

**Saginaw-Tittabawassee Rivers Contamination CAG  
CAG Retreat  
Memorial Park, Freeland MI  
Monday, March 27, 2017  
6:00 PM – 8:30 PM  
DRAFT**

**CAG Members Present**

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

**CAG Members Absent**

Michael Kelly  
Bryce Wakeman

**Ex-Officio Members Present**

Mary Logan, USEPA  
Joe Victory, Michigan DEQ  
Todd Konechne, Dow Chemical

**Support Staff Present**

Doug Sarno, Facilitator  
Diane Russell, EPA

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

- Results from retreat
- 2017 Membership Needs and Recruitment
- Possible TAP support on dioxin research status
- General Project Updates
- Segment 4/5 EPA Response to CAG comments
- EPA, Introduction to Monitoring

The CAG welcomed Joe Victory as the new *ex-officio* member from Michigan DEQ.

### **Results from Retreat**

Doug provided an overview of the discussions from the retreat. Overall the CAG was satisfied with the work completed in 2016.

The CAG approved a resolution to place the new leadership team onto the CAG bank account.

### **2017 Membership Needs and Recruitment**

Of the five members with terms ending this year, three are retiring and two are renewing.

The major needs continue to be a better gender balance, younger members, and overall member diversity. As the work proceeds southward, we may want to make sure we have the appropriate geographic representation as well.

Two applications have been received to date. Everyone is encouraged to please reach out to people who may be interested and recruit new members.

### **Possible TAP support on dioxin research status**

The CAG discussed the proposal from ESC to conduct a literature search regarding current research and projects related to dioxin cleanups. The CAG did believe this could be a helpful activity and had the following input:

- Efforts should be limited to what we are facing at this Superfund cleanup.
- Should look at both human health and environmental contaminants and conditions.
- It should focus on what is new, any changes in last 5 years.
- It needs to be helpful to CAG members to talk to their neighbors and use in annual orientation of new members.
- There is particular interest in cumulative effects, and interactions between dioxin and other chemicals of concern.
- Both EPA and the State continue to look at new information, and should be consulted to ensure we are not being duplicative of work already conducted.

### **General Project Updates**

Todd Konechne, Dow, provided this update. It is early in the year, so there is not much going on yet. We are getting ready for activities to start in the upcoming construction season. We have done some tree canopy work over the winter-- when the ground is frozen it has less impact. Segment 4 will be our focus this year, both sediments and floodplain.

We conducted some early actions in segment 4 last year. Segment 4 has the largest number of floodplain properties, so some may get pushed off until next year. Then we will be back on schedule for Segment 5 and beyond.

The overall site is split into two Operable Units, OU1 and OU2. OU1 includes all segments in the Tittabawassee River and The Saginaw River down to the Sixth Street turning basin, which is about 5 miles of river (this basin is actually not near 6<sup>th</sup> Street). Conditions in the upper part of Saginaw River to the Tittabawassee which is why they are grouped together. When we start OU2, we will have to do some additional investigation work. Saginaw Bay will be the last area to be addressed.

### **Segment 4/5 EPA Response to CAG comments**

Mary Logan, EPA, provided this report. Public comment took place last fall in September and October. EPA received comments from 9 individuals or groups including the CAG and ESC. The decision document was signed in February 2017, and EPA did not make any changes to what had been proposed.

The Segment 4/5 Action Memorandum can be found at this link

<https://semspub.epa.gov/work/05/932277.pdf>

EPA appreciated the way the CAG's recommendations were organized. EPA's responses are summarized as follows:

- 1) *The CAG is seeking further discussion and a summary of how Monitored Natural Recover (MNR) is being used.* EPA proposes to use meetings this year to go through this information to create a better understanding.
- 2) *The CAG is seeking a better understanding of how long term monitoring and maintenance will be performed.* Tonight's discussion will begin this conversation and later in the year we will get into more detail
- 3) *The CAG was wondering about the extent of natural resource trustee input on proposed remedies.* That is not a role of the trustees in the NCP regulation of the Superfund. They are limited to looking at resources and resource restoration. (A CAG member noted that we were just looking to ensure that other expertise was included in the decision making.) EPA does have a large team of experts that are included in looking at the plans and are involved in sending questions

and issues to Dow. Right now, the biggest thing EPA is facing is that they have not yet done the baseline risk assessment. Because we are doing the removal process we don't need a baseline risk assessment to prove the unacceptable risk required in the remedial process. In a removal process, we can use other risk factors to drive the need for cleanup, in our case we are using the secondary sources of contamination from erosion to drive the risk. We will do a residual risk assessment at the end and if we find anything at that point, it could trigger additional action.

- 4) *The CAG expressed concern about the usability of the EPA web site.* We know, it's done at the national level, and it is out of our control.
- 5) *The fact sheet did not have concentration levels and depths and the CAG is seeking a simple way to track cleanup across all segments.* In the future, we will try to do that. Editors want very simple information in the fact sheets. (The CAG noted that it does not need to be in the fact sheet.) It is in the reports, but it is challenging to make it digestible. We will try to do better. (The CAG noted that in an ideal world, there would be some hyper links to the backup information.)
- 6) *A fact sheet is needed on the risk-based decision process to help explain this to the community.* OK.
- 7) *Detailed comments from ESC.* We did consider the comments from ESC. The CAGs comments were easy to follow, the ESC's were harder to follow.

There is a complete responsiveness summary on line linked to the action memo.

### **Introduction to Monitoring**

Mary Logan provided an introduction to monitoring at Superfund sites.

There is a wide range of terminology, planning documents and activities associated with monitoring at Superfund sites.

Post Construction Completion (PCC), activities take following construction  
Post Removal Site Control (PRSC)

Together these activities help to ensure that the cleanup work continues to protect human health and the environment.

Environmental monitoring is the process of measuring or collecting environmental data, embodied in a monitoring plan.

Operation and maintenance (O&M) are the measures required to maintain the effectiveness of the remedy.

The O&M plan describes the details for measuring and maintaining the remedy

The Site-Wide monitoring plan is required to document baseline conditions and monitoring over time. Three components of the monitoring plan include:

- 1) Post-response monitoring

- 2) Contaminant uptake into biota
- 3) Sediment and contaminant monitoring

Response action objectives (RAOs)

- Short term RAOs are expected to be met very soon after remediation.
- Long term RAOs may require longer time or additional actions before change takes place

EPA is currently monitoring:

- Stability of caps
- Integrity of banks
- Post flood conditions at cleanup up properties

MNR will also be part of the monitoring at sites where that is selected.

Channel catfish, small mouth bass and walleye are being monitored over time.

Every quarter mile, we take a composite sample from 30 locations to measure dioxin levels. This is already being done regularly.

CAG: what does it mean that Dow is doing the monitoring?

Answer: Contractors and consultants under direction from Dow do the actual work. Everything gets reported to the EPA for review. The 2010 agreement with EPA, MDEQ, and Dow lays out the whole process. Dow does the work and the agencies provide oversight of the work.

CAG: what is a bathymetric survey?

Answer: a depth finder to paint a picture of the bottom of the river.

CAG: how often will we get summary of results?

Answer: we will provide an overview later this year and talk about how often you want it, probably annually.

CAG: is there any effort to look at movement of sediments at the end of the river during flooding and storms.

Answer: the composite sampling has been done on the entire 24 miles twice per year since 2013. We have not fully figured out how to track the trends yet or set a baseline.

CAG: do you look at the water column during storm events?

Answer: we made a conscious decision not to spend a lot of resources taking data now, because by the time we get there we will have to develop specific workplans anyway. We have pretty good baseline data.

CAG: do homeowners have a number to call if they see any bank erosion.

Answer: Dow works closely with property owners so they do know who to contact, but there is a monitoring program for those banks 2x per year, and also for banks with higher dioxin levels which were stable and not addressed.

CAG: when we move to the Saginaw there are lots of other potentially responsible parties involved, is Dow still the only PRP involved in the cleanup.

Answer: Dow is looking at dioxins and furans. EPA will look at other potential PRPs for the other contamination in the Saginaw River and Bay.

EPA will provide a list of guidance documents related to long-term monitoring.

The meeting adjourned at 7:30 PM.