Saginaw Tittabawassee Rivers Contamination CAG
DRAFT Summary of Full CAG Meeting
Saginaw Valley State University – Curtiss Hall
Monday, August 15, 2011

CAG Members Present
Drummond Black
Charles Curtiss
Matthew de Huis
Ryan Jankoska
Michael Kelly
Judith Lincoln
David Meyer
Laura Ogar
Joel Tanner
Bob Weise
William Webber

CAG Members Absent
Jeffrey Bulls
Michael Espinoza
Leonard Heinzman
Deborah Huntley
Wendy Kanar
Rachel Larimore
Janet McGuire
Annette Rummel
Paul Vasold

Ex-Officio Members Present
Joe Haas, US FWS
Todd Konechne, Dow Chemical
Mary Logan, US EPA
Al Taylor, Michigan MDEQ

Ex-Officio Members Absent

Support and Agency Staff Present
Catherine Garypie, US EPA
Cheryl Howe, MDEQ
Patti Krause, US EPA
Tim Prendiville, USEPA
Diane Russell, US EPA
Doug Sarno, Facilitator

Doug Sarno called the meeting to order at 6:15 PM. Agenda items Included:

- Leadership Team Update
- Update on Cleanup Activities
- Update on Segment 1 Proposed Plan
- Draft CAG Recommendation for Segment 1

1. Leadership Team Update

- Bank account is being opened, the CAG received the $5000 grant from Dow for incorporation expenses which will be deposited.
- Dr Garabrant scheduled for September, please send in any additional speaker suggestions. Joel Tanner identified some names and the leadership team is exploring those.
- The EPA public meeting is tomorrow, a member of the leadership team will provide a short overview of the CAG.
- A letter was sent to EPA regarding potential conflicts of interest on the CAG and attacking the credibility of this issue. EPA has responded to the letter. The CAG has worked hard to create a diverse membership and manages the potential for conflicts, including many efforts to have the Lone Tree Council represented. The CAG treats all members of the public and all viewpoints equally. The CAG believes that the accusations in the letter are simply untrue and the personal attacks in the letter were inappropriate. The CAG will not respond directly as the letter was sent to EPA.
- The role of the CAG is to represent a wide range of viewpoints, and to represent the whole community. The CAG is not seeking neutral individuals and recognizes that everyone has a point of view. To suggest anyone on the CAG has a bias is not accurate; these are just the range of opinions that we bring to the table. At the same time, no one is being paid to represent a specific point of view or being told what to say or do by any third party. All members serve as individuals, regardless of their employer or affiliations.
- It is important to clarify the CAG's role in getting public comment vs. EPA's role. The CAG is not EPA, our goal is to get input to our work to ensure that we are hearing any concerns or issues that may not be coming up around the CAG table. The public comment period at CAG meetings is for input to the CAG, not directly to EPA.
- A CAG member asked why an individual suggested for membership was not selected. The Leadership Team reviewed all applications fully, however the membership needs being filled at this time were very narrow to replace lost members. A more broad membership campaign will occur in 2012.
- EPA and the CAG are working to get the topic of sediment traps on the agenda of a future CAG meeting after discussion of Segment 1 is complete.

2. Cleanup Activities Update

Diane Russell of USEPA provided an update of activities on exposure controls for high use properties. The project is looking at 18 total exposure units in four phases. Phase 1 and 2 were evaluated last year, and property-specific workplans were developed to identify specific actions which have been implemented. Assessments for Phase 3 are underway, looking at eligible properties that may require early action. Some of the properties in Phase 3 are non-residential. Phase 4 includes the Saginaw River properties.

Island MM removal began today to construct river access and prepare the site. The total project should be completed in about 3 weeks. Any property owners who could have potential riparian rights provided permission to do the work without getting into the specific legal terms. Access was also provided by private property owners.

An update was provided on spring flooding and post-flood sampling. MDEQ collected surficial samples of deposited materials from 6 public locations that had been previously remediated.

- Caldwell Boat Launch
- Freeland Festival Park
- Imerman Park
- West Michigan Park
- Center Rd boat launch
- Rust Street Boat Launch

Samples ranged from a low of 7.3 ppt (at Caldwell Boat Launch), to high of 1600 ppt (at Freeland Festival Park) though both of these sites saw a range of levels. This is public information and will be shared with the CAG. Dow also collected information in accordance with the agreement and this will be included. This data helps to understand what is happening in the system and reinforces the need to take action. It also helps to track the effectiveness of the cleanup as it moves down the river by providing baseline information. Questions asked by the CAG included the following:

- Will you sample at the same locations as we move down the river? The agencies do plan to do that, but there might be a better way to track this over time, each flood event and deposition is different so you cannot simply compare from year to year. MDEQ will work with statisticians to come up with better approaches.
- There were several significant flood events this spring, which event was sampled? Sampling was conducted after the last of these events.
- Is the amount of scouring caused by floods being evaluated? We are evaluating the volume of sediment being mobilized and deposited from the river.
- What remediation work had been done at Freeland Festival Park? Some capping and clean material has been placed. This site has also historically had higher concentrations of redeposited contaminated sediments.
- Who conducts these cleanup activities at the parks? Dow contractors.

3. Update on Segment 1 Proposed Plan

Mary Logan of USEPA previewed the Segment 1 presentation that will be given at the public meeting tomorrow night. USEPA is in the middle of an official comment period, any comments provided tonight are not taken as official comments and should be submitted in writing as with previous CAG comments. Mary briefly reviewed the conditions, technologies, alternatives, and evaluation criteria for Segment 1 that were presented last month.

SMA 1
EPA is recommending capping for this area. Monitored natural attenuation was not selected due to concerns that it would take too long to assure that there is no more contamination at the surface. Surface contamination with cleaner sediment below could work, but it would disrupt the benthic communities at higher levels of contamination. CAG members asked the following questions:

- What type of arsenic is present? Conducted a total arsenic evaluation, did not speciate.
- Is there any potential for the arsenic to be moving through the sediment or attaching to the gravel? The cap will use sand similar to what is there now; gravel is used as armor to hold the cap in place. EPA has a lot of experience in this sort of capping. The cap is designed to contain and prevent the spread of contamination.
- What impacts have this contamination had on the river bottom critters? Benthic community surveys at SMA 1 showed the benthic community was healthy.
- Are there similar cleanups with this sort of contamination with this sort of sediment? There may be one in Minnesota.
- How thick is the proposed cap and how long would it last? Not yet designed but would be expected to last in perpetuity with monitoring, similar caps have about 6 inches of sand and 4-6 inches of gravel.
- Do best practices stop resupension? No, not completely, need to look at the degree of control needed and set up monitoring downstream to measure results.
- Do you excavate to make the cap even with the bottom? No, but the edges will be engineered to work with the bottom and flow of the river. Given the size and materials we are working with, would expect only localized impacts but these are important. There will be modeling to understand potential effects during the design to implement the best cap design.

SMA 2 and 3
EPA is proposing a containment system of sheet pile and a low permeability cap to isolate the contamination and also to pump out the DNAPL to the degree possible and treat water through the RGIS system. EPA did not prefer the alternative with containment without source removal because it is very important to remove the source material. Also it did not select the dredging alternative. CAG members asked the following questions:

- Will debris hinder sheetpiling? In some places it was a problem during the RGIS installation, wood logs got in the way which prevented driving some piles as far as desired. Would expect similar conditions.
- How pumpable is the DNAPL? It is not all pumpable but has been pumped already in some places. Will try to pump out as much as possible.

SMA 4 and 5
EPA proposal is to cap with a gravel layer to protect from erosion as there is already clean sediment above the contamination. Did not find pumpable DNAPL here. Monitored natural attenuation not selected because it would not provide enough protection. Dredging is not recommended because of short and long-term effects of dredging and leaves residuals behind that need to be capped anyway.

SMA 6
EPA proposal is to dredge and dispose of ethyl parathion, put in a containment system, recover DNAPL and install hydraulic controls. Dredging not preferred because of its negative impacts.

CAG members asked the following general questions:

- Has the comment period been extended? There have been no requests to extend the comment period to date.
- Who makes up the EPA Team? Mary Logan is the project manager, decisions are made at the Division Director level (Rick Karl who was at the CAG meeting two months ago). The technical team includes Mary, Diane, and a staff of technical folks.
- How confident are we that we have identified all the hot spots on this three mile stretch? We know enough to address these areas, we continue to look at whether other areas will also need to be addressed.
- Are long-term monitoring and maintenance included in these costs? Yes.
- Does Dow ever recommend which alternatives they prefer for managing these chemicals? Dow is required to put together alternatives that can all be successful, they all have pros and cons, Dow does not always agree that the selected option is the one that is necessary. EPA ultimately selects the alternative.

The CAG asked to be updated on designs and issues as the process proceeds.

4. CAG Discussion on Recommendations on the Segment 1 Proposed Plan

The recommendation team is working on draft recommendations. In general the CAG supports the alternatives proposed by EPA ad will recommend that engineering of these should move forward. The following issues and concerns were discussed:

- One concern is that this is not a deep water system and these caps can significantly affect the river system as these are fairly large areas being capped.

- Do we need to implement flood control to prevent future events? EPA noted that there is a requirement not to put in an encroachment that will cause a harmful impairment in carrying capacity of the river. These areas are really not very large but there will be an assessment of any harm. The Superfund program does not deal with flood control issues.
- It is important to clarify in this recommendation that EPA is making the determination that public health is not a concern in this segment as people fish at the dam and we are hoping to increase the use of the river over time.
- It is also important to point out that Segment 1 is not like any of the other stretches of the river. It is highly industrial and the risks and contamination are different. This does not set precedent for future segments.
- Leaving the arsenic in place is troubling, also the cholorobenzene that is not yet DNAPL. It is better than doing nothing, but not sure that the CAG has identified sufficient reservations in its recommendation.
- What happens if caps fail, what monitoring plans are in place? EPA has done a lot of work looking at caps that have been in place for a decade or two and they have been effective when they are designed for the energy events in that water system. Regular monitoring is conducted plus special monitoring following high water events. Repairs are made as needed, but failure can also be declared and new action taken. Superfund requires 5 year reviews of remedies to ensure that all remedies continue to perform effectively.
- Would sediment traps be used for dredging? Not generally, but we will be talking about sediment traps at a future meeting.
- Given the above concerns, it may be important to provide general principles or caveats that in this recommendation.
- The CAG will not ask for additional time to prepare comments, recommendations will be completed by August 31.

5. Public Comment

A stakeholder expressed concern about development need the river and impacts of leaving material in the river. Heard in the past that every time you drop something in the river you change the scoring for the whole river. Still farming the land next to the river, when it floods everything gets covered, and all of that bad stuff washes down. Dredging is better, get it out of the river. If you start digging in the ground and bringing up contamination, we need to do something with it. We need to start thinking about where to build and not to build.

Another stakeholder commented that monitored natural recovery sounds a lot like “Do nothing.” Dredging is a loaded term, it evokes the open bucket dredging history that created a mess. Zilwaukee dredging also has been a problem. There is strong public reaction to this word, however we now know that it can be done very effectively with special buckets and vacuums and silt screens. Why don’t we call this environmental dredging so it can be viewed in a more positive way? It has to be given a lot better treatment in future EPA literature.

EPA responded that it uses the terms straight from the EPA sediment guidance. Suspension can be minimized by using environmental buckets and silt curtains, but there is still suspension. EPA is trying to target the mass of contaminants to remove from soils that is going to cause the least amount of long and short term effects.

The CAG asked for a more detailed presentation on dredging at a future meeting.

The Meeting was adjourned at 9:00 PM.