



20 August, 1999

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Via: Kathleen Bailey, DSO
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Dear Sam and Tom:

Thank you, and the National Advisor Council for Environmental Policy and Technology's Standing Committee on Sectors, for the opportunity to informally comment on behalf of the Council of Great Lakes Industries on the four draft substance plans under the new U.S. PBT initiative. We have divided our response into 'general comments' – that apply to all four action plans – in this letter with substance specific comments attached. The views expressed result from inputs of CGLI members and other industry representatives.

General Comments:

1. There is a real need for the application of a sound set of substance selection criteria. Including substances in a program because those substances have appeared on somebody else's list is poor policy. We suggest considering adopting the NAFTA/CEC sound management of chemical selection criteria. The CEC criteria are consistent with those developing as a global consensus for addressing PBT chemicals.
2. Second and more important, there is an urgent need to include a substance de-listing procedure. The Strategy goals culminate in reducing human and ecosystem risks from listed chemical exposure. When that has been accomplished, we need to be able to remove a substance from the list - or at least to some "inactive" status. The major problem we've faced so far in the Great Lakes Binational Toxics Strategy (BNTS) is achieving closure. Methodologies for doing so need to be clearly outlined at

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the outset. Doing so will necessitate the identification of de minimis risk levels for listed substances. It is unreasonable to expect that risk levels will ever, or can, reach zero. Therefore, an achievable endpoint must be established. Procedures are needed to accomplish this task. Ideally, they should be no more rigorous than the criteria used to list a substance!

3. It is very important to the success of a voluntary program that realistic quantity reduction targets are articulated as opposed to vague objectives like virtual elimination and other undefined objectives. Timetables to achieve quantity reduction targets under a voluntary regime are also critical. However, before these important program elements can be established the current status, as reflected by existing and quantified risk levels, of the selected chemicals must be clearly established and stated. This has not been accomplished in the drafts to date.
4. We have found it very important to utilize an operating model such as the decision tree analysis we developed for OCS. This model provides a logical progression of actions leading to a conclusion while maintaining the participation of all parties.
5. We have also found it important to ensure a comprehensive, verifiable, inventory is developed early in the process. This inventory should include a re-analysis of the environmental trends data on the substance using first order kinetics. Unfortunately this labor intensive data management activity was not included in EPA's budget for the BNTS and therefore had to be undertaken using other sources. The National Action Plan should provide resources for this analysis.
6. Financial and time commitments from non-governmental stakeholders can be quite significant and should not be automatically assumed to be forthcoming.
7. Success requires extensive facilitation to achieve consensus amongst stakeholders by U.S. EPA staff. CGLI has found even within the industry stakeholder group cooperative efforts are sometimes restricted by competitive pressures (and anti-trust regulations). So consensus among historically opposed stakeholders requires specific skills and sensitivities. Unfortunately very few EPA staffers have this type of orientation which means that an investment in EPA staff development is essential.

Within the Binational Toxics Strategy we've operated under the guidance of government leaders to do "the doable". We are not setting out to chase molecules, but are pursuing reasonable and practical methods to reduce real quantifiable risks from these substances from our eco-system.

Please understand: we have serious concerns about your moving forward with the four action plans in the absence of a strategy that addresses the above general comments. Indeed, we thought some changes to the overall approach might be forthcoming after the Spring '99 comment solicitations. Nevertheless, specific comments on the four substance plan draft are attached.

Thanks for seeking our comments early in your planning. They are offered in the hope that your good efforts will result in a sound strategy that gets the results we all want. We are always available to respond to any queries you may have.

Sincerely,

George H. Kuper
President and CEO

Attachments (4)

1. CGLI's Specific Comments Regarding the Draft PBT National Action Plan for Level 1 Pesticides
2. CGLI's Specific Comments Regarding the Draft PBT National Action Plan for PCBs
3. CGLI's Specific Comments Regarding the Draft PBT National Action Plan for Octachlorostyrene (OCS)
4. CGLI's Specific Comments Regarding the Draft PBT National Action Plan for Alkyl-lead

cc: Robert C. Stempel, Chairman, CGLI
CGLI Responsible Use Steering Committee
Gary Gulezian, G. L. National Program Office, USEPA – Region 5

**Specific Comments Regarding
the
Draft PBT National Action Plan
for the
Level 1 Pesticides**

2.0 PBT Chemical Profile

The discussion regarding environmental concentrations in the last sentence of the second paragraph needs to be supported with documentation. The extent of the “contamination” must be put in perspective for this comment to have any validity.

3.1 Relevant Government Performance and Results of 1993 (GPRA) Goals

The discussion in the next to last, and last, sentences in the first paragraph, tie Level 1 pesticides to broader GRPA goals. These two pesticide programs are separate initiatives with differing goals and should not be linked.

CGLI agrees with the concept of accomplishing National PBT Strategy goals through administration of existing programs. However, the restatement of GPRA Goal 2 - Clean and Safe Water in this section, implies that more than 5 percent of the population is served with water which contains Level 1 pesticides at levels which do not meet drinking water standards. We have not seen information which suggests that this is the case. This inference should be removed.

Similarly, the restatement of GPRA Goal 4 suggests that pollution prevention measures, specifically the “migration to lower-risk pesticides and pest management practices,” can be applied to Level 1 pesticides. Since the Level 1 materials are no longer manufactured or used commercially, this application does not apply.

3.1 Goal for the Level 1 Pesticides

The word “eliminate” at the beginning of the fourth bullet should be changed to “reduce.” It is not realistic to call for the **elimination** of atmospheric transport within the foreseeable future.

4.0 Strategic Approach

As stated above, coordination between the National PBT Strategy and existing

Agency programs is laudable. However, care is need to restrict the discussion to Level 1 pesticide applicable elements. The discussion in the Draft occasionally wanders beyond Level 1 substance specific compounds.

4.2 Non-point Source and Reservoir Strategies

It is not necessarily true that the magnitude of Level 1 pesticide residues in samples collected for the National Sediment Quality Survey Report to Congress is “generally representative of the magnitude of the contamination of sediments with pesticides.” (End of the fourth paragraph in this section.) The National Sediment Report concentrated on known “hot spots.” Many sediment accumulations are not “hot spots” and would not fit this profile.

The discussion regarding dieldrin contaminated wells at the end of the fifth paragraph needs to be tied to the more that 5 per cent of wells which the GPRA goals suggest do not meet drinking water standards, - or the link to the GPRA goal should be removed.

5.0 Measures of Progress

The second bullet in the list of possible measures of progress needs to be reworded to: “There is a significant decrease in the amount of Level 1 pesticides disposed”.

The last portion of the fourth bullet (“95% of community drinking water supplies meet pesticide standards, and 75% of the nation’s waters support healthy aquatic communities”) should be deleted. It is not limited to Level 1 pesticides.

For those goals which relate to “decreases” in collection, spill, disposal, etc. a comparative baseline is needed. Likewise a significance value which relates to a de minimis level of risk should be established. Otherwise, an attainable endpoint will never be reached.

6.2.1 State Clean Sweep Programs

The table presenting the “Preliminary Estimates of PBT Pesticides Collected by Clean Sweep Programs from 1988 through 1997” needs more explanation in either the text, headers or both. What is the parameter for which the middle column is the average percent? Is the “Total Amount” in the last column the total collected, the estimated inventory, or something else?

The first bullet under the paragraph following the table needs explanation too. “Six states account for half of 12 million pounds” of what?

The discussion which follows regarding disposal, mixes experiences and challenges relating to non Level 1 pesticides with the Level 1 materials. The portion dealing with non Level 1 pesticides should be removed to prevent confusion.

6.5 Exposure Reduction Activities

In addition to the risk of exposure and the current data on concentrations of Level 1 pesticides in fish (information to be provide to the public), EPA should also provide historic trend data. This will show progress achieved and lead to determination of relative and residual or 'de minimis' risk. It is unlikely that we will be able to get below these levels. Zero risk is not an attainable target.

7.1 Reporting Procedure

When environmental concentration trend data is reported, it needs to be presented as data responding to first order reaction rate kinetics. These log plots will show the trend decreasing steadily, within the confines of the reaction dynamics which are occurring. The linear plots, usually used, give the incorrect impression that concentrations are "leveling off" or that the decreasing reduction rate is something to be concerned about. This of course is not the case. The reduction rate is a function of the starting concentration which is continually decreasing. Only a first order rate presentation protocol can accurately depict media status and program response.

**Specific Comments Regarding
the
Draft PBT National Action Plan
for PCBs**

2.1 Description

The last sentence in the first paragraph has been oversimplified. Specific fuels and conditions would have to be present to produce PCBs via “open burning.” This general statement should be qualified to correct the impression that every open flame can produce PCBs.

2.5 Sensitive Subpopulations and Geographic Areas

The discussion in the first paragraph should acknowledge the fact that PCB levels in the environment, including fish, have declined and are continuing to decline - thereby reducing risks.

The first sentence in the second paragraph should be reworded to say
“main staple of their diets may be at increased PCB exposure risk.”

Further down in the second paragraph, CGLI questions the strong association made between fish consumption/PCB intake and “developmental deficits and neurologic problems” in children. These studies have been heavily criticized and not convincingly replicated. In fact, some can not be replicated since fish PCB levels have declined to levels significantly below those experienced by the study cohorts. The characterization of what is know has been made too strong in the draft discussion It needs to be described in terms of observations made rather than as solid documentation.

2.7 Source/Sector Links with Other Chemicals

As established in the early sections of this report, most PCBs exist or are in use because of the use of electrical equipment. CGLI does not agree that use of PCB containing equipment (electrical equipment) establishes “links” to the potential for releases of other PBTs. There is NO relationship between use of electrical equipment and other industrial processes. A manufacturing facility using PCB containing equipment may or may not be involved in processes which might result in release of some other PBT. The source/sector links table is irrelevant.

4.0 Strategic Approach

The discussion regarding PCB sources in paragraph two, needs to give comparative information regarding relative contributions from the various “sources.” Some of those suggested may be large, others extremely small and perhaps insignificant. The Action Plan should concentrate on significant sources.

4.1 Regulatory Program

CGLI agrees that there is no need for extensive changes to the PCB regulatory program.

4.2 Coordination with States, Tribes, Other Federal Agencies and the International Community

CGLI supports the cooperative approaches described in paragraph one. They will serve as both debottlenecking and incentive measures.

4.4 Research Strategies

The “newer studies ... showing neurotoxic, immunological and hormonal effects at lower levels than previously observed” mentioned in the third paragraph should be cited as references.

4.5 Non-point and Reservoir Sources

First paragraph. The listed NPL sites “which includes the most serious hazardous waste sites in the U.S.,” are not necessarily “serious” because of the presence of PCBs. This statement is misleading.

5.0 Measures of Progress

The “minimal violations” mentioned in the “possibilities list” may or may not relate to PCB release risks. Many of the “violations” which PCB equipment operators are often cited for relate to labeling or recordkeeping infractions which have nothing to do with release potential.

The bullet relating to removal of fish consumption advisories and drinking water supplies implies that more than 5% of the Nation’s water supplies exceed PCB standards. Is this true? If so, it should be documented?

6.1 Stakeholder Involvement

The incentives discussed in the second paragraph under **Utilities** are important if voluntary phaseout is to be encouraged.

**Specific Comments Regarding
the
Draft PBT National Action Plan
for Octachlorostyrene (OCS)**

1.0 Background

This discussion begins, in the first paragraph following the list of bullets, with the assumption that risks for each of the PBT chemicals is unreasonable and must be reduced. It says nothing about characterizing the risk, on a chemical by chemical basis, to establish a risk baseline - or determine if the risks are in fact unreasonable. Each of the Action Plans should depart from a point of risk characterization and quantification.

Also, in this first paragraph under the bullets, a list of actions is provided in the last sentence. Why is “enforcement and compliance” the first action listed? The PBT Strategy is to be initially a voluntary program. It seems that these actions should be last resort and appear at the end of the list.

In the second paragraph following the bullet list, OCS is identified as a PBT for which an Action Plan is being prepared under the National PBT Strategy because it was already on the Great Lakes Binational Toxics Strategy List. In section 2.6 of the draft Action Plan it is mentioned that OCS is listed as a BCC under the GLI, and as a “recognized pollutant” in the Lake Superior and Lake Ontario LaMPs. Just because a substance is listed under some other program does not necessarily mean it should be “listed” within the National PBT Strategy. Separate, independent, listing criteria are needed for the Strategy.

2.1 Description

The second sentence in the first paragraph should be reworded to say: ... “octachlorostyrene has been reported as a possible inadvertent by-product...”

The last sentence in the same paragraph should read: ... “these process may be contaminated with OCS.”

Again, in the second paragraph it is assumed that the risk associated with OCS releases is unacceptable. No mention is made of characterizing risk levels. This must be done.

2.2 Environmental Impacts

Risk characterization needs to become a part of the first paragraph in this section. In addition, the first sentence should be reworded to read, “The impact, if any, of OCS on the ecosystem....”

The second paragraph provides reference to Sarnia area sources to the St. Clair River. In comments regarding the February 17, 1999 draft OCS and HCB Inventory Reports for Ontario, CGLI reported that Dow Canada personnel have informed us that “no OCS release is occurring as a result of any continuing operations at the site. Effluent monitoring from the plant site and the Scott Road landfill has produced detectable OCS results in only one of the 52 weekly testing events during 1998. The calculated OCS release rate based on this measured concentration was reported as 0.0001 grams/day. This very small release rate has been shown to be the result of on-site residuals, not from contemporary production activities.”

2.4 Sources and Sectors

The discussion in the first paragraph should reflect the site and process specific nature of the association of OCS with other chlorinated species such as dioxins or HCB. It should also point out that the ratio of OCS to the other chlorinated species is likely to vary between processes and locations using the same processes. Release inventories calculated by using “standard” ratios are subject to question.

In comments filed by CGLI regarding the U.S. OCS Challenge Report prepared for EPA under the auspices of the Binational Toxics Strategy, Mr. Larry LaFleur of the National Council of the Paper Industry for Air and Stream Improvement, explained why “standard” ratios should not be used. Those comments read as follows:

“A fundamental premise of modern synthetic chemistry is that one needs to understand the basic reaction mechanism before one can reliably predict products. Even if one knows the proper mechanism, the appropriate reaction conditions (e.g., temperature, catalyst, sufficient time, proper solvents, suitable concentrations, etc.) must be present in order for the reaction to proceed. Many reactions which occur in one solvent, such as free radical chlorination in aprotic solvents, would be suppressed in a protic solvent such as water. Finally, the necessary starting materials must not only be present, but must be present in proportions conducive to the reaction. In many respects, synthetic chemistry is the science of successfully optimizing the various

combinations of these variables to achieve a specific, desired outcome.”

Therefore, any connection drawn between OCS and other organochlorine releases must be done only after case-by-case review and understanding of reaction specifics.

The next to last sentence in the first paragraph should be reworded to read: “... does not necessarily imply current or previous sources of OCS.”

2.6 Current Activities

Regulations

Second paragraph. The revision to the TRI reporting threshold for OCS is only a proposed rule at this time. The discussion here which expresses certainty that the lower level will be promulgated is not appropriate.

Third paragraph. The discussion of the “suspected” endocrine disruptor designation for OCS stretches much too far when it describes research “to demonstrate a relationship between exposure to **suspected** endocrine disrupting chemicals and associated adverse effect in humans.” . As EPA has moved ahead with development of its "Estrogenic Substances Screening Program," it has been sensitive to avoid labeling substances as endocrine disruptors or suspected endocrine disruptors. Importantly, the screening program has not yet been fully developed, not to mention fully implemented. Unfortunately, this sensitivity is not reflected in the OCS Action Plan, but should be. At the least, the correct statement is that the suspected substances have been slated for testing under EDSTAC. To conclude that a “suspected” substance is responsible for an endocrine related impact is premature.

Great Lakes Binational Toxics Strategy

The stakeholder comments referred to in the last sentence of this paragraph include the CGLI report to the OCS Workgroup. In that report CGLI identified several listed or suggested “sources” which in fact no longer exist. Therefore, rather than “uncovering new information regarding the likelihood of potential sources to release OCS” CGLI provided evidence that some sources should be “delisted.”

Localized Contaminated Site Remediation

See comment above regarding Dow Canada Sarnia site and Scott Road Landfill releases.

2.7 Source/Sector Links with Other Chemicals

For the reasons explained by the quote from Mr. LaFleur above, the first and second sentences in the first paragraph should be reworded, and a new sentence should be inserted between, to read: “There can be similarity among the mechanisms of formation of HCB, chlorinated dioxins, and OCS. However, specific process characteristic examination is needed to confirm favorable formation conditions. Because of this potential similarity, these pollutants may be emitted from some of the same source sectors.

3.1 Relevant GPRA Goals

The description of Goal 2 Clean and Safe Water suggest that 5% of the population is served by water which does not meet drinking water standards for OCS. This misimpression should be corrected.

3.2 Goals for Octachlorostyrene

The first paragraph should be reworded to read “Considering the present lack of understanding concerning sources”

CGLI supports goal number 1, the collection of sufficient monitoring data to determine if further OCS action is needed.

In goal number 2, risk characterization work needs to be added to the information which is to be collected.

4.0 Strategic Approach

CGLI strongly supports the “key component” described in the paragraph titled “Opportunities for Integration with BNS Efforts, Sectors and Work on Other PBTs,” which relates to understanding the relationship between OCS and other Level 1 PBTs. Assumptions regarding relationships should not be made. Actual relationships must be observed and confirmed.

6.0 Key Actions

Several of the actions described in the bullets under the heading “Information Collection & Voluntary Initiatives through the BNS” may have already been concluded. The National Strategy must make use of the BNS findings and not repeat this work. Accordingly, Table 1 at the end of section 2.4 should be updated using the information which has been filed by CGLI within the report to the BNS OCS Workgroup.

8.0 References

The authors of this Action Plan are to be commended for documenting claims

and citing references throughout the paper. This important element was left out of the other National Strategy Action Plan papers.

**Specific Comments Regarding
the
Draft PBT National Action Plan
for Alkyl-lead**

This paper is well done. CGLI has no line by line comments. The authors should be commended for producing an Action Plan which:

- Is risk based.
- Recognizes that the highway motor fuels BNS Challenge goal has been met.
- Sets realistic program goals for the pursuit of lead free aviation gasoline.
- Seeks voluntary action, as separate programs, for other leaded fuel uses.

CGLI recommends that these approaches be applied to the U.S. BNTS Challenge Report for Alkyl-lead. The BNTS highway motor fuels challenge goal should therefore be declared as having been met.