

**ENVIRONMENTAL ADVISORY COUNCIL**  
**Lansing, Michigan**  
**Thursday, July 20, 2006, 1:00 – 4:00 p.m.**

Members in attendance: Kurt Giberson, Chuck Hersey, Mike Johnston, Ellen Kohler, Phil Korson, JD Lindeberg for Jim Frey, Glen Logan for Andrew Hobbs, Vince Nathan, Del Rector, Donna Stine, and Bill Stough.

Guests: Cindy Emmons, Laura Esmon, Stephanie Milkovich , Jon Russell, and Danielle Allison (Leadership Academy participants), Scott Piggott (Farm Bureau), John Schroder (MMA), Brad Venman (NTH Consultants), and Chris Ruswick.

DEQ Staff in attendance: Andy Hogarth, Frank Ruswick, Dennis Armbruster, Frank Baldwin, Liane Shekter Smith, Steve Sliver, Jim Johnson, Duane Roskoskey, and Karen Shaler.

**OPENING**

Frank Ruswick began the meeting discussing today's dilemma due to the small number of members being in attendance. There was a remarkable discussion during the June meeting, but more members need to attend in order for decisions to be made. Frank will start asking for RSVP's for future meetings due to ongoing problems with attendance.

**CURRENT ISSUES**

There was no discussion of current issues since Director Chester was unable to attend as he was headed to a town hall meeting on Sugar Island.

**DEVELOPMENT OF LAND APPLICATION RECOMMENDATIONS**

Frank began the discussion indicating that he wanted to narrow today's discussion since last month's discussion was broad, but common threads were found. He explained what was discussed last month as the possible next step.

Flexible certainty: There is interest expressed by the regulated community that there be certainty of what is required. However, there is also an interest in flexibility. The decision making framework needs to be flexible to accommodate circumstances. We need to recognize the push-pull of both interests. We also need to recognize that developing a regulatory approach that provides both certainty and flexibility tends to be complicated. This weighs against the interest in keeping regulations simple and easily understandable.

Frank indicated that one observation made during the June EAC meeting was that bright line rules, which provide regulatory certainty, tend to be conservative. That is, bright line rules are necessarily over inclusive and under inclusive to some extent. When regulating for protection of public health and the environment, we therefore tend to draw bright lines so as to err on the side of protection. However, we should recognize that how conservatively we draw a bright line is a policy decision and is a matter of choice.

Frank suggested that based on the June discussion, it might be helpful to consider different categories of beneficial uses rather than treating all land applications uniformly. This would allow us to choose more or less conservative approaches depending on the particular category of beneficial use. He suggested three categories:

Benefit soil functioning: The material land applied affirmatively benefits soil functioning.

Resource substitute: The material serves as a substitute for another raw material.

Disposal cost avoidance: The only benefit is savings in disposal costs.

Frank suggested we start the discussion with the “benefit soil functioning” category. He indicated that the discussion would likely need to address three sets of issues:

Use vs. material: Should we pay regulatory attention to the material itself or how it is used?

Measure of benefits and risks: To what extent will it be necessary to assess the benefits and risks associated with a particular material and/or use in making regulatory decisions?

Assurance mechanisms: What types of tools (e.g., monitoring and inspections) will be necessary to provide assurances about the regulatory decisions that have been made.

The following comments and questions were raised during the ensuing discussion:

Most of the EAC’s discussion is about identifying and measuring risk. But assessing risk is difficult and then needs to be considered in relation to other risks we face. Perhaps there is a need for a better understanding of how standards under Part 201, which as a measure of risk, are set. Frank indicated that he had been trying to avoid a detailed discussion of the formulas underlying risk calculations made under Part 201 (and similar approaches) because it was a highly technical area. However, there may be a need for the EAC to have a basic understanding of risk assessment techniques.

When looking at risk management, we are balancing the flexibility and certainty. There are other risks with decision-making that need to be considered. Part of cleanup needs to take into account the robustness that a land use restriction will be effective in future. We may assume that land use will be industrial, but there remain concerns as to whether it will always remain so. Our regulatory approaches always makes assumptions with respect to what will happen in the future. But are those assumptions actually true? We need to factor this into decisions about how conservative regulations need to be.

Could we also think as an alternative, in terms of who owns/controls this stream of material? Let’s look at the systems we have in society. Cherry factory consolidates their waste. whereas a homeowner has yard waste. We have infrastructure built up about

hauling septage, industrial residuals, and yard waste. We need to group the categories. Do they aggregate more/less material? Who controls the use? The person who uses it may not be the person who generates it.

Disposal costs are societal costs. Should we really be taking risks associated with land application when there is no benefit other than the avoidance of disposal costs?

If a material is truly inert and presents no risk, why should we force that material to a landfill, where it takes up space that could be used by other waste material, for disposal? For example, there is a current initiative for construction and demolition waste that encourages grinding the material and leaving it on site.

There is a difference between waste and raw materials. We need to think about waste being a resource instead of needing to regulate in fear. But we also have to consider what else is in that waste that may not be beneficial and what is its risk?

There would be less concern with land application, if we had better information on where material was being applied. We need to understand that material land applied today could present be a problem in the future. We need to be able to address it if it does. Under NPDES Program, is there some way to track where these sites are? Then we would know where problems may occur and how to address them.

The MDA uses the concept “Generally Recognized as Safe” that balances benefits to soil with risks. Perhaps this would be helpful in the solid waste context: If we have different benefits, should we accept different levels of risk?

We should also recognize that placing some material in landfills presents its own risks.

At a practical level, creating different sets of standards depending on use may present difficulties. Developing data and information to classify material according to standards can be costly.

Part 201 was developed to make remedial decisions, not to offer a balance between benefit and consequence. Therefore, we need a different legal structure in this context.

However, if we don't use Part 201 standards to determine how much material can be land applied, would we be creating a site of contamination under Part 201 when the material is land applied? We do not want to allow something that will create the need to remediate. If we do not use Part 201, what is the alternative?

We also need to consider the duration of time that a particular risk will exist. This has to do with the quantity of use.

We need more focus on assessing the benefit that a material can provide rather than predominantly on risk. We would benefit from a presentation on soil science to help us see that perspective.

The 503 program appears to be working very well with respect to land application of material that can benefit the soil. Perhaps we should use the same approach for solid waste. The federal government did a lot work on 503 and adopted a risk standard that is lower than 201. Let's use what the feds have and think about that and look at a 503 basis. In circumstances with manufacturer of designer materials, apply a higher standard to those. A member provided to the EAC a "Beneficial Reuse of Organics flowchart" describing a model based on this system. (See Attachment 1.)

But would Part 503 standards need to be supplemented if the waste material contains contaminants not governed by Part 503? And we cannot always say sewage contains only a certain group of contaminants. Land application according to "agronomic rates" is an attractive concept, but everyone has a different idea of what it means.

The regulatory model we are discussing allows land application below a level of risk determined to be acceptable. However, can we justify that approach if there is a better, alternate way of disposal with far less risk?

How would we integrate the lesson learned for septage waste disposal in regulatory process? St. Clair County has a research project for a bioreactor to dispose of septage waste. Can we accept and manage those risks in an acceptable way? It would be increased risk with increased gas production, but would use less landfill space. St. Clair County's statute indicates that anyone within their boundary has to take their septage waste to the bioreactor. When we can identify a less risky alternative, we prohibit the other disposal methods. We do not want to be required to dispose via an alternative method that is very expensive.

We need to take into consideration land use going to dedicated sites or private farm fields. Will farmers get paid to take biosolids on their land? In some other states, farmers are paid to take tons of biosolids and take more than they should, but they have ended up with groundwater contamination because they took more than they should. We have to consider land use.

Michigan's initial hazardous waste regulations adopted an approach based on the degree of hazard a material presented. The state of Washington adopted something similar. Perhaps we should consider that approach in this context.

We need to determine which state programs work: Wisconsin does; California does not (fragmented and varies from county to county--no statewide uniformity). It may be useful to request someone from Wisconsin to attend a future meeting, but there would be a problem with funding their travel. Frank indicated that staff would provide a summary of the Wisconsin program for the EAC's information.

## **CLOSING**

Frank indicated there was a beneficial discussion among those who attended today. He suggested that members think about what staff put together. Does that classification system work? What would it look like? How would we measure acceptable level of risk? What would

it be? What do you like about the alternative model presented? How would this work for the waste streams we are talking about? What are the characteristics of a waste to apply the 503 model? Which constraints need to tag along with a model? The 503 rule has limits for certain slates of contaminants. What number would you apply if a waste stream had other contaminants?

Frank distributed an updated membership list and thanked those who attended today.

Notes by Karen Shaler; summarized by Frank Ruswick.