

**Saginaw-Tittabawassee Rivers Contamination CAG
Summary of Full CAG Meeting
Saginaw Valley State University – Curtiss Hall
Monday, September 16, 2013
6:00 PM – 8:35 PM**

CAG Members Present

Drummond Black
Armando Falcon
Matthew de Huis
Leonard Heinzman
Deborah Huntley
Michael Kelly
James Krogsrud
Rachel Larimore
Judith Lincoln
Donna Mallonee
David Meyer
Laura Ogar
David Sommers
Joel Tanner
Brian Thomas
William Webber
Bob Wiese

CAG Members Absent

Jeffrey Bulls
Charles Curtiss
Ryan Jankowksi
Frank Kuszak
Paul Vasold

Ex-Officio Members Present

Mary Logan, USEPA
Joe Haas, FWS
Todd Konechne, Dow Chemical
Al Taylor, MDEQ

Support and Agency Staff Present

Mary Breeden, US EPA
Kim Cousans, Dow Chemical
Cheryl Howe, MDEQ
Diane Russell, US EPA
Doug Sarno, facilitator

Deb Huntley called the meeting to order at 6:05 pm. Agenda items included:

- CAG Updates
- General Project Updates
- Segment 2 Cleanup Decision

A videotape of this meeting, along with copies of all meeting summaries and presentations is available at 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. CAG Updates

Community Outreach Efforts of EPA Saginaw Office

The final planned meeting of the floodplain outreach program was held last Tuesday, September 10. EPA will provide a full update of the program and results at the next CAG meeting. EPA advertised this meeting broadly, previous meetings were invited to specific stakeholders. Looking to use the CAG Facebook page as part of EPA outreach. The EPA outreach calendar will be connected to the CAG website so there will be access to all activities going on about project, fish advisories and other events.

The River Walkers program is back underway, retired fisherman volunteers talk to local fisherman about fish advisory. Norm and Willie are the volunteers.

2. Segment 2 Cleanup Decision

Segment 2 is the next segment scheduled for cleanup, it is the four mile stretch immediately downstream of the Dow property. EPA proposed a cleanup plan in early July and asked for public comment. In the process of assessing the comments. This proposal was presented and described at the July CAG meeting.

EPA did not receive a lot of comments on this proposal. Mary Logan, EPA, provided preliminary responses to the CAG comments. Final review and approval of the EPA responses to all comments is still under development.

EPA appreciates the overall CAG support for the proposal and the flexibility of the approach. EPA will provide the ongoing updates as requested by the CAG.

The CAG identified the multiple uses of the banks along Segment 2 and the likelihood of changes over time, which could point to the need to consider long-term uses as residential exposure. EPA's remedy will be protective as it is looking primarily at the sources of contamination and controlling those, thus limiting exposure regardless of

land use. These land use issues will be evaluated in more detail as we make our overall floodplain decision in 2014, and we will discuss this further with the CAG at that time.

Another issue raised by the CAG was the potential impacts of caps or covers on boating on the river, particularly at low water levels. EPA will explore this issue further in the design process.

The CAG asked for more background on the numbers of types of properties along the segment. EPA agrees this is on point, but EPA also needs to protect the privacy of the actual landowners. Dow and five other property owners are along the segment, which includes agricultural and residential uses. Four owners are near the sediment management areas.

The CAG would like to see additional detail on the nature of the long-term monitoring and encourage more information to the public. EPA is proposing a detailed presentation next year on the monitoring program, and a discussion on how to communicate results to the community at large.

Other public comments identified the desire for both more and less removal. EPA also received comments on the impacts on boat traffic.

There were requests for more public access, trails and fishing spots and EPA will consider these issues in conjunction with the floodplain decision.

EPA Region 5 is in the process of consulting with EPA Headquarters on the final decision and it should be in place before the next CAG meeting November 18

CAG Question: Are you not looking at residential cleanup criteria? There is no current consideration of cleanup criteria for sediments, land use issues will be taken into account in the floodplain decision.

3. Segment 1 Project Progress

Todd Konechne provided the update. We are in our second year of field work for the first three miles of the river which are adjacent to the Dow plant and we are close to completion of this work. The Segment 1 remedy identified six sediment management areas (SMAs) that required cleanup. SMAs 1, 4, and 5 are being capped. SMAs 2, 3, and 6 include DNAPL removal and treatment, followed by installation of a cap and sheet pile connected to underlying clay and flush with the sediment to isolate and contain any remaining DNAPL material.

During 2012, we installed and implemented the DNAPL removal systems, started in fall and stopped for the winter, completed cap for SMAs 4 and 5. In 2013 we completed the cap of SMA 1.

So far in 2013, we have removed 5,448 liters of DNAPL for a total of approximately 15,000 liters to date. Approximately 156 extraction wells have been installed. We are continuing to remove DNAPL, but have already removed enough to allow installation of the containment systems. The SMA 2 containment system was completed in July. SMA 6 is divided into two units, the upper river half was installed in August. The SMA 6 lower river portion will be completed by early October. SMA 3 was just completed yesterday. The SMA 1 cap installation is being evaluated to understand impacts from a potential Natural Resource Damages (NRD) project with the Dow Dam.

Todd presented graphics and photos to describe how the containment system works and is installed.

CAG Question: How deep is the sheet pile? It is designed to be driven about one foot into the clay layer, and has ranged from 3 to 8 feet. We have tried to pre-measure and cut segments before driving to limit the amount of underwater cutting necessary.

CAG Question: Are the wells being removed? Wells are still in place in areas where the DNAPL is still being pumped, but these will be removed before winter.

CAG Question: Will this pumping and containment be done anywhere else? DNAPL is not an issue anywhere else below Segment 1.

CAG Question: What happens with the DNAPL? It is sent to the Dow incinerator.

Public Questions

Where is the soil, sediment disposed? For segment 1 there has been no soil or sediment removal, just the DNAPL. For other cleanup actions, sediment is going to local landfills.

I live next to Midland County landfill, will this disposal contribute to groundwater contamination at these landfills? EPA regulates all this action, landfills have licensing and monitoring requirements and all this material can only go to licensed landfills. Dioxin is the main contaminant in these sediments and it does not migrate easily in groundwater.

Does the DNAPL move well? No, this material has been there for a long time and settled on the bottom. We do not believe it is still actively moving. Any residuals are contained within the containment systems.

What about pollutants to the air? The Dow incinerator is licensed and designed under regulation to make sure it does not release anything exceeding health standards, and it includes scrubbers and air cleaners to ensure it meets all standards. Laws, technology, and monitoring are much more stringent than in the past.

Once it is pumped, do you fill the spaces back in? DNAPL is liquid so as soon as it is pumped water fills in that void. Also designing system to create and inward hydraulic gradient

What about wells into the clay layer, can that create leaks? The clay layer is up to 200 feet thick and wells are only penetrating 6-12 inches to get to the materials that rest on top. We are very careful not to punch through any protective layers.

Any updates on sediment traps? EPA continues to coordinate with the Corps, but their attention is on more pressing issues. At this point, the 6th Street Turning Basin is working effectively as a sediment trap as long as it is dredged. The State and Corps are also in conversation on this issue and it will continue to be discussed.

4. Potential CAG Input to Contaminated Sediments Technical Advisory Group (CSTAG)

CSTAG is a panel of EPA, Army Corps, and other agency representatives that monitor site progress and provides advice on certain large, complex, or controversial contaminated sediment Superfund sites. CSTAG will be discussing the Tittabawassee River, Saginaw River & Bay site at a meeting to be held in October at EPA's Community Information Office, 804 S. Hamilton, Suite 3, Saginaw, MI. Stakeholders associated with the site, including the CAG, are invited the afternoon of October 9th to present any information that they believe is important for the CSTAG to consider.

The EPA project team will meet with CSTAG and provide them technical information about the site and the CSTAG will provide comments on best practices for consideration. The CAG can be part of this process to weigh in on community issues such as progress, communication, impacts, future uses, etc. The CAG would be provided a 30-minute time slot and/or can provide written comments up to 40 pages.

The CAG decided that they do want to weigh in to the CSTAG process. Laura Ogar, Armando Falcon, and Matt de Huis volunteered to work as a committee to prepare the CAG input. This team will distribute the letter to the full CAG to have an on-line discussion of these issues.

On another issue, Michigan DEQ has announced a comment period on the delisting of the fish and wildlife beneficial use impairment from the area of concern (AOC) including the Saginaw River and Saginaw Bay. This would remove one of the ten impairments from the list.

Focusing on the contaminated areas of this habitat, these are the types of legacy issues we are discussing as a group. The CAG decided that it does need to learn more about this issue and understand if we should weigh in. Al Taylor offered to help coordinate a meeting with the AOC Coordinator. The CAG will ask the AOC coordinator to provide a

briefing at some point in the future to provide context of the AOC program and its potential impacts and connections to the Superfund cleanup process. AI will help coordinate a call and members who wish to participate can discuss whether additional CAG action is warranted.

The meeting was adjourned at 8:00 p.m.