

**Saginaw-Tittabawassee Rivers Contamination CAG  
Full CAG Meeting  
Memorial Park, Freeland MI  
Tuesday, September 21, 2015  
6:00 PM – 8:30 PM  
DRAFT**

**CAG Members Present**

Drummond Black  
Charles Curtiss  
Leonard Heinzman  
James Krogsrud  
Terry Miller  
Jim Koski  
Joe Kozumplik  
William Marsrow  
Luis Mulford  
Laura Ogar  
David Sommers  
Joel Tanner  
Bryce Wakeman  
Bob Wiese

**CAG Members Absent**

Armando Falcon  
Michael Kelly  
Lee Pavlik  
Nancy Pavlik

**Ex-Officio Members Present**

Al Taylor, MDEQ  
Mary Logan, EPA

**Support and Agency Staff Present**

Kip Cosan, Dow Chemical  
Dan Dailey, MDEQ  
Janelle Pistro, Dow Chemical  
Doug Sarno, Facilitator

Doug Sarno called the meeting to order at 6:00 PM. Agenda items included:

- EPA Project updates
- Segment 3 Proposed Plan

Copies of all meeting summaries and presentations are available at [www.saginawcag.com](http://www.saginawcag.com).

Materials and additional information on the Dow Chemical Site including all presentations from CAG meetings are also available at the EPA web site at <http://www.epa.gov/region5/cleanup/dowchemical/cag.htm>

## **1. EPA Updates**

Mary Logan provided the update.

### **Segment 2**

Sediment management area (SMA) and bank management area (BMA) physical activities were completed, now in ongoing process of ensuring that vegetation is established, monitoring will be ongoing. Will have photos at the November meeting.

### **Floodplain**

A cleanup plan was selected earlier this year, and we are working through the details. A subset of floodplain properties that are very clear as to their use are moving forward already, and excavation from these first properties started last week.

## **2. Segment 3 Proposed Plan**

The third segment of the Tittabawassee River facing cleanup is 4.2 miles long, 250 to 400 feet wide. It includes two Sediment Management Areas (SMAs), each about 0.4 acres, and 10 Bank Management Areas (BMAs) between 100 and 2,000 feet long, about 1.3 miles of bank total. Evaluations are ongoing and additional areas could be identified.

For all SMAs, EPA looks at three possible technologies 1) monitored natural attenuation, 2) capping, and 3) removal and off-site disposal. EPA looks at effectiveness, implementability, and cost in making its decision. Depth of contamination and access were also major factors. SMA 3-2 is harder to access by road and the dioxin is also at deeper depths.

The proposed actions are:

- SMA 3-1, remove and dispose sediment
- SMA 3-2, capping

For all BMAs, technology options are 1) stabilization or 2) Removal and revegetation. Evaluation looks at the level of disruption to existing habitat, ability to manage erosion, and impacts on river flow. Property owners to date have preferred stabilization on private property.

The proposed actions are:

- All 10 BMAs, stabilization

Additional design will be required for all actions, access roads created, monitoring during and after, disposal of materials and health and safety planning will be determined for all activities.

1,800 sediment samples and 430 bank samples have been taken. Contamination is not evenly distributed, and erosion areas vary.

Cleanup is being done to minimize bioaccumulation in fish and downstream movement of contaminants.

Cleanup is being conducted under EPA removal authority, there is no specific cleanup level, instead EPA is targeting the worst potential sources and will then monitor the effectiveness of those actions. A final decision document will be completed eventually to identify if cleanup goals have been met or if additional action is required.

The EPA public comment period runs from 9/1/15 to 10/15/15, there will be a public comment meeting at Memorial Park on 9/23/15.

EPA will finalize the plan at the end of the year and begin implementation in 2016.

CAG Question: How do these projects compare with segment 2 projects? They are very similar.

CAG Question: These seem very rural, how would you get access in more residential properties? We would likely ask for access across properties and then restore the property once the project is complete. We would take into account septic fields and other issues.

CAG Question: Why is access such a consideration, shouldn't public safety come first? Capping and removal are equally effective to protect public health and achieve the goals. There are tradeoffs in all choices but the remediation goals can be achieved either way.

CAG Question: What is considered long-term monitoring? In perpetuity.

CAG Question: Have you noticed any patterns in the sampling of where the contaminants are found? Banks that formed at the same time the contamination was

released in the early 1900s are quite contaminated. The sand bars that have been in place the longest also have the most contamination.

Public Question: Are you looking at suspended sediments in monitoring? Not at this time.

CAG Question: Do they dig down to place the geocell? It is placed on top of existing sediment. It is about 4-6" high. The river bottom moves up and down about a foot at a time.

CAG Question: Doesn't that raise the bottom and cause carving as water goes around the cell? We monitor on all sides to look for that.

CAG Question: How far down does the contamination go? We have not chased it to the end, but it does decrease as you get closer to the Bay.

### **3. Segment 3 Proposed Plan CAG Recommendations**

The presentation provided an overall good description of EPA's intent. The recommendations committee provide an overview of its draft comments on the proposed plan. The CAG discussed each of these issues and identified the actions it saw as most important to communicate to EPA.

**ISSUE:** There was a reference to BMA-11. Is there a BMA-11? EPA explained that this was a typo, and no BMA-11 exists.

**ACTION:** No further action was recommended.

**ISSUE:** The handling of acronyms in the document was inconsistent, and there was no overall list.

**ACTION:** The CAG recommends that acronyms be more carefully used and described in future documents, that documents include a list of acronyms, and that public meeting materials include a list of acronyms.

**ISSUE:** There are many pages of materials in the backups, they were difficult to follow and print, and CAG members had to jump around to different documents to follow the process. It was challenging to understand the difference between the four documents. (EPA explained that it was really one document, but was posted in four parts due to the web site limitations.)

CAG members sought out printed documents at the repositories, however reference librarians had difficulty finding the actual documents. They ultimately found them on disk, and would have charged to provide the hard copies. (EPA explained that it has been told by libraries to provide the large documents on disk as they do not have sufficient space).

**ACTION:** The CAG recommends that libraries do have hard copies on hand, at least during the public comment periods, or that EPA find alternate locations where hard copies can be maintained. Also EPA should make an effort to ensure that librarians have

better knowledge to know where and how the backup information is found, during public comment periods. EPA needs to also more clearly explain if it has split documents due to space constraints and help users find the information they seek.

**ISSUE:** The committee would have liked to see more detail about the rationale for the decision and a better link back to the detailed background documents.

**ACTION:** The CAG recommends that EPA put a stronger emphasis on the decision rationale in the proposed plan document, to ensure that the rationale is clearly presented in the decision document, how tradeoffs were considered, and provide clear links to backup information.

**ISSUE:** The background documents were dated April 2015 and the committee would have liked to have access to technical documents prior to the public comment period. EPA explained that EPA did not approve the document until August and that once documents are approved by the agencies they can be released.

**ACTION:** The CAG recommends that EPA ensure public access to technical documents as soon as possible, and be given notice as soon as documents are posted.

**ISSUE:** The CAG had extensive discussion of capping vs. removal. While not able to make a definitive decision regarding Segment 3, the CAG recognized the need to have a more informed and detailed discussion of this topic, preferably with the assistance of an independent technical advisor.

**ACTION:** The CAG identifies a preference for removal as a more permanent remedy, but recognizes the challenges associated with logistics, engineering, and other factors that affect site-specific decision-making. The CAG is in general support for the SMA decisions on Segment 3 but recommends that EPA conduct further evaluations as to whether some removal of shallower contamination at SMA 3-2 is feasible and would result in a more robust solution.

### **Access to the Technical Assistance Program (TAP)**

Using resources provided by Dow under EPA rules, the recommendations committee suggested that the CAG gain access to independent technical support, particularly those that volunteer to review cleanup options, expert assistance, and materials in advance of the public to allow sufficient time for review.

**ACTION:** The CAG should move forward on determining how to be access and use the resources provided under TAP.

### **Larger Conversation about Removal vs. Capping.**

The CAG had a detailed discussion of the trade-offs between capping and removal, and whether the CAG is comfortable with recommending capping. There are a number of locations where caps have been in place for quite a while. There are also places where caps have not been successful.

**ACTION:** The CAG would like to have a more detailed conversation about how caps have been used and the success rate and factors. This is a topic the CAG would also like to discuss with its future independent technical expert(s).

CAG Question: Why does it have to be either/or? It does not, and EPA has used combinations of capping and removal.

The river is a dynamic system, what happens in one place affects other places, changing or hardening parts of the river changes where the energy goes.

There are on-line seminars on making sediments decisions

ACTION: We will share links to these podcasts with CAG members. There is a podcast on October 8.

CAG Request: Can we hear about what is going on at the Pine River site and any potential impacts on our project.

The meeting adjourned at 8:15