

**Saginaw Tittabawassee Rivers Contamination CAG
DRAFT Summary of Full CAG Meeting
Saginaw Valley State University – Curtiss Hall
Monday, March 21, 2011**

CAG Members Present

Drummond Black
Jeffrey Bulls
Matthew de Huis
Leonard Heinzman
Deborah Huntley
Wendy Kanar
Michael Kelly
Judith Lincoln
David Meyer
Laura Ogar
Annette Rummel
Joel Tanner
William Webber

CAG Members Absent

Charles Curtiss
Michael Espinoza
Ryan Jankoska
Rachel Larimore
Janet McGuire
Paul Vasold
Bob Weise

Ex-Officio Members Present

Joe Haas, US FWS
Mary Logan, US EPA
Al Taylor, Michigan DNRE

Ex-Officio Members Absent

Todd Konechne, Dow Chemical

Support and Agency Staff Present

Don de Blasio, US EPA
Blair Giesken, CAG Volunteer Transcriptionist
Cheryl Howe, Michigan DNRE
Janelle Pistro, Dow Chemical
Tim Prendiville, US EPA
Diane Russell, US EPA
Doug Sarno, Facilitator

Doug Sarno called the meeting to order at 6:07 PM. Agenda items Included:

- Introduce new members
- Approve CAG Articles of Incorporation
- Updates on technical projects
- Background on Segment 1

1. New Members CAG Incorporation

- New CAG members Matt de Huis and Jeffrey Bulls were introduced.
- The CAG would take formal action to complete the CAG's incorporation as a 501c3 organization. The articles of incorporation will be distributed by email for the group to review. Annette Rummel made a motion to approve the resolution outlined in the articles of incorporation as presented. Laura Ogar opposed the motion, noting that she did not believe formal incorporation was necessary. All other members voted in favor, and the motion was passed.
- Judith Lincoln asked for a motion to appoint all of the CAG members as directors as required within the articles of incorporation. The motion was made by Joel Tanner and seconded by Annette Rummel. All were in favor.
- Joel Tanner also made a motion to approve the appointed positions within the CAG articles (President, Secretary, and Treasurer). Annette Rummel seconded the motion. All were in favor.
- The leadership group is still looking for suggestions of experts in various fields related to Dioxin contamination and health effects who can come speak to the group and present information related to the cleanup. It is hoped to finish compiling this list by the April 18th meeting in order to get these individuals on the CAG schedule.
- Janelle Pistro noted that in response to requests at the last meeting, she brought folders of information compiled on Dioxin that are made available to homeowners. This information is available to the public as well.

2. EPA Technical Updates

- The public comment period on exposure controls for high use properties closed in March. EPA is in the process of digesting comments and developing a summary response identifying plans to modify or move forward with the proposed plan within the next 6 to 8 weeks. Implementation is scheduled to start this spring.
- On Island MM, EPA is evaluating the three alternatives to identify the preferred alternative to present to the public for public comment. The comment period may start as early as April. EPA will keep the CAG up to date as this project progresses.
- The CAG viewed an EPA video on cleanup options available for contaminated sediments. Mary Logan noted that the video is available online for those who are interested in re-watching it or sharing it with others. Joe Haas noted that the video is generic and does not address the issues of floodplains.

3. Segment 1

Mary Logan, EPA, presented a Summary of conditions in segment 1 of the river, adjacent to Dow's industrial property. The segment covers 3.1 miles and includes Reaches A through H. There is relatively little floodplain as it is bounded by the Dow property. EPA believes at this point that the sources have been controlled in this segment. All stormwater, groundwater, and wastewater on site now is processed through the Waste Water Treatment Plant and flows through a single outfall into the river.

Al Taylor provided an overview of the groundwater control system. Groundwater is managed by a system called RGIS which uses a series of engineered trenches designed to capture any contaminated groundwater before it reaches the river.

- It was asked if the majority of contaminants now in the river were from Dow outflow. Al Taylor said they don't know for sure. The RGIS system has been in place since 1979. Contaminant concentrations in the water have been very highly contaminated in the area of segment 1.
- It was asked if all of the new contaminants are now being treated and Al Taylor noted that they are.
- It was asked if the pumping system is susceptible to a backup during heavy rain. Al Taylor noted that the system is designed to be functional when fully submerged by water.

Significant cleanup has already been performed on Segment 1. Previous actions completed include:

- Reach B removal and capping
- Reach D dredging, capping, and monitored natural recovery (MNR)
- Reach G groundwater capture and treatment system.

Ongoing investigation activities are exploring the stability of conditions under various river flows and biological evaluations (distribution of species; what do they look like compared to uncontaminated area and how chemicals are building up in the fish).

It was asked who is conducting the testing on the species. Mary Logan noted that in addition to Dow, the State of Michigan took samples and that these were sent to GLEC lab (a Great Lakes Bay lab) for testing.

Preliminary findings of the evaluation include:

- DNAPL/recoverable product was found in some locations.
- Dioxin and furans in Segment 1 were largely addressed by actions in Reaches B and D. A range of contaminants are being addressed in this action.
- Focus of the cleanup will be on overall risk reduction and management of exposures. The removal of contamination mass does not equate to risk reduction.

EPA will be considering a number of specialized options for Segment 1 including hydraulic containment, product recovery, and specialty caps, however the range of technologies are limited.

Discussions for upcoming CAG meeting will include:

- Environmental conditions that best suit certain cleanup options
- Advantages and limitations of cleanup options
- Processes that can affect exposure levels, trends, and site risk
- The role of monitoring to ensure protectiveness of actions.

4. Public Comment Period

- A member of the public asked why the public could not participate in each part of the meeting as the CAG got its presentations, that it would be more effective for the public had access throughout the meeting. It was noted that the public comment period was placed after the presentation on segment 1 as that was the main topic of conversation for the public. If different key topics are discussed at one meeting, the CAG may choose to have multiple public comment periods.
- A member of the public asked why the public is seated in the back so that they could not be seen by the CAG leadership. It was agreed that this was not an effective room organization and it would be changed at future meetings.
- A member of the public asked if Dow Chemical still has a seven mile mixing/diffusing zone and that people should know that. He noted that there may be an impression that what is going into the river at that place is benign, but that really the contaminants are allowed to go into the river as long as they're diluted. It was answered that Dow is releasing its treated wastewater within the legal permit guidelines set forth by the State and abiding by State and Federal regulations.
- A member of the public asked if sediment traps would be used when dynamic river conditions are approaching in the spring. Mary Logan responded that EPA is trying to limit sediment transport and that they are evaluating if sediment traps are necessary. EPA is studying past use of traps to see what these have accomplished.
- A member of the public asked if any of the species samples were tested for mutations to their DNA. Mary Logan responded that no, they were tested for growth and life span but not for DNA mutations.
- A member of the public asked if any CAG members owned Dow Stock on the board. One CAG member responded yes and that nearly anyone in the room with a mutual fund could have such and perhaps not even know it. It was also asked if anyone had received political funds from Dow, and no CAG member has received any such funding.
- A member of the public noted that Dioxin does cause Cancer now and that it's proven. A CAG member asked for proof of that from the EPA or another entity. It was noted that the CAG is inviting experts in to talk about this.

- A member of the public asked how much contamination was from groundwater. Al Taylor noted that there is a historic issue of contamination from groundwater and that it's being addressed through a legal mechanism implemented in the mid-80s.
- A CAG Member asked if there has been remediation of the ground, or if the focus has just been on the waterways. Al Taylor noted that there is a program of corrective actions being conducted on soil contamination at the Dow plant site, ensuring that it doesn't migrate off the plant site and that there are maps outlining these actions that could be shown to the group to better explain. Mary Logan noted that the State of Michigan is conducting much of the work at the Dow plant site in Midland and in the City of Midland. The CAG was formed to provide advice on the Rivers and Bay and is not advising on cleanup activities related to the Dow site.
- Al Taylor noted that information about the corrective actions performed over the past seven years (both on site and for the river system) is available on the EPA website.
- A member of the public asked when the next renewal for Dow's release permit would come up and if there would be public notice. Cheryl Howe said that the draft permit is not on the system currently, but that public comment is part of the process.

The Meeting was adjourned at 8:30 PM.