

**Saginaw Tittabawassee Rivers Contamination CAG  
DRAFT Summary of Full CAG Meeting  
Saginaw Valley State University – Curtiss Hall  
Monday, May 16, 2011**

**CAG Members Present**

Charles Curtiss  
Matthew de Huis  
Leonard Heinzman  
Deborah Huntley  
Ryan Jankoska  
Wendy Kanar  
Michael Kelly  
Rachel Larimore  
Judith Lincoln  
David Meyer  
Annette Rummel  
Paul Vasold  
William Webber  
Bob Weise

**CAG Members Absent**

Drummond Black  
Jeffrey Bulls  
Michael Espinoza  
Janet McGuire  
Laura Ogar  
Joel Tanner

**Ex-Officio Members Present**

Joe Haas, US FWS  
Todd Konechne, Dow Chemical  
Mary Logan, US EPA  
Al Taylor, Michigan DNRE

**Support and Agency Staff Present**

Don de Blasio, US EPA  
Catherine Garypie, USEPA Attorney  
Blair Giesken, CAG Volunteer Transcriptionist  
Cheryl Howe, Michigan DNRE  
Janelle Pistro, Dow Chemical  
Tim Prendiville, US EPA  
Diane Russell, US EPA  
Doug Sarno, Facilitator

Doug Sarno called the meeting to order at 6:09 PM. Agenda items Included:

- Leadership Update and Planning for MSU Presentation
- CAG Recommendation on Island MM
- Brief update on post-flood response
- Update on the progress of decision for high use properties
- Progress on planning for Segment 1

## **1. Leadership Update and Planning for Dioxin Presentations**

Activities are underway to further the incorporation of the CAG. Official incorporation should be finalized shortly.

Arrangements for expert speakers on dioxin-related issues continue. Dr. Matthew Zwiernik from Michigan State University will be presenting at the June CAG Meeting regarding the Tittabawassee River wildlife studies. The leadership team is coordinating with Dr. David Garabrant to present the status of the University of Michigan Dioxin Exposure Study (UMDES) at a future meeting and is still looking for a speaker to present to the group on the basic health issues and studies related to dioxin. The leadership team created “unofficial” summaries of each of the MSU wildlife studies and distributed them to the CAG to help focus the presentation for next month. Comments included:

- CAG members do not necessarily need detailed information on each specific species studied but rather an understanding on the overall effect of dioxin on animal populations in the vicinity of the rivers,
- CAG members would also like to understand which species are most affected and how,
- EPA suggested that the CAG also have a presentation on how these studies inform EPA and other agency decisions,
- US Fish & Wildlife Service offered to discuss how these studies are used and applied to their work at the next CAG meeting.

## **2. CAG Recommendation on Island MM**

The recommendation committee presented its draft recommendation on Island MM. This draft has been distributed to all CAG members and included all comments received to date. The committee does recommend early action be taken on Island MM given the information that is currently available. The support for this early action is based on six key assumptions:

1. The erosion of the island presents a near-term contamination problem.
2. Accelerated action will benefit the overall cleanup.
3. Accelerated action will not affect resources or timing of main cleanup.
4. The Island has no inherent recreational/environmental value in itself.
5. There is no private ownership of the island.
6. Owners of adjacent properties will support the action.

The committee noted that there is critical information not yet available that will be important to making a credible decision, including:

- The impact of removing the island on the river banks and sediments east and south of the Island,
- The contamination levels in adjacent river banks,
- The configuration of the contamination beneath the island.

As a result, the committee notes that additional sampling will be required. While there is not enough information to make a final decision right now, the CAG recommendation is that EPA move forward with either Option 2 or Option 3, based on the results of additional study and information. Comments and questions included:

- A CAG member asked how many samples of Island MM exist and at what depths. Mary Logan explained that there are 3 samples, as the island itself is not extremely large. The upstream and downstream samples are approximately 6 to 8 feet beneath the sediment surface. EPA plans to conduct additional sediment sampling in the vicinity of the island.
- A CAG member asked if these samplings and research are publicized in any type of scientific journal. Mary answered no, but that they are publicly available.
- A CAG member asked if we can implement a quicker, more compressed cycle of action to move these important reaches and high erosion areas into more immediate action. Mary noted that they are trying to combine a comprehensive upstream to downstream approach along with early response actions to address these high-risk and high-use areas without having to wait for the full action on that specific segment.
- A CAG member noted that some people at the public meeting asked why the EPA doesn't just allow the Island to erode and disappear back into nature; one person also had a strong position that some of the remedial action taken earlier was not adequate or had been washed away. Public perception might be quite different than what actual testing will show.
- A CAG member took exception with the idea that the contamination would simply "wash away" or "go back to nature." As a resident living downstream from the Island, this contamination will be moving in that direction. Early actions taken upriver will positively affect downstream properties and future cleanup.
- A CAG member requested a change to bullet point 6 to say "allow access and action".
- A CAG member noted that several groups he had spoken to are concerned about losing the feature of the island entirely as it is a treasured fishing area, and that consideration should be reflected in the recommendation
- The CAG decided to refine the recommendation to say "Owners of the adjacent properties and the island as appropriate will support the action".
- The CAG decided to change the phrasing "main cleanup" to "This accelerated action will not affect the resources or timing that support the balance of the cleanup".

The CAG agreed to a consensus recommendation with the inclusion of the aforementioned changes.

### **3. Flood Response Activities**

Flood response activities are taken on an annual basis to maintain portions of the remedy that have already been implemented. The following activities were taken this year:

- Parks & public boat launch cleanup, including cleaning any sediment that may have deposited on hard surfaces like playgrounds and picnic areas, wood-chipping of nature trails, cleaning and disposal of sediment from boat ramp areas,
- If a resident's property has flooded, they can call in and have someone come out to assess the situation and provide a voucher to have it remedied if needed,
- Post-flood monitoring and sampling.

Al Taylor also noted that, as part of Task 4 (site-wide monitoring), sampling is also done to test the rate of recontamination, to help understand how long a remediation lasts and how long it takes to re-contaminate to problematic levels. DEQ also photographs the sites on a monthly basis for additional monitoring.

A CAG member noted that with how much flooding and recontamination has been discussed, the group would likely benefit from a presentation on the results of the studies taken to assess this year's flooding and its effects.

### **4. Update on High Use Properties**

EPA is working to plan activities on high use properties. Current actions include finalizing legal documents and assessing the large number of public comments received. A number of properties are still being assessed. This assessment will continue through the spring with implementation of exposure controls anticipated to begin in June.

### **5. Planning for Segment 1**

Mary Logan provided an overview of planning for remediation of Segment 1. EPA is continuing its study of Segment 1 and anticipates a proposal for remedial action activities within a few months cleanup to begin in 2012 and potentially continue through 2014. Segment 1 consists of the 3.1 miles of river adjacent to Dow's Midland plant. Given its proximity to the Dow plant, there are a number of unique conditions within this segment. Dioxins and Furans have been largely addressed by previous actions and cleanup is now focused on other contaminants. The RGIS System (Revetment Groundwater Interception System) runs both sides of the river and intercepts plant groundwater that would otherwise go to the river. The RGIS manages approximately 1.5 million gallons of water per day which is treated in the on site waste water treatment plant. Groundwater is part of the on-site RCRA licensed corrective action. This is

overseen by the state and not part of the activities of the CAG, however the RCRA and CERCLA programs do work closely together to coordinate activities.

Significant cleanups in Segment 1 to date include:

- Removal and capping at Reach B,
- Dredging, capping, and monitored natural recovery at Reach D,
- Containment, groundwater capture, and treatment at Reach G sand bar.

Extensive investigations since 2006 have identified 6 chemicals/chemical groups as key drivers to the cleanup including chlorobenzenes, chlorophenols, polynuclear aromatic hydrocarbons, arsenic, ethyl parathion, and ortho-phenylphenol. Specific areas have been identified that will need cleanup for both surface sediment and underlying sediment.

EPA will look at all options with the primary goal of achieving overall risk reduction. There is no presumptive remedy for any contaminated sediment site and both in-place and removal approaches may reach acceptable levels of effectiveness and permanence. Common Elements of all sediment management actions will include the following:

- Continued assurance of source control,
- Dewatering and water treatment,
- Disposal of materials at approved sites,
- Construction and post-construction monitoring,
- Operation and maintenance.

CAG member questions and comments on the EPA presentation included the following:

- Will this involve a public comment period? Yes.
- Will options for all 6 of these sediment management areas be presented at once, even though different actions may be suggested for each of the sites? Yes, EPA needs to balance moving forward with cleanup while welcoming public input and discussion. Mary noted that while they are presented together, they will be broken down within the fact sheets and commented on separately. Mary noted that the different SMA's would be presented as a package, but the analysis of preferred remedial actions will be done separately.
- What is the likely cost of Segment 1? Mary noted that for Segment 1 alone, if the most expensive option were to be chosen for each SMA, that the project would cost upwards of \$12 million.
- If the DNAPL remains, will it present a constant source of contamination for groundwater? Mary responded that if the DNAPL doesn't mix with water, but the product that's at the interface with groundwater can dissolve into the water.
- Do we know if the DNAPL is currently contaminating the surface water or groundwater? Al Taylor responded that fish contamination does exceed a health-based standard. The DNAPL sits on top of the till. In some areas, the entire sediment column is contaminated, while in other areas, only certain depths or surface levels are contaminated. They are still assessing these areas and additional product and recovery investigation must be done.

## 6. Public Comment

- When the public sees a situation like this, removal tends to be the desired response. Why would the EPA make a statement that mass removal is not necessarily protective? Mary Logan answered that you can't presume that removing the mass will always achieve the desired goal. The impacts of removal must also be considered and it is important to also consider managing risk with things like capping, taking into consideration the full range of issues affecting risk at the surface.
- If the responsible party says "Let's do the most comprehensive option," do all options still have to be explored? Mary Logan noted that EPA has a mandate as the ultimate decider to evaluate the criteria in the National Contingency Plan. If all parties agree, however, EPA can develop fewer options for evaluation and streamline the process. EPA also needs to take into account that the PRP may ultimately not be able to pay, in which case EPA may have to.
- When will Dow's NPDES permit for water discharge to the river next be considered for renewal? Cheryl Howe said the state has received the draft permit and are in the process of review.
- A member of the public noted that not much has been accomplished because there is no problem. The greater scientific community has told us that dioxins and furans are not harmful to human beings. He has yet to see the first person afflicted by anything caused by dioxins in the river. He explained that the only thing that will solve the Dioxin problem is wind, sunshine, and water. The level has been dropping since the 1970s. It would be better to invest the money spent on this cleanup in economic development and enhancement for our communities.
- A CAG member noted in response to this public comment that we went from no rules to extreme rules back to risk-based corrective action. If that's where we are, it would be very helpful to know what risks we are addressing, how the corrective actions address those risks, and what is the cost.
- A member of the public thanked the CAG for the new seating arrangement and opportunity to comment. He asked if the public members could receive copies of the materials distributed to the CAG as well. It was agreed that this will be done at future meetings.
- A member of the public asked what is the state of research on sediment traps. Mary Logan responded that under Task 2 of the legal agreement, part of what is being explored are mechanisms to stabilize contaminant transport. EPA will be going out this spring to see what has occurred and conducting studies regarding additional sediment traps.

## 7. Saginaw EPA Office Activities

In response to a CAG request, Diane Russell provided a brief overview of the local outreach events being conducted by the EPA Saginaw office. The local office has been open since June 2009 to allow EPA to go above and beyond requirements. It is staffed

full-time with a technical person and community involvement assistant. Activities include:

- Support to the public meetings and public comment periods,
- Provide a focus for education and information to the broader public,
- Booths at expos and fairs (Saginaw County Fair, Midland County Fair),
- Booths at Farmer's Markets (Saginaw, Freeland),
- Educational Events,
- Classroom visits,
- Fishing advisories
- The office also manages a cooperative agreement with local organizations to help conduct outreach.

CAG member questions and comments on the EPA Presentation included the following:

- A CAG member asked how the success of these booths is measured. Diane noted that they keep track of approximate number of visitors and how many people they've interacted with and helped to raise awareness.
- A CAG member asked for the Cooperative Agreement to be explained. It's a grant that's given to the partners to encourage community interaction and input on decisions. It is also aimed at community education to help limit exposures and risks.

The Meeting was adjourned at 8:23 PM.