



December 15, 2005

**Mobilizing/Coordinating Industry BNS Support  
Project No. #GL9655501-0**

**PROJECT FINAL REPORT**

**Background and Summary:**

The Council of Great Lakes Industries (CGLI) worked successfully in partnership with U.S. EPA, during the 2004-2005 project year, to implement the Great Lakes Binational Toxics Strategy (GLBTS). This important work has been made possible through a grant associated with Project Number GL 9655501-0 and direct support from both CGLI members and non-member industry stakeholders.

Pursuant to project objectives, CGLI has maintained GLBTS industry stakeholder contacts, continued awareness efforts, recruited new GLBTS and substance workgroup participants, continued work on source characterization, tracked reduction progress, identified opportunities and success stories, studied U.S. AOC sediment issues and the application of risk-based decision-making criteria, and assisted the Integration Workgroup in substance management assessments for Level 1 Substances. This report summarizes these efforts and the findings from this work.

**Project Accomplishments:**

**Task 1: Continued GLBTS Workgroup Support and Awareness Efforts**

Since project inception in October 2004, CGLI has continued GLBTS support activities as follows:

- 1) Conducted awareness initiatives to recruit and retain industry representatives for participation in GLBTS meetings, activities, and events through monthly industry stakeholder conference calls, summaries in CGLI newsletters, and direct contacts. More than 20 conference calls, 12 newsletters, 10 project summaries and at least 50 direct contacts were made during the project year.
- 2) Coordinated industry participation in stakeholder, substance workgroup, and integration workgroup meetings. Eighteen industry representatives participated in the December 2004 Stakeholder and Integration Workgroup meetings, 10 in the March, 2005 meeting, 12 in the May 2005 meetings, 10 in the September 2005 meeting, and 15 in the December 2005 meetings.

- 3) Coordinated industry participation in substance review processes. CGLI collected and submitted comments on each version of the dioxin, HCB, B(a)P, OCS, and pesticides Level I substance reassessment draft reports during the project year.

### **Task 2: Broaden Industry Participation**

CGLI continued to build industry participation in GLBTS activities throughout the project year. Our industry stakeholder list has again been revised and new contact names added. A few have been removed as a result of retirements or transfers of personnel to jobs in unrelated areas.

**New contacts added this year** have been in the, steel, foundry, chemical, pesticides, carpet manufacturing, electrical equipment manufacturing, electric utilities, treated wood and pulp and paper sectors. New sectors from which representatives were added include: foundry, treated wood, and carpet manufacturing.

At the end of the project year, CGLI had established contacts with representatives from the pharmaceuticals, personal care products, soaps and detergents sectors. These persons have expressed intent to participate in GLBTS activities during the 2005-2006 project year.

**Registered industry stakeholder representatives receive regular (monthly) briefings** regarding Strategy activities, Challenge Goal status, and Workgroup projects or needs. CGLI continued to feature GLBTS topics and activities in newsletters and information bulletins. Partner organizations reprinted some of these in their own communication instruments that receive even broader distribution.

**The GLBTS page on the CGLI website** was updated and improved to make Strategy information available at: <http://www.cgli.org/binationalToxics/binationalPROJ.html>. The site also includes a links to the Binational.com and GLIN sites providing additional access to GLBTS information and activities.

**Recent examples of the GLBTS highlights** published each month in CGLI member updates follow.

#### **December 2004**

The GLBTS stakeholder forum November 30 in Chicago had a new format with only a small portion of the morning spent in a plenary session with a single keynote speaker – Dr. Dan Meyer of the American Dental Assoc. talking about mercury, management practices related to dental amalgam – and reports from substance workgroup chairs. The rest of the day was devoted to individual workgroup discussion. The format was endorsed by the stakeholders as allowing more time for important face-to-face discussion on substance issues.

The target for completion of the substance management assessments has been established as the June Binational Executive Committee meeting. A lot of work is yet to be done and the current work schedule will constrain the time available for stakeholder

comments. Industry stakeholders were pleased to find our request granted and have the dioxin workgroup thoroughly discuss the comments submitted by CCC, CGLI and NWF on this critical first “pilot” assessment report. A new draft is expected in February based on the comments.

The Integration group meeting on 1 December included workgroup reports, and an update on the dioxin and OCS pilot management assessments. Dale Phenicie reported on the SOLEC Chemical Integrity workshop. Luke Tripp of the CEC and Angela Bandemehr of the EPA office of International Affairs discussed international toxic reductions. The CEC is extending an overture to GLBTS participants to work with the CEC on similar types of initiatives. We responded that the participation might be possible but separate from the GLBTS.

The next set of meetings will need to intensely focus on the management assessments and we asked that they allow for workgroup preparation beforehand. The governments will review the timetables and may reschedule the next set of meetings. The next integration workgroup meeting is currently scheduled for 16 February 2005 in Windsor; and, the next stakeholder forum is currently scheduled for 17 May 2005 in Toronto.

**September 2005**

The successful GLBTS program is being evaluated as it nears its 10 - year completion date in 2006. It will determine “where we go from here” in the program. Much more was heard at the GLBTS Integration meeting the next day as the program managers seek a delivery mechanism for the US Collaboration recommendations, with a way to implement the Canadian focus on competitiveness and environmental sustainability and accomplish new goals that come from the revision of the WQA. Those involved with the program said the two countries look to the Region to continue to lead on chemical issues. Possible new focuses mentioned were additions to the level 1 chemical list, moving up of level 2 substances to level 1 status (this would put them on a virtual elimination track), addition of a green chemistry and product ingredient focus, and extended producer responsibility. The future of the program will be the topic of the Integration meeting in December.

CGLI’s continued work on chemical release inventory and in-use data has assisted the substance workgroups in gaining additional reductions. For example:

**PCB equipment use** was an area for focus for CGLI during the 2004-2005 project year. To obtain a sense of “where we are” regarding equipment retirement verses the GLBTS baseline, information from the latest version of the EPA transformer inventory data base was compared with data presented in the GLBTS 2003 progress report. Results are show in the following table and confirm a 90 percent reduction.

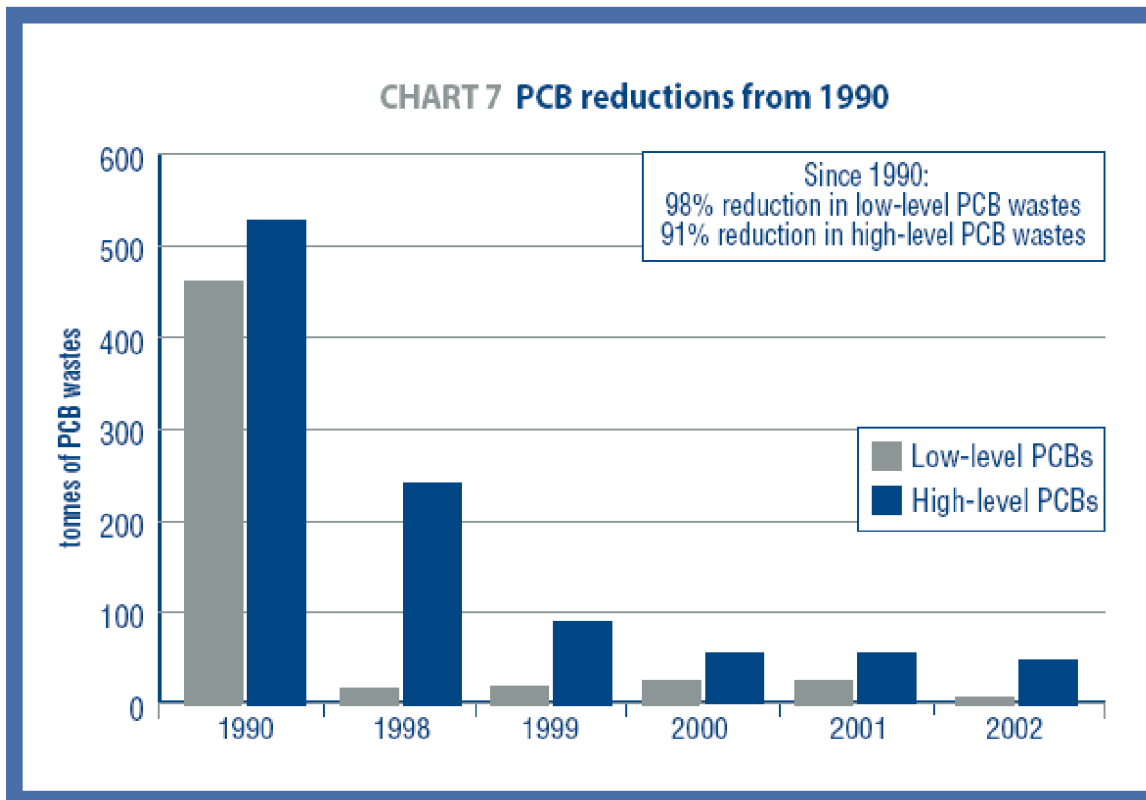
<b>U.S. EPA Transformer Inventory July 2004</b>	<b>U.S. National</b>	<b>Great Lakes States</b>
Number of facilities reporting	3,590	1,175
Number of transformers reported	22,340	8,047
PCB fluid weight – kg	139 million	101 million
PCB fluid weight – lbs	306 million	222 million

<b>GLBTS 2003 Progress Report</b>		
Number of transformers – 1994 baseline	200,000	
Number of transformers estimated for year 2000 in 2003 GLBTS Progress Report	20,000	

CGLI has also assisted in the design of the Tellus Institute’s efforts to develop a “business case” for the replacement of PCB containing electrical equipment.

**The Canadian steel sector** has made substantial progress in phasing out the use of equipment containing PCBs and disposing of stored PCB waste. In service equipment use has decreased by 53%, storage of high level wastes has been reduced by 98%, and lower level waste storage has been reduced by 91% since 1990.

Details, including a progress chart (chart 7 reproduced below), are found in the Canadian Steel Producers Association Progress Report on the Environment for the Year 2002. Available at: <http://www.canadiansteel.ca/newsroom/reports.html>.



**In Canada, the pulp and paper sector** has largely replaced PCB containing equipment. They did so “years ago.” However, because of the high cost of destruction, and the unfavorable economic conditions for this sector during the past several years, mills have been forced to continue storing these materials. One of the objectives of the Workgroup

needs to be to investigate how to make it more economically feasible for companies to move material out of storage and get rid of it.

**A pair of toxics inventory reporting papers was prepared** by CGLI, U.S. EPA, and Great Lakes Commission authors. These papers were presented at a Philadelphia meeting of the Air and Waste Management Association in June, 2005. This research compared the U.S. Toxics Release Inventory (TRI), the U.S. National Emissions Inventory (NEI) and the Great Lakes Air Toxics Emissions Inventory (GLATEI) reported releases of Level 1<sup>1</sup> and Level 2<sup>2</sup> GLBTS substances. Results are summarized in the tables that follow from the two reports.

The first table – labeled as Table 2 from the Level 1 report – identifies which of the Level 1 substances is reported by which of the inventory programs.

**Table 2: Inclusion of Level I substances in the TRI, GLATEI, and NEI**

<b>Compound</b>	<b>TRI</b>	<b>GLATEI</b>	<b>NEI</b>
Alkylated lead		X	
Benzo(a)pyrene		X	X
Hexachlorobenzene	X	X	X
Mercury & mercury compounds	X	X	X
Octachlorostyrene	X		
Polychlorinated biphenyls	X	X	X
Dioxins and furans	X	X	X
<i>Pesticides</i>			
Aldrin	X		
Dieldrin			
Chlordane	X	X	X
DDT & metabolites			
Mirex			
Toxaphene	X	X	X

The second table – Table 9 from the Level 1 report – demonstrates that inventory quantity results obtained from each of the differing programs can vary widely. Reasons for the variability were found to be related to differing reporting threshold quantities,

<sup>1</sup> Assessing Emission Inventories for Air Emissions of Great Lakes Binational Toxics Strategy Level 1 Substances, Amy Thomas, Edwin Smith, Dale Phenicie, Jon Dettling and Kevin Yam, Air and Waste Management Association Annual Meeting Proceedings, July 2005.

<sup>2</sup>

differing requirements regarding which sources are required to report, and the scope of each reporting program.

**Table 9:** Air emissions of mercury and compounds from the NEI, GLATEI, and TRI (1999)

<b>Air emissions (lbs.)</b>	<b>NEI</b>	<b>GLATEI</b>	<b>TRI (Hg)</b>	<b>TRI (Hg comp.)</b>
Total	234,607	61,570	20,652	5,897
Point source	149,375	44,954		
Area source	85,232	2,245		
On-road mobile source		10,692		
Off-road mobile source		3,680		

A third table – Table 14 from the Level 1 Report – highlights the strengths and limitations found in each of the inventory reporting programs, including the factors that result in differences in reported release quantities, and from the standpoint of usefulness in tracking Level 1 releases for GLBTS Challenge Goal assessment purposes.

**Table 14:** Strengths and limitations of the TRI, GLATEI, and NEI

<b>Inventory</b>	<b>Strengths</b>	<b>Limitations</b>
<b>TRI</b>	National scope	Consistency and reliability of data
	Multiple years of data	Limited to point sources
	Multiple environmental media	Includes only sources above a threshold
	By source category	
<b>GLATEI</b>	Multiple source types	Regional scope
	Multiple years of data	Inter-annual consistency of data
	By source category	Completeness of sources included
	Consistent annual reports	
<b>NEI</b>	National scope	Single year of data (to date)
	Multiple source types	Not comparable to previous national inventories
	By source category	Consistency and reliability of data

The Level 2 report demonstrated that air release sources are the most significant from the standpoint of releases of this set of substances. The following table – labeled Figure 1 in the Level 2 report – illustrates this conclusion.

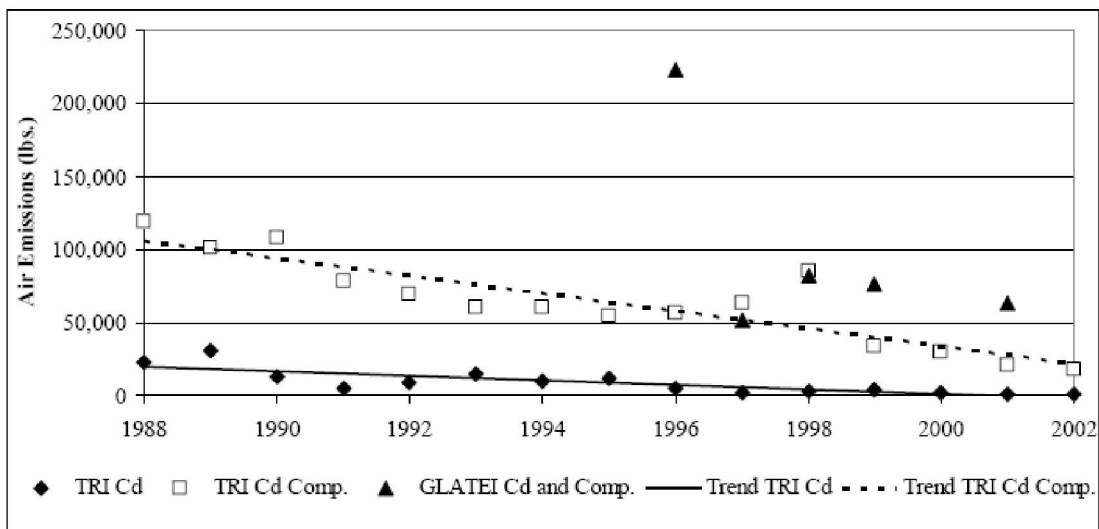
**Figure 1: TRI air and water emissions of GLBTS Level II substances 1996-2002 yearly average**

Compound	Air Emissions / Water Emissions			Total air and water emissions (lbs.)
	0%	50%	100%	
Hexachlorobutadiene				3,339
1,4-Dichlorobenzene				467,877
Pentachlorophenol				11,679
Cadmium				10,038
Cadmium Compounds				66,454
Heptachlor				4,248
4,4'-Methylene bis(2-chloroaniline)				1,242
3,3'-Dichlorobenzidine				148
Lindane				457
Pentachlorobenzene				253
Polycyclic aromatic compounds				882,385
Benzo(g,h,i)perylene				30,482
Anthracene				75,114
Naphthalene				3,008,762
Phenanthrene				162,189

Totals are averages of 7 years of data, except pentachlorobenzene (2000-2002), benzo(g,h,i)perylene (2000-2002), and phenanthrene (1996-2000)

Table 3 from the Level 2 report shows which of these compounds are reported in each of the studied inventory programs. And, though release quantities again varied from inventory to inventory, release quantity trends appeared to be generally downward, as demonstrated by cadmium and cadmium compounds dated shown in Figure 2 from the report.

**Figure 2: Time trends of cadmium and cadmium compound air emissions for the U.S. (TRI) and for the Great Lakes region (GLATEI)**

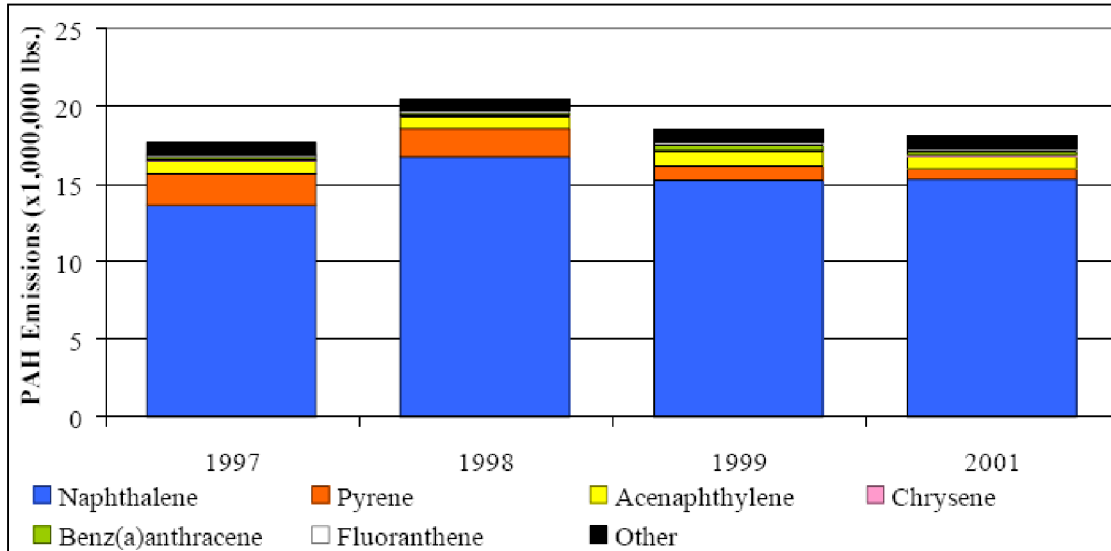


**Table 3:** Inclusion of GLBTS Level II compounds in selected emissions inventories

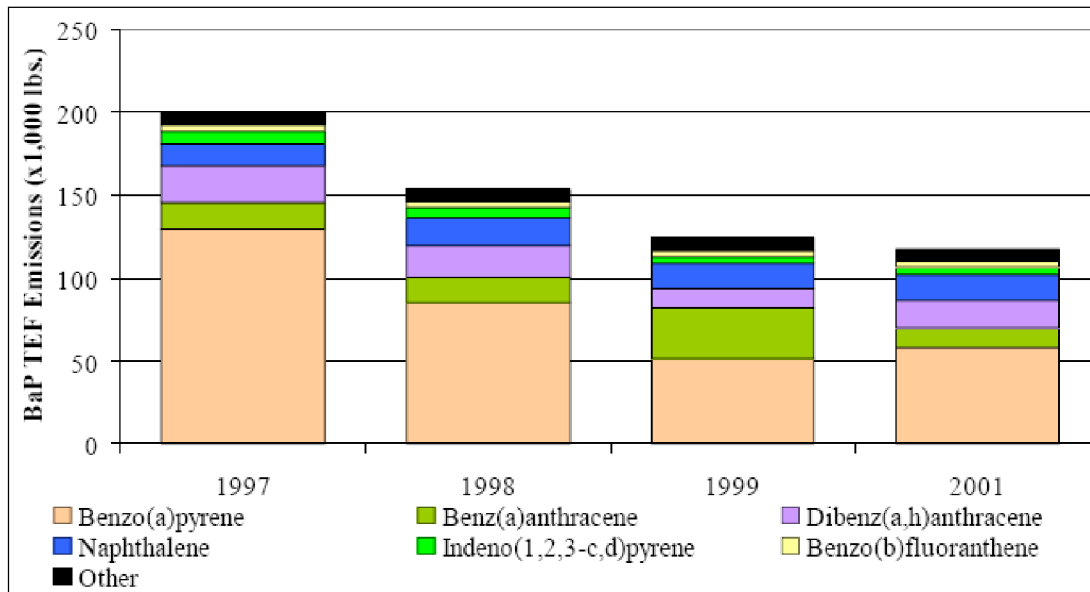
Compound	TRI	GLATEI	NEI
1,2,3,4-Tetrachlorobenzene			
1,2,3,5-Tetrachlorobenzene			
1,4-Dichlorobenzene	X	X	X
3,3'-Dichlorobenzidine	X	X	X
4,4'-Methylene bis(2-chloroaniline)	X	X	X
$\alpha$ -Hexachlorocyclohexane		X (as "lindane")	
$\beta$ -Hexachlorocyclohexane		X (as "lindane")	
Lindane ( $\gamma$ -hexachlorocyclohexane)	X	X	
Cadmium and cadmium compounds	Separately	Together	Together
Dinitropyrene	X	X	X
Endrin			
Heptachlor	X		X
Heptachlor epoxide			
Hexachlorobutadiene	X	X	X
Pentachlorobenzene			X
Pentachlorophenol	X		
Tributyl tin	X	X	X
Polycyclic aromatic hydrocarbons (PAHs, as a group)	As "PAC"	Individually, not as group	Groups of 7, 15 and non-15
Acenaphthene		X	
Acenaphthylene		X	
Anthracene	X	X	
Benz(a)anthracene		X	
Benzo(b)fluoranthene		X	
Benzo(g,h,i)perylene	X	X	
Benzo(k)fluoranthene		X	
Chrysene		X	
Dibenz(a,h)anthracene		X	
Indeno(1,2,3-c,d)pyrene		X	
Fluoranthene		X	
Fluorene		X	
Naphthalene	X	X	X
Phenanthrene	X	X	
Pyrene		X	

At first look an apparent exception to the general downward trends of Level 2 substance releases is polyaromatic hydrocarbons (PAHs) as demonstrated in Figure 15 of the Level 2 report. These data were taken from the GLATEI reporting program for years 1997-2001. Though the emission quantity trends appear flat, a significant point is that the total PAH release picture is made up predominantly of naphthalene. When toxic equivalency factors are applied for each of the compounds that comprise the PAH component mix, a clear downward trend, on a TEQ basis, was observed. This trend is shown in Figure 17 of the Level 2 report and clearly demonstrates the importance of reducing releases of benzo (a) pyrene (BAP) – a Level 1 substance.

**Figure 15: PAH emissions by weight from 1997-2001 for the Great Lakes region**



**Figure 17: PAH emissions by BaP TEF from 1997-2001 for the Great Lakes region**



**Task 3: GLBTS Succession Model**

CGLI has worked extensively during the 2004-2005 project year to recommend future directions for the GLBTS process. Comments have been provided for the existing Level 1 Substances Management Assessment Reports. And, recommendations have been

forwarded to GLBTS Managers regarding considerations that should be made when additions to the GLBTS chemical lists are contemplated.

**The CGLI “new chemicals” recommendations** can be summarized as follows:

1. The selection of additional substance for consideration of management under a renewed GLBTS must come through existing National screening programs in both the U.S. and Canada.
2. Canada’s current DSL process is appropriate to consider as a “model” for performing chemical reviews. But, processes of this type must be administered at a National level with the output serving as input for consideration of which compounds should be managed Regionally.
3. To be considered for Regional management actions, substances identified by the National evaluation programs must be found to be relevant to the Region, in respect to presence, potential for exposure at critical levels, and with high likelihood that management actions can have a significant positive impact within the Region.

**Because National (or International) chemical screening programs are key** elements in future GLBTS efforts, CGLI has worked to catalog existing tools. The results of this effort were contributed to a white paper produced jointly by Ted Smith of EPA GLNPO, and Dale Phenicie of CGLI as part of the resource materials developed for the Great Lakes Regional Collaboration Toxic Substances Team. This paper<sup>3</sup> can be accessed at: [http://www.glin.net/pbtstrategyteam/documents/GLRC\\_PTS\\_WhitePaper\\_%20Chemical\\_Screening\\_Draftv1.pdf](http://www.glin.net/pbtstrategyteam/documents/GLRC_PTS_WhitePaper_%20Chemical_Screening_Draftv1.pdf). The programs reviewed in this paper include the following:

#### **U.S. Domestic Programs**

##### **Toxic Substances Control Act (TSCA)**

Pre-manufacturing Notices (PMN), Review and PMN Screening  
TSCA Inventory Update Rule (IUR)  
TSCA Section 8(e) – Serious adverse health effect notices  
TSCA Section 5 – additional test data requirements

##### **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)**

Product property testing requirements  
Hazards to humans and domestic animal assessments  
Hazards to no-target organism assessments

##### **EPA Office of Prevention, Pesticides and Toxic Substances (OPPTS)**

Harmonized test guidelines – applied to TSCA and FIFRA

##### **EPA High Production Volume (HPV) Challenge Program**

##### **EPA Voluntary Children’s Chemical Evaluation Program (VCCEP)**

##### **EPA Toxic Release Inventory (TRI) reporting requirements**

Standard TRI reporting requirements  
Low threshold PBT reporting requirements

##### **EPA PBT Profiler**

##### **EPA Endocrine Disruptor Screening Program (EDSP)**

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<sup>3</sup> Chemical Screening Programs, Ted Smith and Dale Phenicie, Great Lakes Regional Collaboration, Toxic Substances Team White Paper, April 2004

**U.S. FDA Regulated Products Approval programs**  
**U.S. DA Food Safety and Inspection Program**  
**U.S. Consumer Product Safety Commission and Federal Hazardous Substances Act**  
**U.S. Department of Health and Human Services National Toxicology Program**  
**U.S. National Institute of Environmental Health Sciences**  
**U.S. Agency for Toxic substances and Disease Registry (ATSDR)**  
**U.S. National Institute for Occupational Safety and Health (NIOSH)**

**International Programs**

**Canadian Environmental Protection Act – Domestic Substances List**  
**European Union (EU) REACH Proposal**  
**EU Interim PBT Strategy**  
**United National Economic Commission for Europe (ENECE)**  
**Convention on Long Range Transboundary Air Pollution POPs Protocol (LRTAP)**  
**Stockholm Convention on Persistent Organic Pollutants**  
**The United Nations Environmental Programme Rotterdam Convention**  
**The United Nations Economic and Social council Globally Harmonized System**  
**CEC Sound Management of Chemicals Program (SMOC)**  
**International HPV Program**

CGLI believes that all of these programs need to be reviewed and understood as the process of moving forward with a renewed GLBTS efforts is advanced.

**Current GLBTS program successes serve as a best model for future program designs.** A key element of the existing GLBTS program that has provided for numerous successes has been its voluntary stakeholder aspects. This feature has served to proactively engage many sectors and industries, resulting in impressive reductions and stewardship accomplishments.

**An excellent example is the steel industry mercury pollution prevention initiative.** Since 1998, three Gary Indiana steel mills have worked through the Lake Michigan Forum and cooperated with the Indiana Department of Environmental Management (IDEM) to inventory mercury uses/sources within these mills and develop a clean sweep/pollution prevention initiative to inventory, recycle, and substitute to the greatest extent practical, mercury at their facilities.

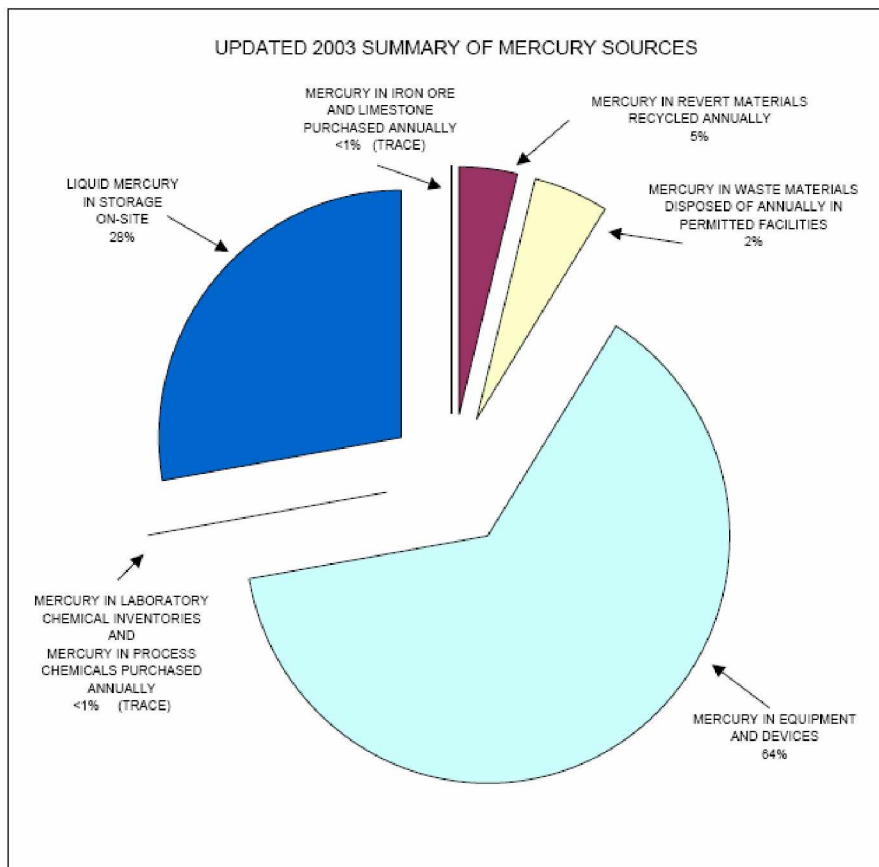
The participating companies are: ISG-Burns Harbor, formerly Bethlehem Steel-Burns Harbor; Ispat Inland Inc. Indiana Harbor Works; and U. S. Steel Gary Works.

To date, of the 4660 lbs of mercury inventoried at the three mills, 3751 lbs., (80.49 percent), have been removed, recycled, or substituted.

The initial plan was designed to obtain a 33 percent reduction in mercury usage within two years, a further 33 percent reduction over the next five years, followed by putting a program in place for continued reductions setting a goal of 90 percent-plus reductions within ten years of the project initialization.

Just five years into the program, the three companies have jointly surpassed all goals and removed the potential for release of up to 3751 lbs. of mercury into the local and Great Lakes ecosystems. The project continues, and additional opportunities to remove additional mercury are actively being sought. The initiative is being managed by the individual participating companies. Periodic reports are provided to the Lake Michigan Forum, IDEM, and U.S. EPA.

The pie chart below, published in the 2003 program summary report, demonstrates that this program seeks to address mercury throughout the steel manufacturing process and includes ores and scrap metal raw materials, chemicals from suppliers, instrumentation and other process equipment, as well as in products or waste materials produced. This program won a SOLEC Success Story recognition award at SOLEC 2004. Complete details can be found in the 2004 program report at: <http://www.epa.gov/region5/air/mercury/nwindianareport3-17-04.pdf><sup>4</sup>.



<sup>4</sup> Mercury Agreement Reduction Program, International Steel Group, Burns Harbor, Indiana Ispat Inland, East Chicago, Indiana US Steel, Gary, Indiana, January 2004

In the 2005-2006 project year, CGLI is working to develop further recommendations on GLBTS program succession plans.

**Task 4: Recommend GLLA AOC/RAP Funding**

This element of CGLI’s 2004-2005 GLBTS Implementation project was directed towards determining how the Great Lakes Legacy Act (GLLA) might be used to stimulate additional sediment remediation activity. This work builds on efforts completed during the 2004-2004 project year that examined the use of risk-based assessment methodologies in the characterization of the U.S. Great Lakes Areas of Concern (AOCs). To accomplish these evaluations, CGLI as partnered with the Sediment Management Working Group (SMWG), headquartered in Detroit.

**CGLI has reviewed U.S. AOC evaluation efforts** to determine which have benefited from the application of risk-based assessment practices. Results of this work are summarized in the table that follows. This evaluation output was verified and vetted through contacts with SMWG members during their fall 2005 meeting, held in Green Bay, Wisconsin.

Lake/Channel	AOC	Listing/RAP Action Status				Remediation efforts begun or underway?
		NPL/CERCLA or State Program administered site?	Identified industry PRPs at site?	Listed RAP Stage	Risk-Based Assessment Methods Used at this AOC?	
Michigan						
	White Lake	State	Yes	2	No	Yes
	Muskegon Lake	State	Yes	2	No	No
	Kalamazoo River	NPL	Yes	2	Yes	Yes
		NPL/CERCLA or State Program administered site?	Identified industry PRPs at site?	Listed RAP Stage	Risk-Based Assessment Methods Used at this AOC?	Remediation efforts begun or underway?
	Grand Calumet river/IN Harbor Canal	State/NPL	Yes	2.5	Yes	Yes
	Waukegan Harbor	NPL	Yes	3	Yes	Yes
	Milwaukee Estuary	State/Partial NPL	Yes	1	No	Yes
	Sheboygan River	State/NPL	Yes	1	No	Yes
	Fox River/Lower Green Bay	State/NPL	Yes	1	Yes	Yes
	Menominee River	State	Yes	2	?	Yes
	Manistique River	CERCLA/State	Yes	2	Yes	Yes
Superior						
	Deer Lake-Carp Creek/River	State	Yes	1	?	Yes
	Torch Lake	State/NPL	Yes	2	Yes	Yes
	St. Louis Bay/River	State/NPL	Yes	2	Yes	Yes

Lake/Channel	AOC	Listing/RAP Action Status				Remediation efforts begun or underway?
		NPL/CERCLA or State Program administered site?	Identified industry PRPs at site?	Listed RAP Stage	Risk-Based Assessment Methods Used at this AOC?	
Huron						
	Saginaw Bay	State/NRDA	Yes	1	Yes	Yes
Detroit/St. Clair River						
	Clinton River	State	No	2	No	?
	Rouge River	State	Yes	2	Yes	Yes
Erie						
	Maumee River	State	?	1	No	Yes
	River Raisin	State	Yes	1	No	Yes
	Presque Isle Bay	State	No	1- Area of Recovery	Yes	Natural Recovery
	Astabula River	State/Partial NPL	No	1	?	Yes
	Cuyahoga River	State	No	1	No	Yes
	Black River	State	No	1	No	Yes
Ontario						
	Oswego River	State/Partial NPL	Yes	2	No	Yes
	Eighteen Mile Creek	State	No	2	No	?

The work was also described in detail in a report given at the IJC Biennial Meeting, held in June 2005 in Kingston, Ontario<sup>5</sup>. In summary, the conclusions from this work were:

- Of 24 U.S. only AOCs, 10 benefited from risk-based assessments.
- AOCs that involve NPL, CERCLA, or NRDA administered actions more likely to have received risk-based assessments.
- AOCs administered only by state agencies less likely to receive risk-based assessments.
- Sites receiving risk-based assessments were not MORE likely to have experienced prescriptions of risk-based remedies.

The AOCs for which risk-based assessments had been conducted were:

- Kalamazoo River (Lake Michigan)
- Grand Calumet River/IN Harbor Canal (Lake Michigan)
- Waukegan Harbor (Lake Michigan)
- Fox River/Lower Green Bay (Lake Michigan)
- Manistique River (Lake Michigan)
- Torch Lake (Lake Superior)
- St. Louis Bay/River (Lake Superior)

<sup>5</sup> Addressing AOCs – Industry-led Initiatives, Dale Phenicie, Council of Great Lakes Industries, IJC 2005 Great Lakes Conference and Biennial Meeting, June 2005

- Saginaw Bay (Lake Huron)
- Rouge River (Detroit/St. Clair River)
- Presque Isle Bay (Lake Erie)

In addition:

- Presque Isle Bay in Western Lake Erie appears to have benefited from application of a risk-based remedy
  - Now re-categorized as an area of recovery
- CGLI was not able to determine if risk-based remedies were applied in:
  - Menominee River
  - Deer Lake-Carp Creek/River
  - Clinton River

**Primary conclusions** reached by CGLI regarding the nature of AOC remediation actions included:

- No one-size fits all solutions
  - Site specific remedies must be developed
- Decisions must be science based
  - Adequate site reconnaissance and testing must be accomplished
- Risk-based remedies are essential
  - Final strategy must reflect nature and extent of the sites risks to human and ecosystem health

**To determine what specific attributes of each AOC might enhance candidacy for GLLA incentive funding**, more detailed examinations were conducted. In addition, interviews were conducted with industrial PRP representatives at several of the AOC sites.

AOC study results revealed that:

- 40 to 50 percent of sites within AOCs are orphan sites
- All AOCs appear to have orphan shares or components
- Federal guidance is not widely applied in the Region
- GLLA 35% match difficult to meet at many sites
- In addition to orphan sites AOCs also have PRPs
- In order for any AOC to be eligible for GLLA funding, sites with PRPs must be eligible for GLLA funding
- State jurisdictional issues can drive GLLA from consideration

The interviews with PRPs produced the following issues, points of interest and recommendations:

- The PRPs are NOT asking that GLLA funding be used to relieve them from “paying their fair share” of AOC clean-ups
- PRPs seek GLLA funding to pay, or help pay, for orphan share clean-up

- The multiple agencies and jurisdictions involved in AOC clean-up activities is a large impediment to efficient action
- SMWG and their PRP members support a concept that the GLLA be the primary authority to address contaminated sediment in the AOCs
- The SMWG and PRPs support GLLA funding at the maximum appropriation level for the next 10 years.
- The GLLA process should include program capacity to develop measurable endpoints, design and implement remedial actions and measure results.
- The current situation where these functions are split between the various parties can result in protracted decision making and stalemate situations
- Establishing primacy for the GLLA to serve as the primary authority would increase coordination of at the federal, state, local and tribal levels
- The Natural Resource Damage Assessment (NRDA) process needs to be included, early on and up-front as well
- GLLA remedy prescription should focus on risk-based principles and recognize that a variety of remedial alternatives will be necessary, including dredging, in-situ caps, in-situ remediation techniques, as well as monitored natural recovery
- GLLA program elements should include working toward better alternatives for removal and disposal of sediments

The points outlined above and specific recommendations for improving the GLLA that came from these interviews and discussions were also included in comments regarding the Great Lake Regional Collaboration AOC Team draft report, provided with CGLI assistance, but submitted by the SMWG<sup>6</sup>. The recommendations for GLLA language clarifications that would improve the ability to enhance AOC clean-up efforts included:

- The “maintenance of effort” language in the GLLA should be dropped. This language, found in 33 USCA § 1268(b)(12)(E) of the GLLA, can inappropriately and inadvertently disqualify or limit valuable and otherwise eligible projects. This language appears to have been borrowed from other federal grant programs where it is important that the level of effort undertaken by the grant recipient in prior years not be diminished by virtue of receiving the new grant. In the context of remediation of contaminated sediment, however, the level of activity can vary dramatically from year to year. Consequently, this provision artificially restricts potential funding for valuable projects. In fact, this language is counter-productive by potentially penalizing local sponsors that undertake remediation projects on their own prior to applying for GLLA funding for other projects. The good judgment of those administering the program should be more than adequate to ensure that the funding is appropriately disbursed to worthy projects.
- The GLLA should be clarified to permit disbursement of funds by GLNPO to the non-federal sponsor of a GLLA project to cover some or all of the 65% federal share. Currently, this apparently is not possible due to administrative restrictions and an absence of an express authorization to disburse funds. This restriction also is a significant impediment to effective collaboration between the federal and non-federal sponsors. For example, where the non-federal sponsor is contributing a

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<sup>6</sup> Sediment Management Work Group comment letter to Gary Gulezian, GLNPO, September 6, 2005

large percentage towards the overall project costs through implementation of a sediment remediation activity, it makes no sense to require a second contractor to be retained under GLNPO's contracting authority to conduct the remaining portion of the work. Having two different contractors working on the same job is inefficient and often problematic. In addition, having the smaller portions of the work performed by another contractor hampers the efforts of the non-federal sponsor to supervise the project and insure that it is optimally implemented. Other similar statutes, such as WRDA, expressly authorize the federal agency (in that case -- the U.S. Army Corps of Engineers) to directly disburse funds to the non-federal sponsor.

- Clarification and reiteration of the role of potentially responsible parties (PRPs) to participate as the non-federal sponsor in GLLA projects is needed. The SMWG notes that the GLLA was passed through the strong cooperative efforts of a diverse array of stakeholders. In fact, Congressman Ehlers complimented the representatives from industry, environmental groups and state government for their cooperative efforts in supporting the Legacy Act concept. At that time, and at the present time, it was and is industry's understanding and expectation that PRP sites could qualify for GLLA funding by virtue of PRP contributions serving as the source of the non-federal sponsor portion of a project. The GLLA refers specifically to the eligibility of funding for the non-federal share to include "monies paid pursuant to or the value of any in-kind service performed under, an administrative order on consent or judicial consent decree ..." 33 USCA § 1268(b)(12)(E)(iii)(I). Despite this express authorization, some have suggested that a "polluters pay" principle should apply precluding PRP eligibility to serve as the source of the non-federal share in whole or in part. The SMWG strongly supports the recommendation of the Strategy that "PRPs' ability to apply for and receive GLLA funding should not be artificially limited on the basis of the "polluters pay principle" only to sites with orphan shares or covering work performed above and beyond the specific requirements of a selected remedy." Limiting PRP eligibility to participate in GLLA projects in only those two scenarios, or worse, as some advocate, completely barring to PRP eligibility to serve as a non-federal sponsor, would cut-off one of the best opportunities to meet the objective of the GLLA to accelerate the remediation of contaminated sediments in the Great Lakes. Therefore, the SMWG supports the Strategy's recommendation to clarify that "polluters pay" principle does not apply and that the eligibility of PRPs to serve as a source of the non-federal share of GLLA projects should be evaluated based on the site-specific merits of the proposal
- The life of the appropriated GLLA funds must be extended beyond the two years currently envisioned. This change is important to accommodate responsible remediation and long-term remedy effectiveness monitoring. In the first instance, some remedies will include reliance on monitored natural recovery in whole or in part and may require longer than two years to achieve objectives. In other situations, such as dredging and capping, long-term monitoring is also a component of the remedy. The two year limitation is inconsistent with the realities of current sediment management approaches.

CGLI appreciates the opportunity to again contribute to the success of the GLBTS and looks forward to continuing this quest during the 2005-2006 project year. Questions regarding this work or information in this report may be directed to Dale K. Phenicie, CGLI's GLBTS Project Director at 770 487-7585 or via e-mail at [dkphenice@mindspring.com](mailto:dkphenice@mindspring.com). Alternatively, interested parties may contact CGLI President and CEO, George Kuper at 734 663-1944 or via e-mail at [GHK@CGLI.Org](mailto:GHK@CGLI.Org).