

**Saginaw Tittabawassee Rivers Contamination CAG
Draft Summary of Full CAG Meeting
Saginaw Valley State University
Monday, June 21, 2010, 6:00 PM – 9:00 PM**

CAG Members, and Ex-Officio Members Present (to be validated)

Drummond Black
Ronald Campbell
Carol Chisholm
Charles Curtiss
Michael Espinoza
Leonard Heinzman
Deborah Huntley
Michelle Hurd-Riddick
Michael Kelly
Ryan Jankoska
LaMetria Johnson-Eaddy
Wendy Kanar
Judith Lincoln
David Meyer
Janet McGuire
Laura Ogar
Annette Rummel
Daniel Sosa
Michelle Steele
Joel Tanner
Paul Vasold
William Webber

Ex-Officio Members Present

Joe Haas, US FWS
Todd Konechne, Dow Chemical
Mary Logan, US EPA
Al Taylor, Michigan DNRE

CAG Members Absent

Ex-Officio Members Absent:

Support and Agency Staff Present:

Don DeBlasio, US EPA
Blair Giesken, CAG Volunteer Transcriptionist
Cheryl Howe, DNRE
Jeff Kelley, US EPA
Diane Russell, US EPA

Deb Huntley called the Meeting to order at 6:04 p.m. Agenda items included the following:

1. Monthly updates
2. EPA management of contaminated sediment sites
3. Previous Tittabawassee River Activities
4. EPA Dioxin Reassessment Update
5. Community Involvement Plan
6. Community Technical Assistance Program Application
7. Public Questions and Comments

Deb introduced a guest to the meeting from the Michigan Department of Agriculture who was present to identify issues pertinent to the Dioxin issue as related to agriculture.

1. Monthly updates

Al Taylor began the discussion of ongoing activities in response to the CAG's request for a monthly update. Al described the 4 major tasks being addressed right now:

1. Task 7.1- Dividing the river into manageable segments for remediation; proposed segmenting has been submitted and is awaiting review.
2. Task 1- High use properties near the river presenting near-term exposure risks. These are similar to priority 1 and priority 2, but will be on a more aggressive schedule. A total of 21 exposure units have been identified. Evaluation will occur to determine if these properties have higher levels of exposure and/or contamination, and how these properties are being used. Looking to match high use and high concentration areas.
3. Task 2- Addressing movement of highly contaminated banks to distinguish areas that might erode into the river and potentially transport contaminants further downstream. These areas are prioritized for evaluation and evaluation has been underway for approximately one month.
4. Task 8- Looking at segment 1 first, the evaluation will move upstream to downstream. This builds on the work that has been taking place for a few years based on what was discharged next to the Dow Chemical plant site. Mary Logan noted that a draft will come up for review this fall and a proposal to the public will not take place until 2011.

Todd Konechne explained to the group the projected schedule and itinerary for the CAG Boat Tour to take place on Tuesday, June 22, 2010. It was discussed that there will be continuity between the three different boats and Mary noted that they were developing a standard information sheet to ensure that all groups receive a similar experience.

Mary Logan explained that the EPA wants to know what is of most interest to the CAG so they can provide better updates and create a stronger understanding of what the EPA is doing. The group expressed that they would like more specific reports on the number of properties evaluated, and what is actually being accomplished between

meetings. Mary Logan noted that EPA's contractors took samples from the water at the end of May Logan and that the results should be back within a month or two.

Deb suggested that on July 19, the CAG meet 30 minutes early (at 5:30) so that there can be a short CAG minute meeting before the public meeting begins at 7:00; all agreed

2. How EPA Manages Contaminated Sediment Sites

Mary Logan provided this presentation. EPA reports to Congress on contaminated sediments. Across the country, thousands of Fish Consumption Advisories result from contaminated sediments which can also impair recreational and commerce uses. The majority of these contaminated sediments are found in rivers and streams. It is estimated to cost billions of dollars to address these sediments. EPA focuses its priorities and energies to get the best results possible.

Mary outlined some fundamental principles of the EPA such as controlling sources and involving the community early and often and provided an explanation of the difference between dredging and excavation. She also explained the optimal conditions and situations for processes like capping.

Key Questions and answers related to this presentation included:

- It was asked whether or not it is our responsibility to let the people of Birch Run know of potential exposure for these transported materials from dredging that may have been deposited in/near Birch Run in landfills. Mary noted in terms of past action from prior dredging that the EPA has a program that requires them to take these dredged materials to a landfill or another place in a safe and legal way.
- It was further questioned if fish and wildlife are taken into consideration in dredging transportation. Mary responded that yes, the EPA does look at these factors when performing dredging. No matter the alternative, EPA must look at both the positive impacts of dredging, as well as the potential negative impacts.
- It was asked where capping has been used before. Mary noted that Todd would also address this later in the meeting and explained that right now there are a limited number of processes to address contaminated sediments, they are dredging, capping, and monitored natural recovery. She explained that things like the levels of contaminants in cleanup may not come down right away after a cleanup because these types of recoveries take time. She noted that there is no presumptive remedial approach, and that all pros and cons for each approach will be considered.
- It was asked which species are being considered to determine cleanup. Mary responded that a specific species has not been determined yet to be used as a measure for this study, but that in the past, certain species of fish have been used. She noted that they will probably try to look at a small segment of fish and possibly a set of microorganisms as well. She noted that biological monitors will

be a part of the study. Al noted that historical data from walleye, catfish, and other fish are likely to be used as a benchmark or monitoring system.

- It was asked if these policies would apply to all sediment cleanup sites and Mary responded that yes, they would apply to all sediment sites.

3. Previous Tittabawassee River Activities”

Todd Konechne provided this presentation. Dow believes that the majority of contamination in the rivers was released in the early years of the Dow Chemical Plant operations at the same time that the river was recovering from very heavy logging usage. As a result, a great deal of activity was going on in terms of river dynamics. Todd noted that contamination of the river is not uniform. Todd noted that previous cleanups have been collaborative efforts between Dow and other parties, and discussed several of these efforts:

- Reach B: 2009- bank & in-channel cleanup, 700 ft. of river was capped. Todd explained the capping process that took place here and that a 12-inch cap of sand was evenly distributed over this area.
 - It was asked when the chlorine cells were placed in the river (which were removed from the river with Reach B’s 2009 cleanup). Todd guessed probably in the 1930s.
 - It was asked what factors led to the determination that capping was better in this instance than de-watering and digging out the old cells & materials. Todd explained that the factors that led to this determination included depth of the river, level of contamination, nature of contamination, water level. Al noted that monitoring takes place after these types of cleanups to make sure that these remedies have sustained themselves and are still in place.
- Reach D: 2007-2009—the technology used for this site included hydraulic and mechanical dredging and Geotubes for dewatering, as well as a sediment cap placed in 2009. Debris at this site created many challenges with the dredging. Todd noted that, other than the residuals that were capped, they were able to remove the sediment. Al noted that there were multiple contaminants at this site, not just Dioxin and Furans, but also pesticides and various other contaminants.
- Reach M: 2008- this was a collaborative with DNRE to conduct riverbank erosion stabilization. They used less aggressive, non-removal approaches with 7 different technologies applied to 1,600 ft of bank. Envirolok wall placed by hand and soil bags were used to promote growth of vegetation. Todd compared the Reach JK Excavation (very aggressive excavation) to the Reach M which leaves the material more intact, but stabilizes it to stop the erosion (much less aggressive).
 - It was asked, without monitoring while these processes were taking place, how will we know how much material is “stirred up” or lost into the river during these operations? Todd noted that monitoring techniques will take place to measure erosion control and other factors to determine effectiveness.
 - It was asked what the time span might be for determining which methods were best and most effective. Todd noted that it may be a long time before we can know which methods are most effective, but that all of the methods

appear extremely promising, and that, from a vegetation standpoint, none of these programs have failed, though some of them may have been slightly more effective than others.

- What are the comparative costs of the two different processes? Todd noted that cost of implementation is being studied right now. Calculations are not complete, although there is a fairly large difference in cost.
- Reach O— this 2007 excavation operation included in-channel sediment removal. There were debris challenges faced at this site as well from items like logs.
- Wicks Park/Saginaw River: 2007—Hydraulic sediment removal involved divers with hand-held dredging wands which sucked up sediment from the bottom of the river which were then sent to a filtration system.

Todd noted that Dow has been asked by the EPA to implement some additional pilot work on the river this summer in the area of Reach O where there are high levels of contamination within the bank. This is a much different type of landscape than at other locations, so additional bank pilots (approx 500 feet) will be performed.

Mary noted that opportunities had presented themselves this year for actual preventative ground work and prevention of potential erosion to take place, and that they will report on these projects as they take place in late summer/early fall.

Concern was expressed that stakeholders have not seen results of these early investigations. Mary noted that they would try to factor this in and add provisions for required investigations into the agreements of what the EPA will require of Dow.

4. EPA Dioxin Reassessment Update

Mary Logan conducted this presentation. EPA released a draft dioxin reanalysis report for a 90 day public review. The deadline for comments is August 19, 2010. EPA is also convening a peer review of experts who will review the draft report simultaneously with the public. EPA has reviewed scientific studies of the health effects of dioxin exposure as part of the reassessment report. It includes analysis of both potential cancer and non-cancer effects and assesses potential risk. Mary noted that the Dioxin dose-response reassessment fits in under risk assessment rather than risk management, and that this is a national-level decision.

Key Questions and answers related to this presentation included:

- Concern was expressed that the 90 days is not enough time for the CAG and the public to respond to a vast amount of scientific data that has been studied and reviewed over a period of years. Concern was also expressed about how these decisions on parts per trillion and cleanup standards may affect economic development. Mary responded that other people have commented that they would like an extension. EPA wants to bring this study to a close, but concerned individuals may apply for or request an extension.

- Mary noted in response to another question that EPA scientists did not do an independent study, but rather did a study and evaluation of open literature.
- Concern was expressed that feedback provided to the EPA is not properly addressed or taken seriously.
- EPA noted that Dioxin is not the only contaminant where EPA has conducted toxicity research, and that we don't want to wait for people to have ill effects to decide if something is potentially harmful or not. The entire premise is to protect people before ill health effects occur.

5. Community Involvement Plan

Don deBlasio presented an update on the Community involvement plan, a management and planning tool with actions to be carried out during the course of site activities that ensures that the community can participate in the decision-making process. Don explained a few of the issues and conflicting viewpoints that arose during community interviews. He noted that they have already begun working on the Community Involvement Plan, and that the CAG is part of the response—the CAG is being counted on to do some of the “interpretation” work for the local community who may not fully understand all of the issues at hand; Don noted that meetings should be held at a convenient and neutral facility (thus, the choice of SVSU) but that it should also be explored to hold meetings in other locations to make the location fair and accessible for all surrounding communities.

EPA noted that it hopes the CAG can play a major role in community outreach and involvement, including the first public meeting which will take place in July. EPA asked how the CAG sees itself being involved in this regard. It was asked what other active communities have done to get involved with their sites. EPA noted that many sites have a very public turnout at their meetings, and some have newsletters and websites. Mary Logan noted that many of the active people in CAGs act as liaisons taking back information and providing presentations to their communities.

Comments on the CIP included the following:

- A CAG member noted the inconsistency in Saginaw County's representation of population in the community involvement plan document and expressed concern that the intent was to have the CAG take more responsibility for community input and somewhat relieve the EPA of this responsibility. The community may become impatient and many community members think that they should be seeing remediation projects this summer and that it needs to be made clear to the community what progress is being made and which roles are served by which organizations. Don responded that the EPA does not want to excuse itself of responsibility, but wants the CAG to be involved in the outreach to the community as respected community members and conveyors of information;
- EPA noted that, as a CAG, the group can help to create a focus of which issues should be addressed by the CAG, and that the CAG is not so much a venue for individual issues and questions as it is a place for focusing on key, consensus

issues. A CAG member remarked that the CAG feels they have received a smattering of issues and that they may not always get their individual questions or group questions fully addressed and resolved

- It was noted that as CAG members and leaders, the CAG can certainly supplement information given to the community, but that the main information to the public needs to come from the EPA, Dow, and other involved agencies. EPA reiterated that the CIP expresses what the EPA will do in the community with or without help from the CAG and community, and that the CAG needs to focus on which issues in the decision making process are important to them.
- Mary Logan noted that before the EPA can ask the CAG or community for input on remedies or upcoming projects, the CAG must have a stronger foundation and baseline of information and that has been the focus of the CAG to date. A CAG member asked EPA officials what kind of information they want from CAG leaders regarding how to approach the community (presentations to service club organizations, local flyer distribution and raising of awareness, other ideas, etc.); Don replied that yes, this is the kind of information the EPA would like from the CAG—strategies for how to approach the community to provide information or ask for involvement.
- It was suggested that members of the CAG direct their comments on section 4 or any other section of the community involvement plan to members of the Interim leadership team so that they can assemble a list of suggestions for the EPA on how to approach the community. The vSpace site is another resource for communicating these ideas.
- It was asked that since it was mentioned that individual questions or issues (like those pertaining to parts per trillion and how this affects economic development and other issues) should not be addressed during the CAG forum, how should she approach such issues? EPA responded that many of the mandates or decisions don't come from the members of the EPA present at meetings, but that many of these decisions are made in Washington and at a national level. A CAG member expressed further frustration on how to address her issues or get this message heard on such issues.
- It was noted that the community needs information on the July workshop and why the community should be present. It was noted that there is a general public apathy among the public and that we need to get them more involved by better reporting progress in the cleanup process. Ideas such as a weekly update in the newspaper or by some other method should be considered. It was noted that people simply want to know the progress and what is being done so that they can see that action is being taken. It was noted that we also need to show the public what has already been accomplished.
- It was suggested that by introducing the CAG at the public meeting, people will become more aware of the role of the CAG and what has developed because of this involvement.
- Al Taylor noted that the DNRE and EPA logistically can't bring projects to the CAG as a proposal until these types of projects are fully formed.

6. Public Comments

- A community member applauded the EPA for getting the Dioxin reassessment out after 19 years and expressed that he does not believe it appropriate for any CAG member to hijack the meeting in favor of the interests of individual organizations. In response, the CAG member noted that she was seeking more public time for input, rather than trying to mislead the group.
- A community member mentioned the success of sediment traps and asked if anything is underway to research the possibility of placing sediment traps. He also raised the issue of agricultural lands and asked if there has been an inventory taken of cultivated areas within the flood plains, and whether or not there are restrictions on the consumption of products found in these areas. Mary Logan responded to the question of sediment traps by stating that evaluation of sediment traps will be conducted in the future. The representative from the Department of Agriculture said that the last land survey was conducted in 2002, and that the issue has come up several times. He noted that they have initiated a request to conduct a new land use survey in 2010 and to update brochures and information currently available to the public in regard to consumption of certain products like livestock and noted that the Michigan Department of Agriculture hopes to have these surveys conducted by the end of the summer.
- A community member noted that farms in the flood plain that were identified to not have been farmed because of Dioxin have been farmed continually. The Department of Agriculture representative responded that contaminated soils and products that came from those areas came out to be negligible to minimal trace contaminants of dioxin as compared to a highly elevated soil and that the uptake of the products from the soil is minimal to none and the primary contaminant is dust or dirt. This is why livestock are primarily affected while crops are not. The Department of Agriculture also plans to look at new commodities to study and test in the coming year..

The Meeting adjourned at 9:00pm while some members stayed on to review TAP application.

6. TAP Application

The following points were made regarding the TAP:

- The purpose of the TAP application demonstrates the need/capability of the group for a Technical Advisor so that they can get money to hire a technical advisor as a source for further information.
- The CAG can create the organization to gather these funds to contract for a Technical Advisor to avoid personal legal responsibility on behalf of the CAG members.
- This would make it possible for Dow to handle the money to contract out the Technical Advisor.

- Dow and the EPA would have no say in which person would be hired as the Technical Advisor.

The following revisions to the TAP application were suggested:

- Question 5: remove the word “informally”.
- Question 6: the word “represent” be changed as not all CAG members are sent as representatives of organizations, but rather are supposed to represent individuals; changed to “members are drawn from sectors including...”
- Question 10: The group agreed that while we might plan to use the money for hiring someone like a web designer or consultant, that we should not be overly specific at this point as to our intentions for the TAP funds until we know more and have more specific objectives and projects.
- All changes will be posted on vSpace.

Other questions and issues raised:

- The issue was raised how the CAG can get more involved in meeting planning so that the group can hear about key issues, perhaps more focused, to increase effectiveness.
- It was asked where the money from the TAP funding would go and how we designate it for certain functions. It was explained that we are simply applying to be the designator of funds on an as-needed basis as we move through the process and we then negotiate with Dow more specific terms of the CAG’s relationship with them if we are selected.