TECHNICAL OUTREACH TOSC SERVICES FOR COMMUNITIES

A publication of the Hazardous Substance Research Centers' Technical Outreach Services for Communities (TOSC) Program.

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The Midwest Hazardous Substance Research Center is a consortium of Michigan State University, Purdue University, and Kansas State University

Report of Accomplishments and Findings

Ashland Lakefront/Excel Energy TOSC Project

Ashland Lakefront/Excel Energy Technical Outreach Services for Communities (TOSC) Project, funded under grant from the U.S. Environmental Protection Agency's Great Lakes National Program Office

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Introduction

In 1999, U.S. EPA's Great Lakes National Program Office (GLNPO) provided a grant to Michigan State University's TOSC Program to assist the residents of Ashland, Wisconsin, concerning the environmental contamination related to a former manufactured gas plant at a site in downtown Ashland. The contamination included soil and groundwater contamination, and also extensive contamination of near shore sediments. The grant was provided to MSU, with Dr. Thomas C. Voice, Professor of Environmental Engineering, as Principal Investigator, and co-investigators Dr. Susan Masten, Professor of Environmental Engineering, Dr. R. Jan Stevenson, Professor of Zoology, Dr. Karen Chou, Professor of Toxicology, and Kirk Riley, Outreach Specialist. The grant objectives included educating and informing local stakeholder groups on the investigation of the Ashland site, on risks (to humans and the ecology) associated with the contamination, and on the range of remedial alternatives for the site. The objectives also included providing independent, third-party review of technical documents related to the Ashland site, particularly on issues where outside review would enable local citizens to participate more effectively in making decisions about the site.

As background, the TOSC program promotes community involvement in environmental decision-making through educational and technical assistance services, and is funded under a grant from the U.S. Environmental Protection Agency. TOSC is housed in the Midwest Hazardous Substance Research Center. Participating universities include Purdue University, Michigan State University, Kansas State University, and the Virginia Polytechnic Institute and State University. Funded since 1994 under grant from U.S. EPA, TOSC program services seek to build community understanding of site contamination problems and empower citizens and local government to participate more effectively in the

decision-making process. TOSC faculty, working collaboratively with citizens, design educational workshops that address key questions and concerns. Additionally, TOSC reviews documents and provides professional guidance on site cleanup work.

Affiliated organizations
In Ashland, MSU-TOSC negotiated agreements with the Lake Superior Alliance, Bob Olsgard, Executive Director, and the Ashland/Bayfield League of Women Voters, Kathy Allen, Executive Director, to provide services. Those services are described below. TOSC conducted a needs assessment and developed informal partnerships with an unusually diverse array of other stakeholder groups, including:

- The Sigurd Olson Environmental Institute at Northland College, which participated with TOSC in community education workshops and expressed interest in TOSC's providing independent expert analysis, particularly on ecological risk assessment. SOEI was an invaluable community partner to TOSC.
- The Great Lakes Indian Fish and Wildlife Commission, which expressed interest in protecting the usufructuary rights of Native Americans and the possible exposure of fish (and thus fishers) to contaminants from the Ashland Lakefront site contaminants
- The Inland Sea Society, a not-for profit organization that (as reflected in its mission) "works towards maintaining a Lake Superior Basin with a naturally diverse and healthy ecosystem, including human communities that demonstrate respect for the Lake."
- The Alliance for Sustainability, an Ashland-based organization that worked to unite local government, business leaders, civic organizations and environmentalists around common goals of sustainable development and environmental protection.

MSU-TOSC held meetings with each of these organizations during the early phases of the project, and this diverse, multi-stakeholder collaboration was unique in MSU-TOSC's experience. As the Ashland Project Manager, Kirk Riley successfully galvanized these groups around TOSC's role of serving as an independent, outside technical assistance provider (although the groups were already participating in other public dialogue efforts). The issues that TOSC addressed, however, (particularly ecological risk assessment) were chosen through a deliberative process organized by the Sigurd Olson Environmental Institute, Kim Bro, Executive Director, and the League of Women Voters. Kathy Allen, of the LOWV, especially emphasized to decision makers that a "transparent" public process would gain the public's trust more readily. The commitments of these parties (LOWV and SOEI) to *open process* and *public dialogue* were critical to the success of the TOSC intervention. Further, TOSC was able to build the trust of area-wide environmental organizations through the agreement with the Lake Superior Alliance, a strong environmental advocacy organization that unites lake basin-wide advocacy groups.

TOSC Services and Activities
Public dialogue and scoping activities: Following TOSC's offer of assistance and agreements with LSA and LOWV, TOSC participated in a series of meetings to gather

public input on several discrete issues. They included the reuse of the lakefront property where the contamination had occurred; cleanup options for Chequamegon Bay, particularly of the contaminated sediments in the bay near the old MGP plant site; and methods for conveying the results to residents, particularly residents around the site who had traditionally not participated in meetings. TOSC provided an overview at these meeting of our services, but benefited greatly from hearing firsthand at public meetings more about community concerns and questions. A listing of those concerns cans be found at http://www.egr.msu.edu/tosc/ashland/january_13_2000/responses.shtml or at Appendix A of this document. In addition, TOSC listed concerns directed specifically to TOSC. Those concerns are listed at http://www.egr.msu.edu/tosc/ashland/citizenconcerns.shtml and at Appendix B of this report.

From these meetings, TOSC developed an Outreach Plan, to codify the services that TOSC would provide. That Outreach Plan, dated November 1999, is available at http://www.egr.msu.edu/tosc/ashland/workplan.shtml, and included as Appendix C herein.

Site characterization workshop: TOSC reviewed data and provided educational services related to the onshore contamination from the former MGP. The focus of this portion of the project dealt with Kreher Park, the former MGP site, and the area between them (the so-called "seep" area), along with contaminated groundwater. There was very little dispute about this portion of the project, but the TOSC assistance helped clarify the community's questions about the site characterization. TOSC assistance in this area was led by Dr. Thomas C. Voice, Professor of Environmental Engineering at Michigan State University; our findings were provided at a community meeting (see http://www.egr.msu.edu/tosc/ashland/january_13_2000/jan13index.shtml) and Dr. Voice's presentation can be found at http://www.egr.msu.edu/tosc/ashland/january_13_2000/overview/sld001.htm (both documents are at Appendix D).

Ecological risk assessment workshop: TOSC held two workshops related to ecological risk. The first was a general overview of the subject of ecological risk assessment. Dr. Jan Stevenson, Professor of Zoology at Michigan State, was TOSC's presenter, and his presentation can be viewed at http://www.egr.msu.edu/tosc/ashland/april_13_2000/era/sld001.htm (or at Appendix E.) Dr. Stevenson's held a workshop on April 13, 2000. Subsequently, TOSC was asked to address a major area of disagreement on the subject of ecological risk over the contaminated sediments in Chequamegon Bay, primary polycyclic aromatic hydrocarbons. Specifically, two competing eco-risk studies had been conducted by a) the Wisconsin Department of Natural Resources and b) Dames and Moore, serving as consultants for the responsible party, then known as Northern States Power (NSP). The studies had reached widely varying conclusions on the degree of risk posed by the PAH-contaminated sediments in the bay, and TOSC was asked to review the studies and provide comments, and present our findings at a public meeting. Dr. Christopher Marwood, (then a Research Fellow at Miami University, Oxford, Ohio; now Assistant

Professor of Ecological Risk Assessment at the University of California, Santa Barbara) conducted TOSC's review and presented his findings at a public meeting in Ashland, on July 10, 2001. Dr. Marwood's review is available in both summary format (http://www.egr.msu.edu/tosc/ashland/Summary_of_TOSC_Eco-Risk_Review.pdf) and a 25-page report at http://www.egr.msu.edu/tosc/ashland/Review_of_Ashland-NSP_Lakefront_Ecological_Risk_Assessment2.pdf. (See Appendix F for the summary of TOSC's findings.) The reader may also view press coverage of the meeting from the July 11, 2002, *Ashland Daily Press*, "TOSC finds flaws in Xcel contamination study," at our website, http://www.egr.msu.edu/tosc/ashland/article.shtml, or at Appendix G herein.

The MSU-TOSC intervention in Ashland also involved graduate students in reviewing technical documents and presenting data findings to residents, thereby building the technical communications and writing skills of the students. The students were supported under the GLNPO grant.

Major findings of the Ashland TOSC Project

1. The Ashland community showed remarkable cohesion and willingness to work toward consensus on major technical issues and on "process" dynamics (how to structure meetings, select leaders, convey information to community members, etc.). This cohesion significantly eased TOSC's entry as an outside assistance provider, obviating the need either to negotiate with multiple, non-cohesive parties or negotiate among parties an identification of TOSC services. We could provide assistance more quickly and extend our reach further into the community, as a result.

2. Having a party dedicated to *open process*, such as we had in our collaboration with the League of Women Voters, enabled us to reach a broader segment of the Ashland community. The League held to the principle that the Ashland community deserved to be heard on this issue and required a forum for that, namely the process that was in place prior to TOSC's involvement and that continues to this day. In an unusual approach, the League did not advocate for a particular *technical* solution, but instead for openness; TOSC community partners usually seek particular technical solutions to which they may be strongly committed. The League's involvement in organizing meetings and advocating for openness occurred during various City administrations that were, alternately, open to a public role and adamantly opposed to a public role in the Ashland cleanup, but the League did not waiver in its position.

3. The Ashland Project provided MSU-TOSC the opportunity to provide technical assistance on a wide array of technical issues, particularly contaminated sediment assessment and ecological risk assessment, two new areas for a program that had largely focused on Superfund or state-lead sites of environmental contamination. We found the TOSC approach to be effective in the Ashland setting. The approach emphasizes identifying key areas of concern, conducting needs assessments, looking actively for local collaborators (e.g., local universities),

emphasizing educational assistance prior to providing a review of technical documents, and presenting all findings at public meetings.

4. Having a knowledgeable local partner organization, the Sigurd Olson Environmental Institute, enabled TOSC to "leave behind" greater understanding and to continue providing education to residents through the fact sheets TOSC developed and the community workshops that were held. TOSC is particularly appreciative of the efforts of SOEI's Kim Bro, Ph.D., and Mike Gardner in partnering with TOSC.

5. Community members expressed significant satisfaction with TOSC assistance. Kathy Allen, Executive Director of the League of Women Voters, wrote that "TOSC made all the difference" by providing assistance that directly targeted community concerns. Ms. Allen wrote a letter of recommendation to GLNPO for a subsequent grant that TOSC was provided, for a dredging project carried out by the U.S. Army Corps of Engineers on the Indiana Harbor and Canal. Bob Olsgard, of the Lake Superior Alliance, has also expressed his satisfaction, through personal communication.