# 2009 Solid Waste Policy Report

Minnesota Pollution Control Agency

February 2010

### Legislative Charges

*Minn. Statutes § 115A.411 Solid Waste Management Policy; Consolidated Report.*
*The commissioner shall prepare and adopt a report on solid waste management policy.*

*Minn. Statutes § 115A.551 SCORE Reporting*
*The commissioner shall monitor the progress of each county toward meeting the recycling goals in 115A.551, subdivisions 2 and 2a. The commissioner shall also report on how SCORE funding money was spent and the resulting statewide improvements in solid waste management.*

*Minn. Law Chapter 363 art 5 s 3(3) Recycling and Composting Report*
*The commissioner shall prepare a report that recommends options for achieving the following goals by 2020: an increase in county recycling rates to 60 percent of the weight of total solid waste generation; and the diversion of source-separated compostable materials equal to 15 percent of total solid waste generation.*

*Minn. Law Chapter 37 art 1 s 62(1, 2) SCORE Reporting Recommendations Report*
*SCORE reporting requirements for the report that is due in April 2010 shall be abbreviated in scope. In addition, the commissioner of the Pollution Control Agency, in consultation with the Association of Minnesota Counties, the Solid Waste Administrators Association, the Solid Waste Management Coordinating Board, and other interested parties shall make recommendations to amend the reporting requirements under Minnesota Statutes, section 115A.557, subdivision 3, in ways that reduce the resources counties employ to collect the data reported.*


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## Minnesota Pollution Control Agency

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# Contents

# Executive Summary

This biennial Solid Waste Policy Report is divided into five parts: 1) a summary of the Integrated Solid Waste Management (ISWM) Stakeholder Work Group process and product, including the Minnesota Pollution Control Agency's observations regarding this process; 2) a description of Minnesota's current solid waste system and recommendations for engaging state and local leadership in discussions on how to move to a new level of system outcomes; 3) a framework to guide the state forward in developing a more effective solid waste governance system; 4) an update regarding the progress made on key issues identified in the *2007 Solid Waste Policy Report*; and 5) conclusions and recommendations for moving forward on solid waste issues and outcomes.

This report satisfies the requirements of Minn. Stat. § 115A.411, which directs the commissioner of the Minnesota Pollution Control Agency (MPCA) to prepare and adopt a report that summarizes the current status of solid waste management; evaluate the extent and effectiveness of our progress in accomplishing state policies, goals, and objectives; identify issues requiring further research, study, and action; and make recommendations regarding reasonable and necessary changes to the state's solid waste management policies, authorities, and programs.

In addition, this policy report is linked to the following solid waste related reports, all of which are mandated by statute and incorporated herein or are currently under preparation.

- Recycling and Composting Report (Minn. Law Chapter 363 art 5 s 3(3)) (ISWM Stakeholder Process Report in Appendix A satisfies the requirements of this report).
- Report on SCORE Programs (Minn. Stat. § 115A.551) (Appendix B).
- SCORE Reporting Recommendations Report (Minn. Law Chapter 37 art 1 s 62(1, 2)) (Appendix C).
- Metropolitan Area Solid Waste Policy Plan (Minn. Stat. § 473.149) (anticipated completion spring 2010).

The MPCA recognizes fundamental structural problems exist that have, and will in the future, prevent Minnesota's solid waste system from meeting the objectives of the state's Waste Management Act.

Although the ISWM Stakeholder Work Group recommended a number of strategies for meeting greenhouse gas reduction goals, the MPCA staff believe that major underlying factors exist that prevent Minnesota from effectively moving forward with these and other strategies. The state Legislature is encouraged to closely review and evaluate the recommendations contained in the ISWM Stakeholder report. Several of these recommendations would require new legislative initiatives to attain state energy and waste management goals. However, significant barriers existed in the past that have prevented the state from moving forward on many of these strategies. Some of these barriers remain.

Considerable time and energy has been expended by stakeholders on the debate regarding where to target waste management efforts with respect to the Waste Management Act (WMA) hierarchy. The MPCA staff believe that the fundamental problem, the lack of an effective solid waste governance system that will align and steer stakeholder activities and efforts toward common, aggressive solid waste system goals and outcomes – at the local, regional, and state level. Although the waste hierarchy does not serve to inform and guide stakeholders on event level (site specific) issues, the hierarchy has served the state well as a tool to guide strategic planning, priority setting, and resource allocation issues; therefore, it does not need to be modified. As we continue to use and implement the hierarchy, the MPCA will emphasize the reduction, reuse, recycling, organics recovery, and energy recovery components of the hierarchy.

Given all the stakeholders/parties involved in the state's solid waste system, the MPCA staff believe that a more effective governance (steering) system is necessary to achieve the greenhouse gas and energy goals set by the Legislature. Improving the state's solid waste governance system will require that the multiple parties, public and private, involved in the system will need clarity regarding who is responsible for which functions and activities; the key parties have effective tools for addressing their areas of responsibility; the burdens and benefits of the system are fairly distributed amongst the parties; all key parties are held accountable for specific

outputs and outcomes; and the system is able to adapt to changing circumstances. Addressing governance first is critical to the implementation of other strategies.

Over the next 12 months, the MPCA will engage in discussions with legislators, local elected leadership, and solid waste stakeholders on this ‘governance’ issue.

# Part 1: Integrated Solid Waste Management Stakeholder Process

The Integrated Solid Waste Management (ISWM) Stakeholder work group was formed in response to recommendations coming out of the Minnesota Climate Change Advisory Group (MCCAG) and identified as a priority by the MPCA in the *2007 Solid Waste Policy Report*. The MCCAG was a 56-member group of stakeholders that prepared a report of recommendations to the Governor and Legislature in February 2008 for reducing greenhouse gas emissions from all sectors of the economy. MCCAG was launched out of the 2007 Next Generation Energy Act, which set goals for greenhouse gas emissions in the state—a 30 percent reduction from 2005 levels by 2025 and 80 percent reduction from 2005 levels by 2050. During its deliberations, the MCCAG determined that improving waste management practices has the potential to reduce greenhouse gas emissions by 75 million metric tons of carbon dioxide equivalent ($MMTCO_2e$), over business-as-usual practices, measured cumulatively from 2005 through 2025.

The ISWM Stakeholder goal was to develop an implementation plan to reach the MCCAG goals for waste management, initially focusing on four densely populated areas of Minnesota, which represent approximately 70 percent of the waste generated in the state. These areas were termed "centroids" and are composed of the following counties:

- **Twin Cities centroid:** Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties
- **St. Cloud centroid:** Benton, Sherburne, and Stearns Counties
- **Duluth centroid:** Carlton, Cook, Lake, and St. Louis Counties, and the Western Lake Superior Sanitary District
- **Rochester centroid:** Dodge and Olmsted Counties

The process began in December 2008 and consisted of a diverse 18-member work group, facilitated by the Minnesota Environmental Initiative (MEI). The work group used the U.S. Environmental Protection Agency's Waste Reduction Model (WARM) as a tool to determine greenhouse gas reductions achieved from various strategies. The group's challenge was to reduce emissions from 2005 to 2025 by 52.5 $MMTCO_2e$, compared to a "business as usual" scenario. The numeric goal was determined for the four geographic areas based on waste generation: since their waste generation is 70 percent of the state generation, this goal was derived by taking 70 percent of the MCCAG goal of 75 $MMTCO_2e$.

The ISWM Stakeholder Work Group recessed during the summer of 2009 to allow time for the centroids to work. Each centroid group recommended one to four scenarios for integrated solid waste management that would meet or exceed their region's goal. Input also consisted of identification of opportunities, barriers, feasibility, costs, and other factors. The work of these four groups showed that the overall greenhouse gas reduction goal of 52.5 $MMTCO_2e$ for 70 percent of the waste generation was feasible.

In the fall, the full work group reconvened to review and consider the recommendations from the centroids. The final report was prepared and submitted to the commissioner of the MPCA on December 31, 2009 (Appendix A: *ISWM Stakeholder Process Final Report*). The *ISWM Stakeholder Process Final Report* includes many worthwhile strategies that can help move the four centroids and the state closer to the greenhouse gas reduction goals.

The *ISWM Stakeholder Process Final Report* also serves as a report to the Legislature, satisfying the requirements of Minn. Laws Chapter 363 art 5 s3(3), which called for the MPCA, with stakeholder participation, to recommend options on how to achieve a 60 percent recycling rate and 15 percent source-separated composting of the waste stream, measured by weight, by 2020. The results are as follows: if implemented, the final set of strategies recommended by the ISWM Stakeholder Work Group would reach a 60 percent recycling rate, but would achieve only a 6.5 percent source-separated composting rate. Some members of the ISWM Stakeholder Work Group felt that 15 percent composting by 2020 would not be feasible. This concern was at least partially based on work conducted by the Solid Waste Management Coordinating Board (SWMCB), a joint powers group of metropolitan counties and a Work Group member, which concluded that a 15 percent organics diversion rate in the metro area would greatly exceed current facility capacity and require aggressive additional efforts in the form of public financing and subsidies.

## MPCA observations

The work of the ISWM group, using greenhouse gas reduction as a new currency of measurement with assistance of the WARM model, reaffirmed that waste reduction, reuse, and recycling offer much untapped potential for 'green' jobs, enhanced renewable energy, and greenhouse gas (GHG) reduction from our state solid waste system. While all GHG models including WARM have limitations, the ISWM participants learned from the use of WARM that in order to reach the MCCAG statewide goals for 2025, Minnesota will have to make significant structural and strategic changes in our solid waste and resource recovery system that moves us beyond our present approach.

While the ISWM group did reach consensus on a large number of strategies, this diverse stakeholder group was unable to reach consensus on several items. A few of the issues the ISWM group wrestled with in 2009 were equally controversial in the 1980s.

Beyond the specific products generated by the ISWM group, the MPCA found the ISWM process of value because it provided a forum where informed and interested stakeholders could discuss, and share ideas about, current solid waste issues. In this regard, the MPCA staff believe that an ongoing "advisory group" would be useful to evaluate progress of the state solid waste system as it strives to meet the very ambitious state GHG, renewable energy, and WMA goals.

As a direct participant in the ISWM process, the MPCA has already found this effort particularly beneficial in focusing our own solid waste activities. As a follow-up to this process, the MPCA has committed staff resources in 2010 to assisting the four centroids. The MPCA is currently working with the Solid Waste Management Coordinating Board and adjacent metropolitan counties in developing a new Metropolitan Solid Waste Plan and evaluating new governance options. The MPCA is also providing technical assistance to the three Greater Minnesota centroids to develop specific projects that advance the higher ends of the hierarchy. This work is likely to take the form of specific projects; preparing best management practices for existing facilities to cut greenhouse gas emissions; and possibly working with local governments to form stronger regional groups to implement existing tools more efficiently and effectively.

Also, as has been noted before, the ISWM process served to highlight for the MPCA staff the opportunities to improve the state's solid waste system. Building on 'lessons learned' from this and previous processes the state has reached a limit on levels of performance with the current solid waste system and discussion needs to continue regarding how to make significant improvements in the performance of our solid waste system.

# Part 2: Current Approach to Solid Waste Management; Room for Improvement

Minnesota's current approach to solid waste management, which depends primarily on the voluntary cooperation of many parties, private and public, has limitations in its ability to improve significantly on its present performance levels. Although a waste management hierarchy of preferred methods is established in statute, the fact that no one party, or group of parties, has the responsibility and ability to 'steer' the system – including all the inter-connected pieces – in a common direction could prevent the state's solid waste system from significant improvement. Governance refers to the overall process by which the solid waste system is managed, ensuring that the activities of the parties in the system are aligned so that overall system goals are achieved in a cost effective manner.

Although the MPCA *Report on 2008 SCORE Programs* shows modest waste reduction and recycling rate increases, this can primarily be attributed to the current economic recession, rather than to significant improvements to how waste was managed. Minnesota's solid waste system's performance has been somewhat static since 1995, unable to advance beyond its initial achievements after the WMA and SCORE legislation was passed. One factor was the loss in the ability of the public sector to gain control of the waste stream in a particular area given the 1994 U.S. Supreme Court decision, *C&A Carbone, Inc. v. Town of Clarkstown, New York.* As a result of this decision local and regional government in Minnesota have struggled to cover the cost of the solid waste programs and services they provide by being assured of a stable volume of solid waste.

Despite the recent downturn in the economy and its dampening effect on waste generation, over the past 10 years these solid waste trends are apparent:

- municipal waste generation has continued to climb;
- recycling rates have not increased enough to counteract waste generation;
- resource recovery facility usage has declined; and
- landfilling has been on the rise.

These trends are expected to continue, particularly as the economy picks up again.

Although Minnesota has many nationally recognized solid waste management programs, state and local governments seem to have reached a plateau that will be difficult to rise above, given the current system.

Over the past 10 years, the MPCA has engaged in three solid waste stakeholder processes, all of which were designed to advance the waste management hierarchy. These stakeholder processes have demonstrated that reaching consensus among diverse public and private stakeholders on major governance and strategic issues is difficult, if not impossible. Focusing on greenhouse gas reduction and seeking to meet the reduction goals set by MCCAG, the ISWM Stakeholder process went farther than previous efforts. It identified an array of strategies that would need to be implemented in order to reach the established greenhouse gas reduction goals. However, many of the recommendations from the ISWM group would require major new mandates, additional levels of funding, and structural changes in the solid waste system.

The private sector will need to play an integral role in any successful and effective state solid waste system. The private sector has the capability to foster innovation, efficiencies, and competitive pricing within any system. However, more needs to be done to ensure that the efforts of the private sector are aligned with and help support the public sector drive to reach state and regional solid waste and greenhouse gas reduction goals.

Under the present solid waste system, the MPCA's authority to enforce certain provisions of the WMA is limited. When local governments in the system find themselves unable to implement the hierarchy and feel they have no tools to move ahead, the MPCA has few and insufficient remedies. What is needed are clear goals and objectives, the right tools for the job, and strong accountability for all parties.

Lastly, cost structure must also be considered. While some strategies make cost savings possible, overall costs tend to increase as waste is moved higher up the waste management hierarchy. Landfill tipping fees continue to be so low as to pull waste toward landfilling and against the preferred flow set by statute. Outside of a few areas of exceptional achievement in Minnesota, landfilling will remain the default waste management method until the public sector provides energy and resource recovery options.

# Part 3: Framework for Solid Waste Governance Discussions

Minnesota's solid waste management governance process is fragmented and difficult to understand. Stakeholder (public and private) roles, relationships and responsibilities need to be clarified so that solid waste can be successfully managed. To that end, within the next several months, it is critical for the Legislature, local government officials, and private entities to engage in this discussion regarding what needs to be done to move the state toward more effective solid waste governance.

It should be noted that there is a difference between governance and government. *Governance* is the process by which solid waste is managed in order to meet the state's goals and objectives. Governance includes the interests and activities of government entities, businesses, nonprofits, communities, and individual citizens. *Government* refers to the laws and rules of the state and localities and the entities given authority by these laws and rules. A more effective governance system capable of steering the state toward consensus-driven solid waste goals would consist of, or provide, the following:

- **Clarity.** Identify clearly and transparently who has what responsibility over which parts of the system, and how they will be held accountable for outcomes.
- **Effective tools.** Those parties responsible for parts of the system should have the tools, authorities and resources necessary to address their responsibilities.
- **Equity.** The burdens and benefits of the system should be reasonably distributed amongst the parties with responsibility for the system; however, primary cost of the system – at all levels -- should fall on the generators of the waste.
- **Accountability.** Adequate measures, benchmarks, checkpoints, monitoring and enforcement must be established.
- **Balance.** One model or approach will not fit all situations. While roles and responsibilities should be reasonably clear, they should provide some level of flexibility.

Governance is a core issue that needs to be addressed in order to ensure that future efforts and activities in the state will move us to a level of performance with our solid waste system. Based on the work of the ISWM stakeholder process, the MPCA developed the following principles as it deals with a host of other system issues:

- **Greenhouse gas is not the only factor.** By law, the MPCA must be mindful of the WMA hierarchy, state goals for renewable energy, and the protection of the land, water, and air. It will consider all factors when assessing resource and waste management strategies.
- **Focus on results.** Whether public or private, operators of any system segment (such as trash collection, separation, processing, or disposal) are responsible for results on key measures. The MPCA will ask: is this part of the solid waste system heading in a sustainable direction, and what are the measured results?
- **Transparency.** To minimize environmental consequences, Minnesota should:
    a. Manage solid waste now rather than burying it for someone else to deal with later.
    b. Manage its solid wastes in Minnesota rather than elsewhere.
    c. Avoid toxic emissions rather than shifting them from one media to another (e.g., groundwater to air).
- **More bang for the buck.** Economies of scale hold true—the more waste managed in a given operation, the lower the cost per ton. Materials now treated as waste offer high GHG and energy potential if pushed up the hierarchy. Action is especially needed for materials that do not perform well in the mixed-waste end of the hierarchy, such as aluminum cans in waste combustors.

- **Visible costs mean better decisions.** For the most part, the cost of the solid waste system should be covered by the generators of the waste. Product stewardship principles can ensure goods have accurate waste-management costs reflected in their pricing.
- **Education and incentives for better behavior.** The public needs to know what to do and why. Therefore education is vital to the success of any public initiative. While education alone can reach a portion of the public, more is needed to reach the rest of the public. Incentives are an important means of influencing behavior. Using incentives wisely will be important to improving the solid waste management system performance.
- **Public vs. private**. Discussions should continue regarding the level of public control over solid waste (e.g., through waste contracts or designation).

One option for creating efficiencies that counties, particularly in the centroid regions, should consider is forming strong regional solid waste authorities. Several effective models exist, including strong joint-powers authorities; creating new solid waste districts under the existing statute; or having the Legislature create special purpose districts, like the Western Lake Superior Sanitary District. There are hundreds of examples of regional solid waste authorities, districts, or commissions, in the U.S., where the local jurisdictions have recognized the advantages of this approach.

Because of economies of scale, such regionalization has the potential to reduce the costs of solid waste management. Larger market share would be created, and the economic risks shared by a larger generator base. Multiple inter-county waste sharing agreements, which can be complex and vary from jurisdiction to jurisdiction, could be avoided, since all jurisdictions would participate equally in the regional system. Duplicative operations and services could be streamlined and save money.

# Part 4: Update on Key Policies in the 2007 Solid Waste Policy Report

## Policy Area 3A: The statutory plan of product stewardship for telephone directories is not working.

In the *2007 Solid Waste Policy Report*, the MPCA identified the statutory requirements for telephone directories as an area in need of attention. The MPCA recommended that the Legislature clarify and strengthen the obligations of telephone directory publishers to fulfill their recycling obligations under Minn. Stat. § 115A.951 and further require the directory publishers to distribute directories on an "opt-in" basis. Recommendations were based on the potential for reduction in greenhouse gas emissions.

Telephone directories received legislative attention in the 2008 session with an "opt-out" requirement under consideration but neither this proposal nor changes to the existing statute were concluded. MPCA staff participated on a national committee for phone directory stewardship formed to provide input to the directory publishers on a voluntary opt-out program. The MPCA will continue to monitor this effort to gauge its effectiveness. Data from the 2008 SCORE report and the 2009 annual reports from publishers and distributors indicate that the directory recycling rate is below 15 percent, up slightly from 11 percent in 2006.

In 2008, the MPCA devoted additional effort to increase compliance by telephone directory publishers and distributors with the statutory reporting requirement (Minn. Stat. § 115A.951). As a result, 98 percent of all directory publishers and distributors contacted complied with the reporting requirement. In 2009, the MPCA issued a memorandum clarifying the intent of Minn. Stat. § 115A.951, with a goal of increasing compliance with the existing recycling requirements.

## Policy Area 3B: The current recycling system is missing major energy and greenhouse gas reduction opportunities with beverage containers, starting with aluminum cans.

The MPCA recommended the establishment of a goal to recycle 80 percent of beverage containers by January 1, 2012. It further recommended providing opportunities to recycle single-use beverage containers at the point of sale or distribution, and described its intention to conduct a product stewardship process with the beverage industry to achieve these goals.

The MPCA, in collaboration with the Wisconsin Department of Natural Resources (WIDNR), pursued a voluntary product stewardship agreement with the beverage industry to fulfill the objectives of the *2007 Solid Waste Policy Report*. The MPCA and the WIDNR convened four stakeholder meetings between September 2008 and January 2009 to offer stakeholders an opportunity to identify and develop potential strategies to increase the recycling of beverage containers.

Currently, 35 percent of the beverage containers in Minnesota are recycled. In order to achieve the 80 percent beverage container recycling goal by 2012, the collection rate of these materials would need to increase substantially.

## Policy Area 3C: Current pricing and management practices are holding back non-residential recycling.

The MPCA proposed extending the "opportunity to recycle" requirement to all building owners, building managers, and building operators who contract for waste management for the building, facility, or business. The MPCA also concluded that more information is needed about current pricing of garbage and recycling services for commercial accounts to determine whether transparent pricing language is needed in statute to change pricing signals in favor of recycling over disposal.

Non-residential recycling improvement was a subject of discussion during the Integrated Solid Waste Management Stakeholder Process. The ISWM work group recommended two strategies that directly address non-residential recycling. One would extend the current residential opportunity to recycle requirement to non-residential sectors. It includes public space recycling requirements and directs counties to implement ordinances that require the opportunity to recycle at commercial entities. The other strategy also includes an opportunity to recycle requirement for commercial and institutional sectors in addition to aggressive recycling goals and recycling capacity requirements at commercial/institutional points of generation. Other strategies advanced by the group, such as requiring retailers to offer plastic bag recycling, would affect the non-residential sector, but would not necessarily make a large impact on recycling rates.

## Policy Area 3D: Contamination from non-compostable plastic bags is a problem when composting organic materials.

The MPCA recommended legislation to require compostable bags when a bag is used to collect yard waste. The MPCA further proposed that education would be necessary to prepare the public for this change.

Compost facility operators noted that removing the plastic contamination from non-compostable bags costs between $3 to $7 per cubic yard. The resulting contamination in the finished product causes the material to be unsalable and it either remains at compost sites or is used for daily cover at landfills.

This issue was partially addressed by the 2009 Legislature with a statutory requirement for the use of compostable bags for the collection of yard waste, when a bag is used, in the Metropolitan Area. Non-compostable bags can still be used on the generator's premises for storage of yard waste or for other purposes, or to deliver yard waste to a compost facility if the materials are removed from the bag and the bag removed from the site. The law went into effect January 1, 2010. This law does not address the contamination issues in Greater Minnesota and a significant amount of finished compost is generated at compost facilities outside of the Metro Area.

## Policy Area 3E: Open burning of farm and household garbage has persisted, despite risks.

The MPCA recommended ending backyard garbage burning by 2010, continuing to provide assistance to counties and local units of government to educate the public and reduce backyard burning, and to allow a two-year temporary exemption for specific counties who apply to address gaps in service or drop-site options, enforcement, and educational efforts.

The MPCA estimates that 45 percent of rural Minnesotans currently burn their garbage on-site, which has a significant impact on human health and the environment. Backyard garbage burning is the leading source of dioxin in the United States and contributes to over half the wildfires in Minnesota each year.

Entering the fifth year of a multi-year effort, the Burn Barrel Reduction Campaign has focused on working with stakeholders and local units of government to reduce backyard garbage burning throughout the state. To date, the MPCA has entered into grant agreements with 27 counties (not including a statewide educational grant with CLIMB Theatre that covered many other counties). Those grants have focused on education, enforcement, and incentives. The most recent projects with Lincoln and Redwood Counties focused on establishing rural waste drop-sites in conjunction with recycling sheds, and the early response from the public has been outstanding.

The MPCA has also increased its enforcement of violations involving open burning of solid waste and prohibited materials (per Minn. Stat. § 88.171), which include most elements of modern household wastes and further developed our partnerships with the Department of Natural Resources, Department of Agriculture, and Department of Health who share our common goal of eliminating backyard garbage burning.

During the 2008 legislative session, the MPCA was asked to testify at an informational hearing in front of the Agriculture Committee about the risks associated with backyard garbage burning and provide recommendations for changing behavior. The committee agreed that backyard garbage burning was a problem and asked for more information on efforts to date and what it would take to ensure that adequate disposal options exist in rural parts of the state. A follow-up survey of all 87 counties determined that an average of 1 percent of the population does not have adequate disposal options available so while availability is still an issue in some areas, convenience, habit, and price are more important drivers.

The agency, in partnership with the Solid Waste Administrator's Association, is conducting a follow-up to the 2005 statewide burn barrel survey to determine what, if anything, has changed in terms of who and how much people still burn and if the motivations are the same. The study will be completed by June 2010. The MPCA will review results and consider next steps. For more information on the dangers of backyard garbage burning and ongoing reduction efforts, go to www.pca.state.mn.us/burnbarrel.

## Information needs identified in the 2007 report and other reports

A number of data gaps identified in the *2007 Solid Waste Policy Report* are being addressed by MPCA's research and technical teams. The following table is a summary of the work conducted by the MPCA since the 2007 report.

| **Data needs from 2007 Solid Waste Policy Report** | |
|---|---|
| **Data need** | **Status** |
| Beverage Container Product Stewardship Process. | Completed process with input from industry. Report available at http://www.pca.state.mn.us/oea/publications/w-ps1-02.pdf |
| Ongoing analysis of the climate change and energy impacts of various waste management practices. | MPCA is tracking developments and developing expertise in life-cycle analysis. |
| Gather benchmarking information about large systems similar to Minnesota that can serve as models. | Some research conducted by the MPCA and then presented to and considered by the ISWM Stakeholder Work Group. |
| Work with the U.S. EPA on improvements to the WARM model for measuring greenhouse gas reductions from solid waste management. | In 2009, U.S. EPA made funding available to the MPCA to award a grant to support implementation of state policy to support its clean energy goals. The MPCA issued an RFP requesting proposals to improve the usefulness of the WARM model when developing carbon credits for recycling. No contractor responses to MPCA's RFP were received, and the EPA grant money will be directed toward another clean energy project. |
| Develop better information regarding generation and management of non-MSW materials. | Some information obtained through work on Construction, Demolition, and Industrial Landfill Work Group and Metro C&D Recycling Study. |
| Continue to evaluate pros and cons of organized collection. | Conducted Analysis of Waste Collection Service Arrangements (see http://www.pca.state.mn.us/oea/publications/w-sw1-06.pdf) |
| Explore the role of product stewardship to cope with problem materials. | Conducted Product Stewardship Recommendations Report as requested by Legislature (see http://www.pca.state.mn.us/publications/lrw-ps-1sy09.pdf) |
| Research life-cycle information on organics recovery methods. | Literature search completed, more information on greenhouse gas and other emissions is needed. The MPCA is following the work of other states, such as California, which has a forthcoming study on the topic. |
| Continue to study the feasibility of collecting and composting yard and food wastes together. | Working with counties and others to collect leachate and other data, research requirements and data from other states, and prepare recommendations. Also evaluating pilot projects in Minnesota and currently revising its compost rules. |
| Advance landfill gas destruction and recovery efforts; data collection on actual emissions from existing facilities. | Continuing to conduct feasibility studies at different sites; including GHG reporting in facility permits; and prepared guidance document for requirements for a landfill to have leachate recirculation added to its allowable operating practice in its permit (see http://www.pca.state.mn.us/publications/w-sw5-08.pdf). |

# Part 5: Conclusions and Recommendations

Based on the MPCA's work on solid waste issues over the last two years and the history of solid waste in the state, the following conclusions and recommendations are provided relative to solid waste management and resource recovery:

- **Better incentives are needed.** Since the passage of the SCORE recycling and reduction law in 1989, Minnesota's approach to solid waste management has been based on three things: voluntary goals headed by the waste management hierarchy, an aging infrastructure, and modest economic incentives for moving waste up the hierarchy. Those state and local incentives have been getting proportionately smaller with time and inflation. While the waste management hierarchy is still relevant and important today, more incentives should be considered as budgets allow, to move waste to the most preferred methods.
- **ISWM Stakeholder Process work was helpful.** In 2007, the Legislature set goals for cutting statewide greenhouse gas emissions by 2015, 2025, and 2050. The legislative goal for 2025 called for a 30 percent cut in annual GHG emissions compared to 2005. The legislation was followed by the Minnesota Climate Change Advisory Group (MCCAG), which recommended sector-specific targets including the solid waste system. The MCCAG report, led to the MPCA convening an Integrated Solid Waste Management Work Group on specifically how to meet the MCCAG goals for solid waste in the most populous areas of the state. The work of the group is to be commended and its recommendations should be given serious consideration.
- **Governance must be improved.** Important to improving the solid waste system in Minnesota is to provide for a governance structure where roles and responsibilities are clear, authorities are granted that parallel assigned responsibilities and ensure an adequate "steering" of the system, responsible parties are provided the right tools to influence behavior, but are held accountable for results.
- **MPCA will support the centroids.** The MPCA will focus on using the tools available to focus on the 17 "centroid" counties in which the bulk of Minnesota's solid waste is generated. In Greater Minnesota, the MPCA has created a new unit specifically charged to work with the three non-Metro centroids (counties clustered around Rochester, St. Cloud, and Duluth). In the Metropolitan Area, the MPCA will work with the seven metropolitan counties on the new Metropolitan Area Policy Plan, and to identify governance issues. The Metropolitan Area, which makes up 60 percent of the waste generation in the state, is key to providing a solution with respect to solid waste governance and meeting the state solid waste management and greenhouse gas reduction goals.
- **Continued local leadership is important**. All local levels of government, particularly counties, have worked hard to get to this point. Counties are urged to move forward with projects and policies that can be implemented now. Examples exist in the state where local leadership has overcome some of the barriers that exist in the current system. In particular, stronger intergovernmental partnerships and regional governments can be effective and efficient in providing waste management services in accordance with the hierarchy and corresponding environmental benefits to their constituents.