Summary Minutes
Solid Waste Management Advisory Council (SWAC)
February 19, 2009
Lazarus Government Center
50 W. Town Street
Columbus, OH 43215

The Following Members Announced Their Attendance at Roll Call:

Erv Ball, Health Departments
Jack Jensen, Municipalities
Dan Harris, Ohio EPA
Steve Hill, Industrial Generators
Terri TerMeer, ODNR
Yolanda Walker, Single County SWMDs
Chris Jacobs, Joint County SWMDs
Joseph Denen, Municipalities
Larry Johns, Townships
Kathy Trent, Private Solid Waste Management Industry
Belle Everett, Townships

Eilert Ofstead, Statewide Environmental Advocacy Groups, and Brad Biggs, ODOD, arrived after roll call.

Review of the November November 20, 2008 meeting minutes

Erv Ball MOVED to accept the November 20, 2008 meeting minutes presented today. Jack Jensen SECONDED the motion and the minutes were approved on voice vote.

Welcome and Introductions

Mr. Harris started by welcoming two new members on SWAC. He indicated that Derek Anderson is no longer with ODNR and introduced Terri TerMeer as ODNR Director Logan's new designee. Also, one of the two township representatives on SWAC, Ralph Jennings, was elected as a Brown County Commissioner. His replacement is Belle Everett, a township trustee in Warsaw Township, Tuscarawas County. An additional SWAC replacement was announced in the past week. Senator Tim Shaffer has replaced Tom Neihaus as the ex-officio Ohio Senate representative on SWAC. Senator Schaffer is from the 31st Senate District, which contains Fairfield, Hocking, Licking, and Perry Counties as well as portions of Pickaway County.

Update on Legislative/DSIWM Issues- Dan Harris, DSIWM

Mr. Harris related to the City View Shopping Center, which has been the news lately. In December, McGill Property Group agreed to resolve violations at the site including a

$1.2 million penalty. Other requirements included sealing subsurface structures, installing active gas extraction systems, connecting drains to sewer system, as well as installing a leachate collection system and four permanent gas monitoring probes.

It was added that there were some lessons learned when dealing with construction projects on old landfills. The pace that construction projects normally move at is not ideal for more complicated scenarios such as City View. The old practices of waste disposal have left behind many dumping grounds. When dealing with these sites in the future, the process needs to move slower and more input is needed along the way. Issues such as water lines acting as conduits for gas leaks or potential liquid infiltration in the event of a broken water line need to be considered when designing these sites. However, it is not uncommon for developers to move at a higher than ideal pace because they are working on a "construction schedule". The Clean Ohio Fund was mentioned, which was created to clean up these old brown-fields in the state.

Mr. Harris then related that the US EPA has provided a notice of advance rulemaking concerning incineration of solid waste versus industrial boiler air pollution standards. The definition of solid waste is to be further defined. The intended result is to establish that select solid wastes processed for use as fuel would not be a solid waste and therefore eligible for regulation under the industrial boiler air pollution standards. Select homogeneous materials such as tire-derived fuel, waste wood and refuse-derived fuel. Although this is essentially a fix to the air pollution program, it is important that the housekeeping portions of the solid waste rules are not sacrificed. The end goal is to have appropriate air emissions for waste used as fuel without sacrificing the solid waste issues.

It was related that DSIWM has directed the Scrap Tire Unit to expand its contracting activities to include solid waste and C&DD sites and re-designated it as the Contracting and Remediation Oversight Unit (CRO). A generic, multiple award request-for-proposals (RFP), called the Orphaned Landfill RFP, was released on Feb 6, 2009. Once the generic contracts are awarded, the three winners will be asked to develop detailed work plans and cost proposals for specific projects. Awarding multiple generic contracts allows initial competition on a broad scale and continues to allow Ohio EPA to obtain competitive pricing from the three multiple award contractors. Having three multiple award contracts will give the Agency a responsive means of dealing rapidly with changing project priorities including the initiation of new projects. These contracts also establish a way to obtain cost estimates to build this activity into future budgets. Doing so will minimize the need for subsequent requests for Controlling Board actions. Success will be defined by completion of projects. A second factor will be the cost of these actions as compared to the original estimate, available budget, and any projected incomes.

A Closed Landfills & Orphaned Site Evaluation & Rating (CLOSER) Team will be formed. The team evaluates the tasks required at each site as well as their threat to the

environment or public health or safety and ranks them with input from DSIWM management. Based on the site/task rankings, cost estimates will be sought under the multiple award contracts. As cost proposals are received the team will develop a plan for project implementation and new sites or tasks will be evaluated, ranked, and integrated them into the current project schedule. The Merkomp Landfill gas extraction system, in Cleveland, will be the first project under this contract.

It was discussed how there are many old landfills in Ohio that were abandoned before post-closure care and financial assurance were mandated. The overall driver for the team was to find a way to utilize money set aside from enforcement settlements, as well as limited financial assurance, to deal with these sites. No new fee money is to be used, and DSIWM is fulfilling an existing responsibility.

Mr. Harris then provided an update on DSIWM rule packages. The fee rules passed JCARR on February 17, 2009 and are complete. The transfer station rules are being reorganized, with little changes substance-wise. DSIWM's new rule coordinator, Michelle Braun, was introduced to the group. It was clarified that Ohio EPA maintains a list-serve which is used to provide updates to any interested parties.

Mr. Andrew Booker, DSIWM, related to the recent Solid Waste Management District (SWMD) workgroup meeting that discussed how the economy is affecting solid waste management in Ohio. Disposal numbers have experienced a significant downward shift across the board in the past nine months. This directly affects the budgets of many SWMDs as well as the landfills themselves. Also, the recycling markets tanked last summer resulting in many recycling centers having stockpiles of material with no where to send it. The markets picked up again in late 2008, but at significantly reduced values for many materials. This may have significant budget ramifications for some SWMDs.

Mr. Booker also provided an update concerning the recent news concerning the State budget. A seven billion dollar deficit is projected in the State's next budget biennium. As a result 120 fees are proposed to be increased to help with the budget shortfall. Some of these fees are solid waste fees. The fee for each ton of construction and demolition debris (C&DD) disposed in Ohio is proposed to be increased by $2.70, for a total of $4.40/ton. $2.25 of the new fees would go to ODNR's Soil and Water Conservation Fund. The State disposal fee for solid waste is proposed to be increased $1.25, for a total of $4.75/ton. ODNR's Soil and Water Conservation Fund would receive $0.25 of those new fees. The remaining monies from the new C&DD and solid waste fees will be used to fund programs in Ohio EPA's Divisions of Air Pollution Control, and Drinking and Ground Waters. The fee paid for each tire at the wholesale level is also proposed to increase from $1.00 to $3.30 per tire. These new fees would go towards vehicle emissions testing. These proposed fees are not proposed to change anything administratively with solid waste fees, and everything is being done in concert with the Office of Budget and Management.

Ms. Trent recognized the State's need to raise fees because of their budget shortfalls. However, the solid waste management industry will likely have to increase the amount charged to their customers as a result of the fee increases. Another likely result is more waste will be sent out of state. It was indicated that Ohio's disposal fees will be more competitive, but still cheaper than east coast states.

Mr. Jacobs pointed out how SWMDs can have different views on waste disposal in Ohio. Their goal is to reduce the amount of waste sent to landfills, but when this happens it results in less revenue for the SWMDs and limits the ability of the SWMD to implement its recycling programs. It was further stated that a dependence on fees associated with waste disposal has occurred, which is not in the same light as what was sought to be accomplished. Mr. Booker added that increases in solid waste fees do help incentivize recycling economically.

It was discussed why Soil and Water Conservation Districts are getting the "lion's share" of the proposed fee increases. One out of every five conservation districts is in dire straits budget-wise. Conservation districts were initially envisioned to be agriculturally based programs, whereas almost half are involved with urban projects, such as sewer design and planning. The conservation districts are currently provided General Revenue Funding (GRF) as a matching grant. Staff reductions have already eliminated 23 positions, or 38 percent. The conservation districts would still be funded by matching grants ($12.6 million), but that money would come from fees instead of the GRF. It was recommended to have a future SWAC agenda item pertaining to conservation districts, to better understand their different roles across Ohio.

Hamilton County Solid Waste District Overview and RecycleBank (Holly Christmann, Manager, and Tom Turchiano, Rumpke)

Because of time constraints, Ms. Christmann skipped the Hamilton County SWMD's overview and started with the topic of the SWMD's partnership with Rumpke to create a RecycleBank pilot in the city of Montgomery. RecycleBank is an incentive-based recycling program where residents receive points based on the amount they recycle. The city of Montgomery, with a population around 8,000, is the first city in Ohio to try the program and it started on October 27, 2008. The goals of the pilot were to evaluate the true costs of the program, the impact on waste diversion, as well as expecting a 25 percent increase in participation and a 35 percent increase in the recycling rate.

The costs ($174,347) for the required carts were paid for by the SWMD and an ODNR grant. The new carts are 65-gallon single stream containers that contain an radio-frequency ID tag that registers and broadcasts the weight of recyclables as they are collected by the truck. The cost of assembly and delivery of the carts were absorbed by Rumpke, who also contributed $70,000 to retrofit the trucks to be used. The fee charged by RecycleBank is $0.50/unit/month. Participants can log onto recyclebank.com and track how much material they recycled and redeem points for coupons from participating sponsors. In the first four months, the city of Montgomery

has seen a 59 percent increase in recycling tonnages and a 37 percent increase in participation (85 percent participation overall).

State Plan Update (Ernie Stall, OEPA-DSIWM)

SWAC has completed its review and discussed several revised chapters of the State Plan during previous meetings. Mr. Stall started by providing quick overviews of those revised chapters and asked SWAC to "approve" the revised chapters, if that is the case.

Chapter II: Implementing the 2001 State Plan: This chapter provides information regarding progress towards achieving the eight goals of the 2001 State Plan and the ten state strategies. Fifty two solid waste management plans (SWMPs) have been issued or approved. Forty of those SWMPs were approved with Goal 1 as the primary goal, which represents 70 of Ohio's 88 counties. Twelve SWMPs were approved with Goal 2 as the primary goal, all of which were single county SWMDs. Many new recycling opportunities have been implemented to meet Goal 1, including at least 214 new drop-offs and 21 new curbside programs, as well as 12 subscription curbside programs that have been upgraded. The resulting reduction/recycling rates for the SWMDs, in 2007, showed:

- Residential/Commercial (R/C) sector ranged from 3.28% to 40.45%
- Industrial sector ranged from 0% to 97.97%
- 13 SWMDs achieved R/C rates ≥ 25%
- 36 SWMDs achieved Industrial rates ≥ 66%

The statewide reduction/recycling rates were 40.7% for total waste, 25.9% for the R/C sector and 53.6% for the industrial sector. Other highlights of the revisions made to Chapter II were the addition of text boxes for specific SWMD program examples, discussion of caveats regarding data, the impacts of power plants on recycling rates and updates regarding state strategies. SWAC members "approved" the revised version of Chapter II.

Chapter IV: Restrictions: Ohio's restrictions include source-separated yard waste, scrap tires, and lead-acid batteries. Other highlights of the revision made to Chapter IV include information on material restrictions in other states and the status of electronic bans in other states. No new restrictions are proposed. SWAC members "approved" the revised version of Chapter IV.

Chapter VIII: Household Hazardous Waste: A summary of the household hazardous waste (HHW) programs held by Ohio's SWMDs includes 7 semi-permanent programs, 2 offered both semi-permanent and temporary programs, 23 offered temporary collection events, and 6 collect HHW at their own facilities. A summary of the electronics collection events held by SWMDs include 23 temporary collection events, 6 permanent programs, and 10 semi-permanent programs. Additional highlights include text boxes that focus on specific HHW programs, a discussion of electronics generation and

electronics regulations in other states. The revision contains no new requirements for SWMDs. SWAC members "approved" the revised version of Chapter VIII.

With SWAC "approving" the three chapters today, the following table was presented to indicate where each chapter was in the State Plan revision process:

Chapter	Approved	Posted
I - Introduction	N/A	Yes
II – Progress	Yes	Yes
III – Goals	No	No
IV – Restrictions	Yes	Yes
V- Siting	Yes	Yes
VI – Ash Management	No	Yes
VII – Scrap Tire Program	Yes	Yes
VIII – HHW	Yes	Yes
IX – Market Development	No	No
X – Waste-to-Energy	No	No

As discussed at the November 21, 2008 meeting, an additional SWAC meeting is be scheduled either March 19th or April 16th. The April 16, 2009 date was agreed upon for and additional SWAC meeting focusing on the State Plan revision.

The recent coal ash spill in eastern Tennessee was mentioned. It was asked if the topic of coal ash should be mentioned in the chapter covering Ash Management.

For the revision of Chapter III, SWAC has already discussed the new education requirements. The topic of potential alternatives for calculating access to recycling infrastructure will be discussed at the next SWAC meeting and "approved" after that. It was mentioned that SWMDs need an opportunity to provide input into the State Plan goals. It was clarified that any changes to the goals are done with consultation from SWMDs. A focus group with mostly SWMD coordinators was formed and the SWMD Workgroup meetings will be utilized as an opportunity for SWMDs to provide input.

For the section on State strategies, the focus is on actions that Ohio's agencies can take to further waste reduction and recycling. The primary agencies that are focused on are Ohio EPA and ODNR. Mr. Stall then reviewed the state strategies included in the revised State Plan:

1. Continue to provide financial assistance through ODNR
2. Explore means of obtaining improved reporting on the part of industrial generators
3. Study existing curbside recycling programs to determine factors that make curbside programs successful as well as define typical costs and participation.

4. Publish the Facility Data Report every other year and Solid Waste Management in Ohio - Recycling, Reduction, Waste Generation & Disposal every three years. In years when full reports are not published, Ohio EPA will make the data used for both reports available.
5. Ohio EPA and ODNR will work with the Ohio Department of Administrative Services on incorporating recycling services into the service contracts for Ohio's state government agency office buildings.
6. Ohio EPA and ODNR will coordinate solid waste planning between both agencies.
7. Ohio EPA will conduct an annual survey of material recovery facilities (MRFs) and distribute the results of the survey to appropriate SWMDs.
8. Continue to investigate and support programs to divert organic materials from disposal in landfill facilities, including:
    a. Anaerobic digesters
    b. Food waste composting
    c. Yard waste composting.
9. To the extent possible, support the development of and facilitate the implementation of technologies that use waste to produce energy. To fulfill this strategy, Ohio EPA will investigate developing rules to govern permitting and operating waste-to-energy facilities. Ohio EPA will further investigate ways of overcoming the environmental regulatory barriers that are discussed in Chapter X.

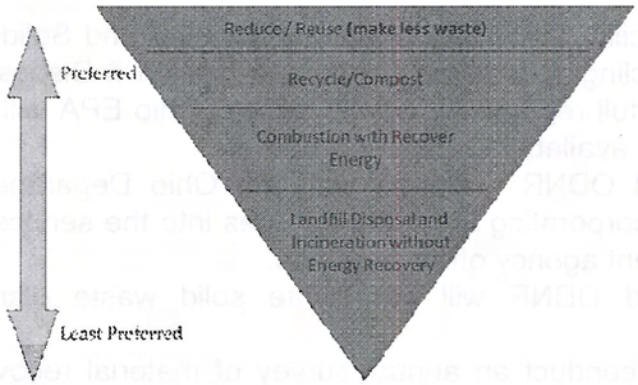
For *Chapter VI: Ash Management*, minor changes need to be made, including an added preface, and the final revised version will be available on the web soon. This chapter will be "approved" at the next SWAC meeting.

Chapter IX is being drafted in concert with ODNR. The revised version will be posted prior to the next SWAC meeting and will be discussed at that time.

Mr. Stall then provided information concerning the administrative procedures required for finalizing the revised State Plan. Once the draft State Plan is approved by SWAC there will be a public comment period as well as public hearings. Revisions will be made, if necessary, based on those comments. SWAC then gives its final approval on the State Plan, followed by Ohio EPA's formal adoption.

Chapter X: Waste-to-Energy represents the first chapter that has been added to the State Plan. The chapter was then reviewed and Mr. Stall indicated it will be posted on the web soon and "approved" at the next SWAC meeting.

Waste-to-energy (WTE) means that waste is treated in order to generate heat to produce energy or produce fuel. US EPA considers WTE technologies to fall into the category for combustion with energy recovery when the following waste management hierarchy is considered:



The benefits of WTE technology, over the use of fossil fuels, are:

- Waste as renewable resource
- May generate less pollution
- Lower dependence upon foreign oil
- Increased energy security
- Reduces landfill emissions of methane
- Reduces reliance on landfills

The drawbacks include:

- Potential effects on recycling efforts
- Composting as a less intensive resource method
- High initial capital investments
- Long pay-back period
- Limited existing infrastructure
- Difficult to site new "waste" facilities
- Issues with securing adequate throughput

WTE technologies include bioreactors (anaerobic digestors and biomass conversion) and production of synthetic gas (pyrolysis, starved-oxygen gasifiers, and conversion of synthetic gas to bio-fuel). Other technologies include the utilization of landfill gas, co-firing waste and coal, and incineration with energy recovery.

The applicable environmental regulations for WTE facilities include regulations for solid waste, surface water protection, air pollution control, as well as hazardous waste. The solid waste regulations pertain to incinerators with and without energy recovery (*OAC Rules 3745-27-50-53)*. Mostly, these regulations pertain to housekeeping issues similar to the applicability at solid waste transfer facilities. The facilities are permitted identically and other facilities can be permitted that don't involve combustion. Ohio EPA is streamlining the permitting process for anaerobic digestors that are used to manage solid waste and/or used for energy recovery. These facilities could potentially be

regulated under *ORC Chapter 3734 (Solid Waste), ORC Chapter 6111* (Water Pollution Control), as well as *ORC Chapter 903* (Concentrated Animal Feeding Facilities). The streamlining looks to avoid unnecessary regulatory duplication.

The air pollution regulatory requirements include new source performance standards (NSPS) (govern new facilities or modifications to existing facilities) as well as emission guidelines (govern existing facilities). Emission levels are required for organics (dioxins and furans), metals (cadmium, lead, mercury), particulate matter, acid gases (hydrogen chloride, sulfur dioxide), and fugitive ash. There are also operating standards for carbon monoxide, flue gas temperature, siting analysis, a materials separation plan, and operator training/certification requirements.

The applicable surface water regulations include the National Pollution Discharge Elimination System (NPDES). The requirements are not specific to incinerators, but are all-encompassing. NPDES addresses point-source discharges, water intake structures, storm water discharges, and the national pretreatment program.

The hazardous waste regulations require all generators to evaluate their waste to ensure it is not hazardous. Toxicity of waste is the biggest concern, with ash being potentially more toxic than slag. The toxicity of waste can be reduced by material separation or using homogeneous, organic feed-stocks.

These regulations are pertinent to anaerobic digestors when sewage and/or industrial sludge is considered as a feed-stock. The technology is nothing new; the difference is in the materials they are accepting, such as manure or food waste.

To summarize Chapter X, WTE fits within the waste hierarchy as superior to landfilling. The technologies can potentially be a component of a comprehensive waste management structure and may help Ohio achieve recycling goals. The chapter also acknowledges the renewed interest nationally and in Ohio for WTE technologies.

Agenda Items for the May 21, 2009 SWAC meeting

As indicated earlier, the agenda will be very State Plan intensive. No other agenda items were recommended at this time. Mr. Jacobs MOVED to adjourn the meeting and Kathy Trent SECONDED the motion.

Respectfully submitted: Erv Ball

Erv Ball, Vice Chair

Minutes approved on: 5/21/09

Certified by: Kathy Trent

Kathy Trent, Secretary

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Ohio EPA
DSIWM