



**Saginaw - Tittabawassee
Rivers Contamination
Community Advisory Group**

Meeting Summary

**Memorial Park, Freeland MI
Monday, November 20, 2017
6:00 PM – 8:00 PM
DRAFT**

CAG Members Present

Peter Bagley
Pamela Binder
James Krogsrud
Joe Kozumplik
Terry Miller
Luis Mulford
Mike Nusbaumer
Laura Ogar
Kevin Quiggle
David Sommers
Virginia Thibodeau
Joel Tanner
Bob Wiese

CAG Members Absent

Charles Curtiss
Merri DeSanto
Leonard Heinzman
Michael Kelly

Ex-Officio Members Present

Diane Russell, USEPA
Todd Konechne, Dow Chemical
Joe Victory, Michigan DEQ

Support Staff Present

Doug Sarno, Facilitator
Janelle Pistro, Dow Chemical

CAG information, materials, recommendations, meeting summaries, and presentations provided at CAG meetings can be found at: <http://www.saginawcag.org>

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

- 2018 Proposed CAG Meeting Dates
- 2017 Project Summary
- 2018 Planned activities

2018 CAG Calendar

The following dates were approved for 2018 CAG Meetings

- Monday, January 22
- Monday, March 19
- Monday, May 21 (Mary Logan cannot attend)
- Monday, July 16
- Monday, September 17
- Monday, November 19 (Thanksgiving week)

2017 Project Summary

Todd Konechne, Dow Chemical provided the update.

Work continued on Segment 4. Completed 5 Bank Management Areas (BMAs). There were no Sediment Management Areas (SMAs) in segment 4. Two additional BMAs in Reach FF are scheduled for 2018.

A total of 1,500 feet of bank were remedied, all with stabilization. If a BMA is 200 feet long, it results in a fair amount more bank work to transition on either side of the targeted contaminated area. 1500 feet accounts for this full amount of work in 2017.

Stabilization includes:

- Tree canopy management to improve light and required select tree removal. We do try to save as many trees as possible. This work can also occur in the winter.
- Bank clearing, smoothing, and shaping to prepare banks for stabilization treatment (will seek to save any good vegetation that is present). The target is a 40 degree or less angle for the bank.
- Stabilization technologies include Geoweb, turf reinforcement mats (TRMs) and straw blankets. This helps keep everything in place while plants take root, it takes 3 to 5 years for good rooting to take place. Sometimes cover crops are also used in the first winter with additional vegetation work done in the second year as there is a short growing season in the first year.
- Stone toe protection. In areas that experience daily water level fluctuations due to dam activity, it takes longer to establish vegetation and stone toe protection helps to protect the banks.
- Seeding with hydro-seeding and live plugs in some areas are used to provide a head start for vegetation.

Segment 4 Floodplain Activities in 2017. Most sampling was completed in 2016 using incremental composite sampling. Dow works directly with property owners to make arrangements for cleanup, EPA provides review and approval of all cleanup plans. 34 properties were cleaned up in Segment 4 (some of these were done in 2016). Cleanup entails removal of 12 inches of soil, replacement with new soil and re-establishing vegetation.

CAG Question: How many property owners have not allowed cleanup?

Answer: There are two ways they can respond, that they don't even want to be sampled or that they don't want cleanup after sampling. The vast majority of properties that have been sampled have also been cleaned up (can think of only two examples where they did not). A very high percentage of homeowners have allowed sampling. Dow's goal is to get all properties cleaned up. When a property changes hands and has not been cleaned up, Dow meets with the new homeowners to explain the process and their options.

CAG Question: What is the cleanup level?

Answer: 250 ppt is the cleanup level, Dow is using an action level of 200 ppt to drive action.

CAG Question: What percentage of properties meet cleanup requirements?

Answer: We measure units smaller than the legal property ownership parcel, not sure of the exact percentage. In segment 4 it was a pretty high percentage of properties.

CAG Question: Are these 34 all of the properties in Segment 4?

Answer: Segment 4 is a pretty high volume segment, there are some more properties that we need to get to next year. Each property takes many days to address. There will be fewer properties in segment 5.

CAG Question: Are the deed restrictions in place for new buyers?

Answer: For people who signed up for the conservation program, it is a requirement to register this on the property deed. By law, the owners are supposed to disclose this when selling. The conservation program is still ongoing and still available to new property owners.

CAG Question: What is available to protect potential buyers?

Answer: It is a real estate law.

CAG Comment: We just bought and were given full disclosure through the real estate transaction.

CAG Question: How was 12 inches decided as the excavation depth.

Answer: That was part of the remedy decision by EPA based on the fact that contamination was much higher at the surface and that the foot of

clean soil provided an adequate barrier within the risk management calculations.

CAG Question: What happens if property owners are in violation?

Answer: Dow's agreements are that the owner will maintain the property at the given land use and not raise livestock. If a property owner changes the land use, then Dow has an obligation to come back and clean up. Anyone who wants to modify the bank needs to get a permit.

CAG Question: Is there enforcement of the conservation agreement?

Answer: Yes those agreements are enforceable, but property owners who are not in the program can change their properties.

CAG Question: Is EPA there when you do the work?

Answer: They provide oversight, yes. There is also a hotline at the state to investigate any suspicious activity on the river.

CAG Question: Where is all the clean fill soil coming from?

Answer: The top soil can come from different sources, we have to sample and monitor all soils that are used. The most recently used soil is coming from agricultural lands.

CAG Question: What lessons did you learn from the big flood last year?

Answer: Once the water breaks the bank, the forces inside the river level off, so it does not really matter how high the river gets above that level. As it descends and stays at a higher elevation on the banks themselves it can cause a lot of damage if it stays at those levels for an extended period of time. It is especially damaging for banks finished late in the season where roots have not yet been established.

CAG Question: Does the Geoweb material stays in place?

Answer: Yes, and we are seeing banks getting very well established after a few years.

CAG Question: Some folks have noted that you did floodplains but not the riverbank, how does that make sense?

Answer: We are trying to clean up the highest level river banks with unstable situations that are a source for contamination back to the river upon erosion. We are not there just to fix eroding banks but to stop contamination from getting in the river. Banks that have always been erosional, have never had deposition of contamination so would not be addressed.

CAG Question: Are there different cleanup levels on banks and floodplains?

Answer: Banks do not have a strict cleanup level, they are based on the potential for erosion putting more contamination in the river. They are being stabilized, not necessarily remediated.

CAG Question: Bank smoothing and shaping, do you remove soils, is there resuspension?

Answer: There is never any resuspension. As we reshape, we are always taking more soil away than the clean soil we are replacing it with.

CAG Question: What about burrowing animals, does the matting help with that?

Answer: We are trying to get to full diverse vegetation on the banks. We are still monitoring pilots from as far back as 2008 and have yet to see any evidence of burrowing animals. We are at the point where we are using the most robust tools we have tested.

CAG Question: Is Dow still offering the same conservation program?

Answer: Yes, all the conditions are the same and will be for the foreseeable future.

CAG Question: The mats do not degrade?

Answer: The Geoweb and inca blankets do not degrade, the other materials we use are designed for short term use and will degrade.

2018 Planned Activities

Diane Russell, EPA, provided this overview. She provided a cleanup progress handout showing work conducted since 2012 beginning with Segment 1.

Segment 5 work will be conducted next year with a number of SMAs and BMAs and also continuing the floodplain work.

EPA anticipates Segments 6 and 7 decision to be done in 2018:

- Background for these segments at the March CAG meeting
- Proposed cleanup to public in summer fall
- Cleanup activities to start in 2019
- Expect at least two construction seasons to complete the work.

Public input on our proposal are important so next year will be a significant year for public input on segments 6 and 7.

CAG Comment: It seems we are making great progress on cleanup. Long term we have had impacts from the contamination. Can we as a group help to mitigate some of the negatives to help the community become more aware that the river has been cleaned up and how do we make better use of this resource moving forward. Including issues such as access and recreation. What kinds of things would the community want to do to use this resource better. Is there interest in creating a subcommittee to look at these issues?

Answer: This assistance can come from many sources, EPA will make their resources available as appropriate, a lot of this work also happens at the local government level.

CAG Comment: We need to understand how fish and game advisories might impact future plans to expand use of the river. I think this is very good timing to start having this conversation. People want to use the water and how can we help move planning forward.

Thomas Township purchased 67 acres to create a nature center. We are looking at the light at the end of the tunnel. Have already installed a canoe and kayak launch.

CAG Question: Is there any money available?

Answer We can provide access to contractors who can conduct some studies. For example, at Velsicol we conducted a reuse study which helped move the process forward. There are other programs beyond Superfund that also might be able to provide some assistance. The wild game advisory is only for the Tittabawassee River floodplain.

CAG Comment: The game advisory shows a much bigger area than just the Tittabawassee floodplain.

CAG Comment: We want to make sure that expanded use is linked to ensuring that the cleanup is working. Don't want to have any issue with health.

EPA: We are years away from cleanup at Velsicol, but it did help the City to look forward. These processes take time.

Public Comment

There was no public comment.

The meeting adjourned at 7:40 PM.

The next CAG meeting is Monday, January 22