

DATE: October 30, 2007 FILE REF: ASTAC
TO: File
FROM: Tom Portle
SUBJECT: Minutes of October 5, 2007 Accumulated Sediment Technical Advisory Committee Meeting

Following is a report on the main points from the Accumulated Sediment Technical Advisory Committee (ASTAC) meeting held on October 5, 2007 at DATCP in Madison, WI.

ASTAC members present: Jim Bachhuber, Earthtech; Jeremy Balousek, Dane County Land Conservation; Greg Fries, City of Madison; Lori Grant, River Alliance of Wisconsin; Paul Kent, Municipal Environmental Group; Thomas Marquardt, Wisconsin Towns Association; and Pat Stevens of the Wisconsin Builders Association.

ASTAC members not present: Lynita Docken, COMM; Jim McMillan, DOA.

WDNR Staff Present: Jack Connelly, Mary Anne Lowndes and Tom Portle

Facilitator: Kathleen Wolski

Other DNR Present: **Sue Bangert, Joanie Burns** represented management for the Bureau of Waste and Materials Management.

► A welcome and thank you was extended by **Suzanne Bangert**, Bureau Director of the DNR's Bureau of Waste and Materials Management. Ms. Bangert laid out the current situation where the bureau has the regulatory responsibility for the sediment since it is a solid waste but is challenged due to scarce resources. More sediment detention structures are coming on line and existing ones are in need of maintenance. We have an opportunity to address this in a proactive manner with the help of this TAC with the mutual goal of creating a flexible and streamlined regulatory paradigm that protects the waters of the state while being cost effective for all stakeholders. Her comments were followed by introductions of all members of the Accumulated Sediment TAC and their interests and affiliations.

Next, **Kathleen Wolski** provided the ground rules by which this and future meetings would be governed. In general these were designed to keep the TAC on task and the meetings on time. Further, they are intended to ensure a respectful and comfortable environment to encourage effective participation by all participants so they can better provide their perspectives and those of their organizations.

Tom Portle began by defining the mission and the steps needed to get to our desired outcome. The **desired outcome** is a regulatory framework that allows self-implementation but affords targeted review by department staff for complex situations where case-by-case review and technical support are warranted. Tom followed-up on Suzanne Bangert's message with regard to increasing need for sediment management and scarcity of staff resources explaining how the current approach of case-by-case review could be modified to get a more efficient, targeted use of staff resources while also enhancing consistency. The **desired outcome/approach** is to: 1) be based on common sense; 2) be as easy as possible to understand and implement; 3) tend to promote responsible self implementation; and, 4) maintain the flexibility to allow for creativity in sediment management according to the applicant's willingness to take additional management responsibility. Tom pointed out that one of

the greatest risks is if regulatory costs and complexity become an impediment or obstacle, some sediment managers will defer or ignore necessary maintenance. If that occurs, the environmental risk actually increases when large storm events (think August 2007) occur and re-suspend and discharge sediment to receiving waters. Tom presented, in sequence with time for discussion, a three-part PowerPoint intended to guide the discussion during this important first meeting (handout of all slides provided for reference and note taking).

The following account is organized according to the flip chart materials recorded by Kathleen. Corresponding discussion with clarifying notes and comments appear adjacent to flip chart materials. Any action items are **bolded within the text**.

Discussion	Flip Chart Materials
<p>Jack Connelly laid out the point we are at in the process. The DNR Board has granted permission to move ahead in working with this TAC tasked to provide language for a revision of the NR 500 series rules. This will address the management of accumulated sediment from stormwater detention structures. Jack made the group aware of the various rule-making steps, public hearings, opportunities for further input leading to adoption of rule language supporting our approach by the DNR Board. This would be followed by outreach and the development of suitable technical resource documents to support self-implementation of this approach. He also gave the expected timeline for the process.</p> <p>TAC members stated concerns regarding lack of consistency between Chapter 30 and other DNR programs. It can be difficult to get consistent answers from the department. Jim Bachhuber wanted to know how sediment detention structures fit in with statutory definitions concerning “waters of the state”.</p> <p>Jeremy Balousek mentioned that landfill operators deal with the sediment in more than one way. In some cases it’s used as daily cover and in others it’s just disposed of as waste. Joanie Burns, Section Chief in the Bureau of Waste and Materials Management, indicated an over-arching desire to favor the safe use of sediment over disposal in landfills to not unnecessarily reduce landfill life.</p>	<p><u>I. Background, Need, Rule Development & Process</u></p> <p>Exemption to rule (NR 500) Focus: Accumulated sediments</p> <p>Need: Consistency</p> <p>Now: Required to be managed - regulated case by case maintenance required <u>sediment</u></p> <p>Disposal – much of material is landfilled – don’t know percentage</p> <p>Doesn’t make distinction between storm-water management structures</p> <p>Who is required to manage ponds sediments? -Municipalities -Developments -Government – DOA/DOT</p> <p>-Homeowners Association</p> <p>Current Regulations</p> <p>Not applying regulations consistently</p>

<p>Discussion</p> <p>Tom, in Part 2, provided an overview of the relationship between risk associated with the quality of the sediment and with the possible management option. This began a discussion where perspectives and concerns were shared. Some of these were as follows:</p> <p>Pat Stevens believes the end use is relevant. For example much less risk to receptors occurs when sediment is used for road bed material and so is isolated from most receptors. Paul Kent indicated if you know the end use that's safe, then don't require testing. The question of whether or not to sample should depend on the end use.</p> <p>Should be able to use a surrogate without doing testing. Paul suggested that if you don't know what the end use is going to be, then require testing. NR 720 has a somewhat parallel procedure – it requires that one decide how clean is clean and also compare with different standards for residential than industrial areas.</p>	<p>Flip Chart Materials</p> <p><u>Part II. Risk A & B</u></p> <p>Determining (Low) Risk</p> <ul style="list-style-type: none"> -What's in it? Define clean -Where are you taking it?
<p>After lunch Mary Anne Lowndes presented the third part of the PowerPoint where the connection to land use was made. She reiterated that more sediment control structures are coming on line and that there were many installed in the last decade that may need maintenance and that the size of the structure and storage capacity dictate how often they remove sediment. Mary Anne pointed out that not all sedimentation structure owners have management plans. She described how knowledge of the relationship between connected impermeable surface and the interplay of the land uses can be fundamental in crafting a risk based sediment management approach to minimize the regulatory and economic burden while being protective of the resource and public health.</p> <p>Low risk criteria is:</p> <ol style="list-style-type: none"> 1) what its coming in (land use); and, 2) where is it being taken. <p>Paul Kent suggested that some skepticism is appropriate in the area of risk analyses because conclusions are heavily dependent on debatable assumptions. One must consider the receptor. If there is low risk to the receptor then it is relatively less important if the material is more or less laden with constituents of concern. Uses that risk contamination of groundwater are different from situations where the sediment is used in a landspreading for grazing or wildlife habitat. There may be even less risk to receptors if the sediment is used as subgrade for a road. Jeremy wants it to be up to the applicant to make the determination through limited testing – still submit the data but not a formal approval. He suggested development of a certification form, its accuracy attested to by signature/ professional seal (if necessary). Lori suggested possibly requiring less testing for low volumes of sediment.</p>	<p><u>Part III. Risk A & B</u></p> <p>Determining Risk</p> <ul style="list-style-type: none"> -What's in it? Define clean -Where are you taking it? <p>If off-site disposal</p> <ul style="list-style-type: none"> -Maybe no control over future movement (use) -Land use changes -Exposure risk/run-off risk

Discussion	Flip Chart Materials
<p>CAUTIONS</p> <p>Jim Bachhuber, Greg Fries and Tom Marquardt, did not feel that the data existed to justify the original Option A – no sampling required approach. Greg indicated that it’s important that DNR review proposals since some could not be fully self-implementing. He was concerned about setting up a situation where the homeowner finds out he meets the criteria for no testing and hires someone to remove the sediment, because no one will know where this material ends up. Greg pointed out that if someone or a municipality hires someone to take the material, you usually don’t know where it’s being taken. Greg doesn’t feel the no sampling required put forth in the original Option A would be well advised for all cases. For example, often the material is trucked only about 5 miles out of Madison. Too often, places that are currently rural can rapidly become more urban. Paul pointed out that even in an urban setting there will likely be certain areas such as grassy areas in a new highway interchange that could benefit from the material without posing any risk.</p>	<p><u>III. Risk A & B</u></p> <p>Determining (Low) Risk</p> <ul style="list-style-type: none"> -What’s in it? How clean? -Where are you taking it? <p>If off-site disposal</p> <ul style="list-style-type: none"> -Maybe no control over future movement (use) -Land use changes -Exposure risk/run-off risk
<p>Greg believes heavy material settles out and fills up the forebay – sand pile from winter-deicing in forebay area needs maintenance. This material is likely innocuous but locals get concerned for purely aesthetic reasons.</p> <p><u>Chapter 30 Issues</u></p> <p>Water Reg. and Zoning, under Chapter 30 requires extensive testing under NR 347. This is often required even when the structure either 1) appears to be exempt under NR 343.02(3) exemptions or 2) even if the Chapter 30 water body is separated of a distance of 1½ miles. Then extensive analysis is required. They send the list of compounds and circle the ones they want sampled, even though chapter 30 exempts sedimentation structures. Greg believes it would be more meaningful data set if it were based on TCLP or bio-available analyses rather than total levels of parameters in the sediment.</p> <p>Lab costs - \$1000 to run the sample; \$4-5,000 to do all the sampling, including mobilization. Cost goes up if doing more than Shelby tube driven by someone wading into pond (floating drill rig costs more.)</p> <p>Jeremy indicated the cost to place material on site is half what it is to transport it elsewhere. Jim provided costs for on-site vs. off-site use.</p> <p>Water Reg. and Zoning requires the urban tests and always requires metals and requires they be collected as total metals which doesn’t provide the most useful information. Jim Bachhuber indicated that the testing required is not clear (under ch. 30) – need to clarify the number of samples, how to take the samples, etc. Jim spoke to inconsistent sampling requirements in any event. Tom thought no matter what we develop, the ch. 30 approach might cause consistency problems. DNR staff committed to bringing the concerns with implementation of Chapter 30 to DNR management.</p>	<p>Option C standards and how it relates to other regs. Chapter 30 inefficiencies</p> <p>Cost of testing (examples) Analytical costs</p>

<p>Discussion</p>	<p>Flip Chart Materials</p>
<p>Greg reminded us that if you sample, you'll find it and to remember that it's the lawn chemicals and fertilizers that are causing the high levels. In terms of relative risk – the children play in and so are directly exposed in lawns.</p> <p>Tom Portle stated that the department plans to provide guidance documents necessary to support a largely self implementing sediment management approach. This decision had been made prior to the above issue being raised.</p>	<p>-Potential problems/discoveries</p> <p>What is a representative sample?</p> <p>Pond may be non-reg but cleaning may cause movement to reg. waterbody (chapter 30)</p> <p>(Repeated from above) ... how it relates to other regs. Chapter 30 inefficiencies</p>
<p>There was some discussion as to the distinction (if any) between materials removed from catch basins and accumulated sediment. Are street sweeping materials (or materials from underground sumps) cleaner or more contaminated than accumulated sediment? Different opinions on the level of contamination of this variable material were put forth. Tom Marquardt indicated that the sediment can be very questionable quality. The handout provided by Mary Anne "<i>Polluted Urban Runoff – A Source of Concern</i>" supports the need for handling such sediment with caution and provides information on the various components of stormwater and sediment. Included in the publication are: nutrients such as phosphorous, pathogens such as fecal coliform bacteria toxic pollutants and carcinogens such as PCBs, pesticides and herbicides and polycyclic aromatic hydrocarbons (PAHs), heavy metals such as lead and zinc and others. Street sweepings are laden with heavy metals, pathogens and residuals from oil and lubricants. On the other hand, because the material, while variable with respect to texture, can often be very coarse and so, if the sediment consisted mostly of coarse particles, would contain fewer pollutants because large particles absorb less pollutants than smaller particles typical of sedimentation ponds. Jack pointed out that the Waste and Materials Management Team (WMMT) had directed staff to focus on sediment from sediment detention structures only and not address street sweepings at this time. The WMMT thought that if this rule change set up a system that worked for accumulated sediment then it could serve as a model for a future approach for street sweepings. However, if the ASTAC feels strongly that the distinction between accumulated sediment and street sweepings doesn't make sense staff could check back with the WMMT.</p>	<p>Option B – level of sampling</p> <p>-What is a representative sample?</p> <div data-bbox="1045 846 1421 1062" style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Note: Some of this discussion occurred earlier but is included here because it fits in with the flow of the "Flip Chart" comments.</p> </div>
<p>Paul wants the rule to provide incentive to homeowners to get the sediment out. As we define low risk, it should not only apply where there are municipal storm water permits but should apply outside of the phase 2 communities. Again, Paul emphasized that if you know the end use that's safe, then don't require testing. If you don't know what the end use is going to be, then require testing. Remediation and Redevelopment's Soil Cleanup Standards, NR 720, has a somewhat parallel procedure – it requires that one decide how clean is clean and also compare with different standards for residential and industrial areas.</p>	<p>-What's in it? How clean? (repeated from above)</p> <p>Different Levels of Low Risk – A</p>

Discussion	Flip Chart Materials
<p>We need to work on defining the gradient between option A and B. Lori would like more layers to be defined. We need to flesh out the nuances and grey area between these two options.</p> <p>Could there be a “Clean Sediment” - kind of a gold standard (brought up by Paul Kent) where if it were demonstrated that it did not exceed a key list of important parameters the material could basically be used with maximum confidence (although still within DNR exemption criteria).</p>	<p><u>Between Now & Next Meeting</u></p> <p>DNR & Sub Group A → B (gradient from A to B) Matrix Repeated: Different Levels of Low Risk – A</p> <p>Is there a known end use? If yes & safe – no sampling</p> <p>- DNR – flesh out layers with help of TAC - Clarifying criteria</p>
<p>DNR staff will provide a product for the TAC to look at. Greg Fries agreed to assist DNR on a sub-group between meetings. The objective: to define the gradient between option A and B – possibly a matrix. This gradient (grey area) lies between the most simple (low risk) cases and the point where risk dictates increasing levels of management including sampling, parameters of concern and management.</p> <p>Paul also requested that DNR provide rule language early in the process rather than waiting until the last minute.</p>	<p>► Suggestions</p> <p>Meet all morning or all afternoon instead of going from 10 a.m. to 2 or 3 p.m.</p> <p>Want to see draft rule language ASAP</p> <p>Provide response to handouts (<i>Tom requested that ASTAC members review handout and provide feedback – for example definitions - tlp</i>).</p>

► **Between Meetings**

Subgroup meeting (Greg Fries and subsequently **Jim McMillan** agreed to assist Mary Anne, Jack and Tom) to define the gradient (grey area) between the most simple (low risk) cases and the point where increasing levels of management (including levels of sampling, parameters of concern, and management such as land use decisions, etc.) appropriately correspond to greater risk.

► **Feedback and Schedule Next Meeting**

People indicated they were comfortable with the approach outlined by the department and thought it was a promising start to the process.

The next ASTAC meeting will be held on Monday November 5, 2007 from 8:30 – 12:30 at Wisconsin Department of Trade and Consumer Protection (DATCP) on 2811 Agriculture Drive in Madison.

► **Adjourned** at 2:00.

“Parking Lot” Items - As we indicated during the “ground rules” portion of the meeting items that needed to be addressed further would be tracked. For the October 5, 2007 meeting these were:

Catch basins, street sweepings, drainage ditches, swales, underground storage.