

**Saginaw-Tittabawassee Rivers Contamination CAG
CAG Retreat
Memorial Park, Freeland MI
Monday, September 18, 2017
6:00 PM – 8:00 PM
DRAFT**

CAG Members Present

Pamela Binder
Leonard Heinzman
Michael Kelly
James Krogsrud
Joe Kozumplik
Terry Miller
Luis Mulford
Mike Nusbaumer
Kevin Quiggle
Joel Tanner
Bob Wiese

CAG Members Absent

Peter Bagley
Charles Curtiss
Merri DeSanto
Laura Ogar
David Sommers
Virginia Thibodeau

Ex-Officio Members Present

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

Support Staff Present

Doug Sarno, Facilitator
Diane Russell, USEPA
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 6:15 PM. Agenda items included:

- 2017 New Member Introductions
- General Project Updates
- Site Monitoring Discussion

2017 New Member Discussion

The membership committee presented Mike Nusbaumer for invitation to join the CAG for a three-year term beginning July 17, 2017. He was approved unanimously.

Project Updates

Todd Konechne, Dow Chemical provided the update.

Working in segment 4, performing bank stabilization. Have worked on approximately 30 floodplain properties this year to date. Up to nine properties will be conducted in 2018 due to the volume of floodplain properties in segment 4 and depending on the weather during the remaining construction season. We will complete segment 4 and begin segment 5 in 2018.

EPA added that in 2018, they anticipate that they will propose the cleanup remedy and conduct public comment for segments 6 and 7.

Site Monitoring

Mary Logan, USEPA provided the presentation.

EPA provided an introduction to monitoring at the March 2017 CAG meeting.

The 2010 Agreement on Consent (AOC) between EPA and Dow requires a site-wide monitoring plan be developed which will consolidate all monitoring activities and will be updated over time. Dow is also responsible for implementing the monitoring plan.

The three components of the site-wide monitoring plan include:

- 1) Post-response monitoring
- 2) Contaminant uptake into biota
- 3) Sediment and contaminant monitoring.

All cleanup plans have 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 the required objectives are achieved.

Site-Wide Monitoring Component 1: Post-Response Monitoring

EPA is currently looking at the:

- stability of caps
- integrity of banks
- post flood conditions at cleanup properties.

The stability of sediment caps is monitored by visual inspections and elevation surveys of the cap thickness.

14 areas were capped from 2008 to 2016, comprising 6.4 total acres (7 of these caps are located in segment 1). The construction of these caps include:

- 2 armor stone
- 5 cellular containment
- 3 geosynthetic clay layers
- 4 caps combined with sediment removal.

Through 2016, approximately 2.6 miles of bank have been stabilized. Banks are monitored two times per year in the spring and fall. Maintenance work is conducted to ensure vegetation growth and health.

Work at Riverside and West Michigan Parks was conducted in 2008 and 2009 due to flooding conditions. These areas are monitored after flooding events to ensure that new deposits do not present health threats.

Site-Wide Monitoring Component 2: Contaminant Uptake Into Biota

Fish monitoring measures the chemical residues in fish resulting from contaminant uptake. Dow is currently monitoring three types of fish: channel catfish (every 2 years at 3 locations), smallmouth bass (every 4 years at 4 locations), and walleye (every 4 years at 1 location near the dam). The next monitoring event will be conducted in 2018.

CAG Question: Why did EPA change the sampling process from 2007 to 2014?

Answer: Composite samples give us the ability to get the data we need without having to take too many fish.

CAG Comment: The CAG would like to have Michigan come back and present on the Fish Advisories.

CAG Question: Why are Bass and Walleye only sampled every four years?

Answer: The contamination levels are much lower and they are not bottom feeders like the catfish, so we don't expect changes as rapidly.

Site-Wide Monitoring Component 3: Sediment and Contaminant Monitoring.

Bed stability is monitored using bathymetric surveys and bed pin monitoring along transects.

Surface sediment concentration monitoring is conducted in ¼ mile segments.

CAG Question: How long would you need to monitor to be able to reliably see a trend?

Answer: We haven't made that determination yet.

CAG Question: Would the work done in segment 3 stir up dioxin and send it downstream?

Answer: Segment 3 was done in dry conditions so we don't think it will have impact. In wet conditions, we do stir up dioxin and expect to see temporary increase in fish tissue.

Public Comment

There was no public comment.

The meeting adjourned at 7:00 PM.

The next CAG meeting is Monday, November 20, 2017