

Executive Summary

2013 Update - State Solid Waste Management and Resource Recovery Plan Integrated Waste Management Plan (IWMP)

Background

Under the Integrated Waste Management Act of 1991, the Montana Department of Environmental Quality (DEQ) adopts, and incorporates by reference, a statewide Solid Waste Management Plan. This plan is a policy document to provide direction as the state continues to develop and implement an integrated approach to solid waste management. Specifically, the plan provides strategies to divert materials of value out of the waste stream, which extends the life of landfill facilities. Diversion goals are set through statute with the next target being 22 percent diversion for calendar year 2015. The original plan, completed in 1994, called for review every five years and updated as necessary. Plan updates were completed in 2006 and 2013.

Diversion Target Goals

At present, diversion-rate target goals are set through statute. Building on the work of the 1991 Legislature, the 2005 Legislature updated these target goals to better reflect the ability of DEQ to calculate waste diversion rates based on materials diverted for reuse, recycling, and composting (Section 75-10-803, MCA). Currently, licensed facilities report these amounts upon renewal submissions, and a voluntary survey is sent to all recycling facilities not required to hold a license. Because this survey is voluntary, some facilities choose not to submit recycling data. Therefore, it is likely that Montana waste diversion rates are higher than DEQ's calculated percentages.

The 2006 Integrated Waste Management Plan (IWMP) and Section 75-10-803, MCA, adopted the updated target goals for reuse, recycling, and composting. Calendar year 2015 marks our next target goal of 22% diversion.

Montana DEQ uses yearly facility reports and voluntary surveys to calculate yearly diversion rates. A summary of diversion rates achieved since 2004 is given below. Individual reports can be found at http://deq.mt.gov/Recycle/recycling_statistics_Page.mcp.

- 2004 – 15.0%
- 2005 – 18.7%
- 2006 – 18.6%
- 2007 – 18.3%
- 2008 – 19.6% (Target Goal 17%)
- 2009 – 19.1%
- 2010 – 19.7%
- 2011 – 19.4% (Target Goal 19%)
- 2012 – 21.9%

To date, Montana has met and/or exceeded the diversion goals set by the 2005 Legislature. These successes can be attributed to increased community-based recycling programs as well as focus on diversion of large-volume materials such as textiles, electronics scrap and construction/demolition waste.

2013 Update

With input from a task force comprised of stakeholders from across the state, DEQ completed a final draft of the 2013 update on April 1, 2013. The plan then went through the rulemaking process and became final on August 9, 2013 (ARM 17.50.301).

Through task force interaction, stakeholders started with a list of 25 recyclables/commodities that are abundant in the waste stream and then culled that list to ten. These ten, ranked from greatest to least potential, are:

- 1 - Electronics Scrap (E-Waste or E-Scrap)
- 2 - Food Waste
- 3 - Cardboard
- 4 - Construction and Demolition Waste
- 5 - Aluminum
- 6 - Plastics
- 7 - Textiles
- 8 - Paper
- 9 - Yard Trimmings (Compost)
- 10 - Metal Cans

Although a few specific actions for individual commodities were noted, a common theme identifying barriers to and recommendations for increasing commodity diversion became apparent. Summarized below are the common themes as well as DEQ's response.

Barriers:

Lack of education of the public — Where to recycle, how to recycle, effects of product contamination, and the realization that recycling is not free.

Lack of education of the solid waste industry and recyclers — The business of collection, transportation, and markets. Additionally, some recyclers have little interest in the less valuable commodities.

Storage Logistics — Commodities must be kept clean and dry and storage space is needed to collect enough materials to cover transportation costs. Many facilities lack the equipment to properly package materials — for example, balers — which allows for more economical shipping.

Transportation Costs — A substantial quantity of a commodity is needed to cover the cost of shipment to markets.

Lack of support by municipal leaders, and a corresponding lack of understanding of the economies involved — The relative value of conserved landfill space is generally not considered by local governments as they consider overall program costs.

Recommendations:

Education and outreach — More education is needed for consumers, businesses, and government officials. The business case for recycling and composting must be better communicated. This education need not be expensive but could include: development and distribution of successful case studies; distribution of recycling guides; standardization of collection practices and signage; periodic local news articles to report program activities; and providing relevant and current website information.

Product stewardship — Consumers and large purchasers must demand that products be sold with a take-back/reuse strategies; examples include paint, mercury-containing devices, and many electronic appliances that become e-scrap.

Partnerships — Consumers, local governments, and businesses must find ways to work together to achieve the economies of scale needed for diversion programs to cover costs. The current Hub-and-Spoke systems within the rural parts of the state provide excellent examples of these kinds of working partnerships. Additionally, community collection events are well attended and achieve substantial diversion rates.

Potential legislation — Legislative actions can increase diversion rates. Possible actions could include funding allocations (grants or low-interest loans), tax incentives to recyclers and or businesses, and potential bans on the landfilling of certain commodities, for example e-scrap.

DEQ Response

State and local governments, universities, K-12 schools, businesses, and citizens of Montana must continue to develop and improve partnerships to achieve increased recycling/diversion of solid waste. The diversion goal of 22 percent by 2015 is quickly approaching and significant commitment is essential for that goal to be attained.

Montana DEQ will utilize the common strategies recommended by the Task Force to build upon successes in the past and momentum at local and state levels. Education and outreach will continue to be a foundation of efforts over the next five years as will be working with community and business partners and supporting stakeholder efforts. Rather than set a five-year timeline for plan elements and implementation approaches, DEQ will instead measure success on a yearly basis and will develop yearly program work plans to focus on key elements and implementation approaches. DEQ will encourage product stewardship and will consider opportunities for legislative action on a case-by-case basis. Because diversion is a weight-based calculation, DEQ will focus on those large, bulky, and heavy items that continue to be landfilled rather than reused or recycled. Specific commodities to be addressed are:

- E-Scrap — Although communities across the state have stepped up to provide collection, e-scrap will likely continue to be a high-volume waste due to perpetual turnover of electronic equipment, such as televisions, computers, e-readers, and cell phones. DEQ will continue to advise communities and assist with collection logistics for new efforts. Furthermore, DEQ will work with manufacturers and retailers to promote the incorporation of product stewardship and life cycle ideals into product design and distribution.
- Textiles / Carpet / Mattresses — Currently there are limited reuse and recycling opportunities for these three commodities. DEQ will work with communities and recyclers to better facilitate collection of materials as well as investigate opportunities for end-use markets.
- Construction and Demolition Materials — Building on the growing demand for reuse and recycling of these commodities, DEQ will continue to offer educational opportunities on the topic and will look for opportunities to repurpose items into other new/existing construction or into new materials.
- Rural Recycling — Montana’s rural communities are increasingly requesting that recycling opportunities be established outside of urban areas. DEQ will continue to provide technical assistance and training to these communities to establish collection programs and potentially expand into Hub-and-Spoke systems.