible to “tackle PBT problems on a sector basis.” CGLI cautions against this approach which can lead to a barrage of theoretical conjecture.

For instance, in recent attempts to identify sources of octachlorostyrene (OCS) as part of the BNTS implementation work, EPA Region 5 has suggested an association approach to naming “suspected” industrial process sources. Having associated OCS with hexachlorobenzene (HCB) in sediments, Region 5 suggested that several industrial processes release OCS because of data associating the “source” with HCB. The Region has even speculated on the quantity of OCS which might be released by various processes, all without confirming analytical data connecting many of the alleged sources to the compound. In addition, Region 5 has proposed certain chemical conditions which they suggest may produce OCS. Again, no analytical data has connected the proposed “source” to the chemical. CGLI terms these proposed sources “theoretical sources.” We do not believe that the use of such theoretical approaches constitutes proper policy making or Strategy design processes.

CGLI urges EPA to avoid the use of theoretical source naming practices when identifying PBT sources. Only documented associations should be used for these purposes.

Harmonization With Other EPA Programs

Another stated objective of the National PBT Strategy is to “...create an enduring cross-office system that will address the cross-media issues associated with priority PBT pollutants.” CGLI agrees that coordination between the National PBT Strategy and other programs is essential. A primary conclusion, reached from the CGLI work with industries on the BNTS, has been that the lack of coordination with mandated regulatory programs has served as a disincentive for participation in the voluntary Strategy. In addition, the BNTS listed substances and the challenges relating to these materials are not consistent with the related compounds which are being aggressively regulated by other branches of EPA.

For example, the BNTS calls for reductions in dioxins, HCB, OCS and benzo(a)pyrene (BaP). Most industry sectors are currently participating in maximum available control technology (MACT) standards setting processes as mandated by the Federal Clean Air Act. These same compounds are among the substances being regulated by the MACT programs. However, the specific compounds are not necessarily being singled out or tested for. MACT surrogates or categories of substances are the target materials for which data is being collected and reductions sought through aggressive and very expensive programs.

This situation is characterized by the coke oven sector where the surrogate is “coke oven emissions.” Although EPA has characterized these gases, coke oven operators do not have readily available data on the release of the individual constituents. They are therefore not in a position to easily associate the reductions in emissions of these compounds which will be realized through MACT compliance programs with BNTS challenge targets. EPA must equate the reductions accomplished through these programs with PBT program goals and objectives to provide more accurate tracking of PBT substance reductions and encourage voluntary PBT program participation.

CGLI is pleased to provide these comments and is most willing to work with EPA on PBT management programs. We stand ready to answer questions, provide additional information, or meet with the Agency on this topic.

Sincerely,

George H. Kuper
President and CEO