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**Solid Waste Master Plan Public Meetings – December 2008 – January 2009
Summary Meeting Notes**

The following summary reflects opinions and positions raised by participants in the public meetings. They do not necessarily reflect the policies or opinions of MassDEP.

Note: The following is a summary of comments made at six public meetings conducted by MassDEP in December 2008 and January 2009. The purpose of the meetings was to obtain comments from the public on the Commonwealth's Solid Waste Master Plan in preparation for making revisions to that Plan. This summary does not reflect every comment made, but includes what the Department took to be the major issues and concerns.

Reducing Waste Generation

- **Product Stewardship/Extended Producer Responsibility:** Participants across all six meetings recommended EPR type strategies as an important approach to improving incentives for manufacturers to reduce the amount of materials used in products and packaging, to make products more durable, and to reduce the toxicity of products and packaging. When manufacturers or retailers are forced to manage their products and packaging after use, this changes their incentives to reduce material use, as well as make products and packaging more readily recyclable. This would also reduce costs for municipalities that now pay for managing these materials. Municipalities should not be forced to pay for these costs, which take funding away from other important local programs. Some specific comments included:
 - EPR approaches make particular sense for products like electronics that have toxic components.
 - EPR approaches may not make sense for everything. While they would work well for a product category like electronics, they would not work well for consumer products in general.
 - Packaging should be more clearly labeled to identify what is recyclable and what is not.
 - Producers should be required to take back packaging (like in Germany).

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- EPR can also help to increase recycling. Specific examples mentioned include electronics, an expanded bottle bill, requiring minimum recycled content for packaging, and labeling packaging to indicate what is recyclable and what is not.
- Deposit programs such as the bottle bill provide a great incentive for residents to increase recycling. Deposits should be expanded to other containers. Deposits also provide a great opportunity for community groups such as scout troops to generate revenue.
- Five states are looking at framework approaches for EPR, through which states are given authority to establish EPR requirements for multiple product categories based on defined criteria.
- Many participants expressed support for an expanded bottle bill. One participant suggested trying to change the bottle bill proposal to address some of the opposition – e.g., to reduce impacts on small retailers.
- **State Level vs. Regional or National EPR Approach:**
 - Some participants felt that Massachusetts should play a leadership role in advancing EPR at the state level. They stated that if Massachusetts does not take the lead, that these approaches are unlikely to be implemented.
 - Others felt that EPR would be better implemented at a regional or national level and that Massachusetts should work on these initiatives. These participants felt that this approach would be more efficient and that a state level requirement could have a negative impact on Massachusetts businesses.
- **Zero Waste Planning Approach:** Closely connected with producer responsibility approaches, many participants recommended that the state take a zero waste planning approach that stresses the highest and best use of materials with the Massachusetts Solid Waste Master Plan.
- **Pay-As-You-Throw programs:** Participants expressed support for pay-as-you-throw (PAYT) programs and recommended increasing the number of municipal Pay-As-You-Throw programs, which provide residents with direct incentives to reduce waste.
 - Give municipalities greater incentive to implement PAYT by giving points for PAYT on the state cherry sheet for local aid or establish that municipalities will get less state aid if they do not implement PAYT.
 - Establish state legislation to require municipalities to adopt PAYT.
 - While generally supportive of PAYT, some participants raised concerns with PAYT potentially leading to increased illegal dumping.
- **Taxes:** Implement a tax on plastic bags or a broader packaging tax.
- **Tax Credits:** Provide a tax credit to companies that reduce packaging and material use.
- **Product Warranties:** Require manufacturers to provide longer warranties to encourage them to design longer-lasting products.
- **Waste Reduction vs. Recycling:** In some cases, reducing material use will reduce the amount of material available for recycling, which will hurt recycling companies.
- **Reuse and Repair:** Provide residents with better information on where and how to reuse and repair products (e.g., like Freecycle). (overlaps with education below)
 - Expand RIRC grants to include businesses running reuse programs (including charities)
 - Use existing recycling networks and infrastructure to promote reuse

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- Establish or promote waste exchanges for businesses and institutions
- There is great potential to increase reuse through local “swap shop” programs and resource recovery parks
- **State Purchasing:** The State can do more to lead by example by requiring companies from which the state makes purchases to reduce packaging, reduce toxics in products, increase post-consumer recycled materials content in products, etc. (See “Market Development/State Purchasing” below.)
- **Schools:** Encourage waste reduction in schools (e.g., not bringing disposable containers).
- **Limit Disposal Capacity:** Limiting disposal capacity will affect the economics of disposal and provide more incentive to reduce waste.
- **Regulating Chemical Use:** The United States does a very poor job of regulating chemical use, while Europe has a much better system. There is a need for much better regulation and a chemicals policy to reduce the amount of toxic and hazardous chemicals in products and packaging.
- **Toxics in Packaging Clearinghouse:** Massachusetts should join this regional initiative to reduce the amount of toxics in packaging materials.

Education

- **Education for Residents:** Participants in every meeting felt that more and better education of residents and businesses is needed about many aspects of recycling and solid waste issues, including:
 - Where and how to recycle
 - What is recyclable and what is not
 - Waste bans in Massachusetts and what is banned from disposal
 - The benefits of recycling and composting compared with disposal, including the economic benefits – why is it important to recycle?
 - Better information for consumers about green procurement and the environmental impacts of product choices
- **School Programs:** Participants across all six meetings also urged more recycling and composting education programs to be incorporated in school curricula from kindergarten through 12th grade. Participants felt that better and sustained education of, and awareness by, children will help drive increased recycling and change people’s attitudes about recycling over the long term.
- **Waste Bans:** Participants consistently felt that there is very poor awareness among residents and businesses about the fact that waste bans exist and what materials are banned from disposal. Participants recommended greater outreach about waste bans.
- **Internet and Electronic Outreach:** Make information about where and how to recycle and reduce waste available via the web.
 - Make information easier to find on the MassDEP web site – i.e., information by category of material or product such as electronics all in one place.
 - There are a lot of existing program options that people don’t know about (e.g., Rechargeable Battery Recycling Corporation collection of rechargeable batteries)
 - Make better use of electronic networks and blogs

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- **Business Outreach:** Businesses need more education and training. Use Chambers of Commerce and trade associations to get recycling information and guidance out to their business members. Businesses also need specific technical assistance on how to set up recycling and composting programs.
- **Haulers:** Participants recommended that MassDEP partner with waste haulers to educate businesses about waste ban requirements and how to recycle.
- **Ad Campaign:** Recycling outreach should include an ongoing mass media ad campaign. California has developed ads that may be able to be used so that this could be done at a lower cost.
- **More Standardized Recycling Programs:** Education would be a lot simpler if recycling programs were more consistent across all municipalities. For example, Brazil has standardized color coding for recycling containers by material type on a national basis.

Local Capacity Building/Regionalization/Increasing Residential Recycling

- **Technical Assistance for Cities and Towns:** Participants at several meetings recommended more technical assistance to cities and towns on programs such as Pay-As-You-Throw that increase recycling and reduce disposal. Specific suggestions included:
 - More ongoing communication and guidance from MassDEP to municipal recycling coordinators
 - Work with schools on their trash and recycling contracting and to set up more recycling programs and avoid restrictive multi-year contracts.
- **Support Regional Program Development:** Regional program approaches have proved to be efficient and cost effective and MassDEP should support more regional program development across multiple cities and towns. In particular, participants suggested more regional hazardous product collection programs.
- **Municipal Assistance Coordinators:** MassDEP's Municipal Assistance Coordinators (MACs) have been a big help for municipalities to improve their recycling and solid waste programs and MassDEP should provide more MACs.
- **Pay-As-You Throw Programs:** See points under Reducing Waste Generation above.
- **Municipal Recycling Incentives:** MassDEP should provide recycling incentive payments for cities and towns, like a "Recycle Bank" program for cities and towns.
- **Program Funding:** Participants expressed a need for greater recycling and waste reduction program funding across topic areas. Recommended strategies included reinstating the Clean Environment Fund, establishing a per ton disposal surcharge, and expanding the bottle bill and using the additional unclaimed deposits revenues to fund waste reduction programs.
- **Multi-Family Recycling:** MassDEP should focus assistance and resources on increasing multi-family recycling, where many residents do not receive convenient recycling services.
- **Larger Recycling Containers:** Larger recycling containers would lead to residents recycling more materials.
- **Public Space Recycling:** It was recommended that the state needs to have more public space recycling containers and programs.

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- **School Contracting Practices:** In many cases, schools are locked into long term solid waste contracts that can prevent them from changing their contracts to incorporate recycling or composting programs. The state should work with schools to improve their contracting practices so that they avoid restrictive multi-year contracts and realize savings from recycling and composting diversion.
- **Hazardous Products Collection:** There is a need for more convenient hazardous product collection programs. Approaches suggested included regional collection programs, more retailer take-back, and collection at existing staffed locations such as fire departments.

Waste Bans/Business Recycling

- **Business and Institutional Recycling Opportunities:** Participants stated that there are tremendous opportunities to reduce waste, reduce material use, and increase recycling among businesses and institutions. (e.g., business/school recycling partnership/competition)
- **Business Reporting and Planning:** Participants stated that MassDEP should require businesses to report how much they recycle and dispose and to establish recycling/waste reduction plans.
- **Chamber of Commerce Programs:** MassDEP should partner with Chambers of Commerce and other local and regional business groups to encourage businesses to establish recycling programs and to provide technical assistance on getting started. It would be more effective for MassDEP to do outreach through existing business association initiatives rather than developing a separate MassDEP education program for businesses on recycling.
- **Municipal Recycling Programs for Businesses:** Businesses should be allowed to use municipal drop-off recycling centers and collection programs, which would provide more options for small businesses to recycle.
- **Waste Ban Awareness:** Most people, including residents and businesses, are not aware of existing waste bans and what they mean. There is a strong need for much greater waste ban education and awareness.
- **Waste Ban Enforcement:** Waste bans need to be actively enforced, particularly for businesses that generate waste. Right now, waste bans provide no disincentive for businesses to dispose of recycled materials. Or, put the other way, there is no consequence for businesses that do not recycle.
- **Transfer Station Recycling Programs:** MassDEP should require transfer stations to do more recycling. A participant made a related comment under the “Siting Issues” section, stating that the state should establish resource recovery parks with recycling, composting, and reuse facilities co-located with disposal facilities or transfer stations.
- **Hauler Recycling Services:** In many cases, private hauler contracts with businesses do not provide incentives for recycling, as haulers often charge businesses extra for recycling collection. MassDEP should work with waste haulers on contracting issues to develop more cost-effective and efficient models for providing recycling services to small businesses. Another suggestion was that MassDEP should require haulers to provide recycling services as part of bundled services with trash collection.

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- **Construction and Demolition Debris Recycling:** The infrastructure for construction and demolition debris (C&D) processing and recycling is not as strong in Western Massachusetts as in other parts of the state, which limits the ability to cost-effectively recycle C&D debris in Western Massachusetts. Several participants advocated for changing approaches to renovation and demolition projects so that contractors adopt deconstruction practices instead of standard demolition to separate recyclable materials. Conventional demolition practices result in a lot of waste.

Market Development/State Purchasing

- **Transportation Agency Purchasing:** MassDEP should work with MassHighway and other transportation agencies to change their purchasing specifications (especially MassHighway's "Blue Book" which is used by most municipalities) to allow greater use of recycled materials like recycled asphalt pavement and recycled asphalt shingles in roadway construction. Some states currently allow the use of higher percentages of these materials. Clear specifications combined with consistent demand will drive increased recycling, as well as ensure consistent product quality and performance. Specific recommended uses included:
 - Greater use of recycled asphalt pavement, asphalt shingles, crushed glass, and crushed aggregate in highway paving
 - Use of more compost for erosion control and landscaping
 - Leveraging increased use of recycled materials by municipal highway departments adhere to state specifications for local road construction and maintenance
- **Other State Purchasing:** Participants recognized the progress that the Operational Services Division has made with increasing purchasing of recycled and environmentally preferable products but also expressed support for more aggressive and more widespread state purchasing requirements, such as minimum post-consumer recycled content requirements, requirements to reduce packaging, and product take-back requirements. A participant suggested that state purchasing of recycled products be addressed at a higher level, e.g., in the State Budget Office.
- **Beneficial Use Determinations:** Participants at several meetings stated that the beneficial use determination (BUD) process is confusing and that MassDEP needs to streamline and issue final guidance on these requirements. This is a particular issue for cities and towns for which the cost and time commitment to develop a BUD application may be prohibitive.
- **Use Existing University Resources:** The University of Massachusetts at Lowell has expertise on plastics recycling engineering and other state universities have other valuable expertise that can assist with new recycling technology development and identify potential new market alternatives (e.g., use of recycled paper in cellulose insulation).
- **Minimum Recycled Content Legislation:** MassDEP should work with the Legislature to establish minimum post-consumer recycled content legislation for specific categories of packaging. Alternatively, there could be a fee on certain products that do not have recycled content (e.g, non-recycled paper).

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- **Material Quality:** Better material quality is important to support consistent long-term recycling outlets. Initiatives like single-stream recycling can place too great an emphasis on increasing the amount of recycled material without paying enough attention to material quality, which then can undermine recycling markets in the long term.
- **State Building Code:** Massachusetts should use the State Building Code as a tool to drive greater recycled content in building materials (e.g., recycled content wallboard).
- **Market Development Financing:** Provide tax exempt bond financing or other financial support to companies that develop new recycling facilities.
- **Local Market Development:** It is important to have strong local recycling markets so that we do not rely primarily on international markets that are subject to change without our control. Having a more diverse combination of markets that includes local market outlets would make recycling markets more stable. Committing recyclable materials to local markets would help support and maintain these companies and maintain jobs in Massachusetts. There may be unrealized local market opportunities (e.g., using recycled newspaper for cellulose insulation.) Massachusetts may be able to use LEED criteria, such as sourcing materials within 500 miles, to drive local market development.

Siting Issues

- **Food Waste Capacity:** Participants expressed frustration over how difficult it is to get approval for a composting or other similar facility. Participants expressed particular support for development of more organics processing capacity, particularly for food waste. Participants recommended that permitting and site assignment requirements for food waste processing facilities should be streamlined, but that it is critical that there are clear requirements for these facilities that are enforced to prevent odor and other nuisance impacts. This includes clear Department of Agricultural Resources requirements for farm-based composting. Several participants mentioned examples of facilities that have not functioned well and caused serious odor, nuisance, and even health impacts, so that stringent permitting and siting controls are critical and should be maintained.
- **Anaerobic Digestion:** Participants expressed support for anaerobic digestion as an alternative for managing organic materials, particularly for food waste.
- **Resource Recovery Parks:** Establish and site resource recovery parks that include recycling, composting, reuse facilities co-located with transfer stations or disposal facilities.
- **Concern Over Facility Siting:** Several participants expressed concerns over facility siting approvals and stated that MassDEP and local Boards of Health need to do a better job of overseeing facility siting and permitting decisions. Several participants suggested that facility siting and responsibility for waste be made more local to have more equitable distribution of solid waste facilities.

Technologies/Options for Residual Waste

- **Composition and Amount of Residuals**
 - Even before considering options for managing residuals, some participants argued that a zero waste approach could get us to the point where we do not need additional disposal options beyond existing capacity to manage waste materials

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and, therefore, that there is no need for additional residuals management options over the long term. Since waste to energy and other alternative technologies need to operate over the long term to recover capital costs, they are not an appropriate option.

- Others argued that, even with dramatic additional increases in recycling, there will still be large amounts of residual materials that require management and that there is an important role for residuals management options, potentially including waste to energy or alternative technologies. This is particularly true given that landfill disposal capacity is projected to drop dramatically in Massachusetts in future years.
- **Whether Waste to Energy Competes with Recycling**
 - On one hand, some participants stated that waste to energy requires an ongoing supply of waste and therefore long term contract commitments that will compete with recycling and serve as a disincentive to recycling. Participants believe that this is particularly true for materials such as paper and plastic that have a relatively high fuel value.
 - On the other hand, other participants stated that recycling rates in communities with waste to energy facilities are at least as high as those in communities not served by waste to energy and that waste to energy works best when recycling is maximized. And, municipal waste combustors recycle metal that would otherwise be disposed of. These participants also pointed out that waste to energy is a key component in places like Germany that have very high recycling rates and that the factor that undermines recycling the most is very cheap landfill disposal.
- **Emissions from Waste to Energy**
 - Many participants are opposed to waste to energy and opposed to lifting the moratorium on municipal waste combustion because of concerns about a wide range of toxic components present in the waste stream (e.g., mercury) or toxics that are created through combustion (e.g., dioxin) and that are either emitted from waste to energy facilities or are contained in ash or other solid outputs from facilities. This is a particular concern as more recyclables are removed from the waste stream; the remaining materials have the potential to be more toxic or hazardous in nature. These concerns exist for both traditional mass burn technology and alternative technologies such as gasification. These participants stated that no high temperature waste treatment process should be considered safe for wastes, including C&D materials. Participants stated that waste to energy results in more emissions than other conventional energy sources such as coal, gas, and oil.
 - Others stated that waste to energy is a much better alternative than exporting residual waste to out of state landfills – which is where residual waste would go without waste to energy facilities. These participants stated that these facilities meet very advanced emissions control requirements and that the moratorium on municipal waste combustion should be lifted. They have the added benefit of creating energy which compares well in terms of emissions with other conventional sources of energy (e.g., coal, oil, natural gas). Some participants also stated that waste to energy is preferable to landfilling from a greenhouse gas perspective.

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- **Energy Creation from Waste**
 - Participants expressed very different views on the significance of energy from waste. Some argued that this is a waste of energy, as waste to energy processes only capture 1/5 of the embodied energy in materials. Others argued that waste to energy provides an opportunity to capture energy from materials that would otherwise be disposed of in landfills and be wasted.
- **Status of Alternative Technologies - Gasification, plasma arc, pyrolysis**
 - There was considerable debate over the operational experience of these alternative technologies to date and how successful they have been and to what degree facilities are currently either operating successfully or being developed successfully.
 - A participant stated that alternative technologies such as gasification fit very well in locations that have very high recycling rates for managing the small percentage of the waste stream that is considered residual material.
 - Others stated that these alternative technologies compete with and undermine recycling.
- **Environmental Justice:** If the moratorium on new capacity for incinerating MSW is lifted, some participants raised concern that new facilities would be sited in communities that do not have the resources to fight them, which creates environmental justice concerns.
- **Anaerobic Digestion:** Participants opposed to high temperature treatment processes expressed more support for anaerobic digestion, if done properly. However, there is still concern about anaerobic digestion being used for municipal solid waste due to the toxic components in the waste stream. Participants at nearly every meeting expressed interest in looking for opportunities to develop anaerobic digestion facilities (see section on “Siting Issues”)
- **Above Ground Landfills:** Participants suggested above ground landfills that store residual materials in a dry environment that can later be mined for recovery as an alternative to conventional landfill disposal and to waste to energy or alternative technologies.
- **Landfill Environmental Impacts:** A number of participants stated that landfills create methane and pose risks of groundwater contamination.
- **Comparing Landfills to Municipal Waste Combustion:**
 - In some cases, participants expressed the opinion that municipal waste combustion facilities should be viewed as preferable to landfills because they capture metals for recycling (either prior to combustion or after combustion), they have programs to divert and recycle mercury-containing products, they create energy, and they do not emit methane like landfills do. These participants stated that it does not make sense to allow more landfill capacity while imposing a moratorium on more waste to energy capacity.
 - Other participants favored landfills over any technology that burns materials. Landfilling materials allows the option for later mining to recover materials that have value.
- **Export of Solid Waste for Disposal:** Participants expressed different opinions regarding whether Massachusetts should be a net exporter of trash for disposal. Many participants felt that Massachusetts should take responsibility and control for its own waste and

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should not be a net exporter of waste for disposal. These participants raised concerns about greenhouse gas emissions associated with transporting waste out of state. Others felt that exporting waste to other states should be considered an acceptable practice, as other states have much more land than Massachusetts and are able to site landfills in locations where they may have much less of an impact on public health than if they were sited in Massachusetts. State boundaries are arbitrary and, in some cases, an out-of-state disposal facility may be the closest, most convenient option.