

2012 ANNUAL REVIEW REPORT
DOUGLAS/JEFFERSON COUNTIES
REGIONAL SOLID WASTE MANAGEMENT PLAN

The Douglas/Jefferson Counties Regional Solid Waste Management Committee met on June 21, 2012 for the annual review of the SWM Plan as required by K.S.A. 65-3405(c). The meeting was held at the City of Lawrence's Solid Waste Annex North (SWAN) building. The following seven (7) members of the eleven-person committee attended the annual review:

<u>Member Name</u>	<u>Agency/Entity Represented</u>
Nancy Thellman	Douglas County BoCC
Lynn Luck	Jefferson County BoCC
Jon Rossillon (for Mike Russell)	KU Environmental, Health and Safety Dept.
Kathy Richardson	Lawrence Public Works, Solid Waste Div.
Mark Richards	Jefferson County Auxiliary Services
Charlie Sedlock	Hamm Landfill
Keith Browning	Douglas County Public Works

The main goal of the annual review is to identify any changes to the region's solid waste management system since the approval of most recent five-year update. The most recent five-year update was completed in 2009.

The committee identified the following changes to the region's SWM system or general SWM activities since last year's review:

1. City of Lawrence

(a) Results of 2011 City of Lawrence DirectionFinder Survey (level of satisfaction of City services) and factors driving continuous improvement.

In the 2011 City of Lawrence DirectionFinder Survey completed by ETC Institute, ninety-three percent (93%) of the residents surveyed, who had an opinion, were satisfied with residential trash services.

Even with a high satisfaction rate, there are multiple factors driving continuous improvement in solid waste management, including:

- Improving worker safety through increased automation.
- Increasing efficiencies in routing and collection through use of technologies and automation.
- Responding to an increasing demand for residential curbside recycling.
- Balancing community values of health and safety with fairness in the rate structure.
- Promoting long term stability for customers.

- Preserving local jobs.
- Responsibly managing local resources.

The Lawrence City Commission created the Solid Waste Task Force in 2011 to develop recommendations regarding the long-term solid waste service options for Lawrence.

(b) Final report and recommendations of city's Solid Waste Task Force.

The Solid Waste Task Force was established by [Resolution No. 6918](#) in February 2011.

The Lawrence City Commission received the Solid Waste Task Force final report on February 28, 2012.

The Solid Waste Task Force was focused on providing strategic direction to manage the waste stream to place increasing emphasis on waste diversion over time. The task force recommended the goal of 50 percent recycling rate by volume by 2020.

To achieve the goals for waste management, source reduction and diversion, the Solid Waste Task Force envisioned a residential service that includes two roll-out carts for single family customers as part of the standard monthly fee – one for trash and one for single-stream recycling. Recommendations for overall service are bulleted below. The complete report is posted at www.lawrenceks.org/swtf/files/swtf_report_2012feb.pdf.

Residential solid waste services – Solid Waste Task Force recommendations

- The City of Lawrence will continue to provide weekly collection of residential solid waste to ensure protection of public health, safety, and environment.
- Increase automation for residential trash collection by:
 - o Providing roll-out trash carts for residential services, which can be utilized immediately with the current fleet of semi-automated trucks. This maximizes the return-on-investment on currently existing semi-automated trucks.
 - o Increasing automation of trucks for residential service collection as current fleet units are replaced.

- Implement a variable rate pricing structure for residential solid waste services that encourages waste reduction and increases equity in the rate structure.
- The City of Lawrence will continue to provide weekly collection of yard trimmings to keep materials out of landfill waste stream.
- Implement city-wide single-stream curbside recycling if fiscally prudent and sustainable. City-wide program would be included in the standard rate for residential service (participation voluntary).
 - o Evaluate costs and opportunities by soliciting a Request for Proposals (RFP) for single-stream curbside recycling.
 - o The RFP should have two (2) alternatives, to separately evaluate collection and processing components. In other words, companies will be asked to submit proposals for
 - turnkey operations (company provided collection and material processing), and
 - material processing only (which would allow municipal collection of materials).
- Promote adequate number of drop-off points for glass, if material is not accepted in single-stream curbside collection system.
- Increase diversion of organic materials from the waste stream by:
 - o Focusing education, and outreach on backyard composting of both yard trimmings and food waste.
 - o Examining the collection of vegetative food waste for residential customers as part of existing residential collection of yard trimmings.
- Develop long-range plan for sustainable household hazardous waste program, balancing needs for fiscal responsibility and customer convenience. Issues that must be addressed include adequate physical facilities, access, marketing, staffing, and ability to staff for open hours that may not require appointments.
- Develop comprehensive outreach and education program to facilitate the implementation of solid waste program changes. Assist residents in ability to easily find information about recycling specific waste streams by creating a searchable web page.

Commercial / multi-family solid waste services – Solid Waste Task Force recommendations

The Solid Waste Task Force did not have adequate time to analyze significant changes for commercial or multi-family solid waste services. However, the task force expects that staff and policy-makers will consider enhancements to these services toward the goals of source reduction, increased solid waste diversion, and rate equity as new opportunities for more automated collections, recycling, organic collections, and other services arise through the implementation of improvements to residential services.

(c) Residential curbside recycling collection service.

The City Commission directed staff to prepare a report on Request for Proposals (RFP) options that outlines major policy issues for a curbside recycling program as a follow up to the Solid Waste Task Force recommendation of implementing a city-wide single-stream residential curbside recycling program, if fiscally prudent and sustainable.

Implementing a city-wide residential curbside recycling program for the City of Lawrence is considered establishing an organized recycling collection service.

State requirements for organized collection service establishment: On July 1, 2011, a House Bill concerning municipalities and establishing organized collection services was enacted by the Legislature of the State of Kansas. The procedure and delayed implementation period for establishing an organized solid waste or recycling collection service are explained in [State Statutes 12-2035 and 12-2036](#).

On June 12, 2012, the Mayor signed [Resolution No. 6976](#) announcing the City's intent to consider adoption of an organized collection service for residential recycling within the City limits of Lawrence, Kansas.

(d) Residential trash carts.

The City Commission requested an implementation plan that would address costs, program implementation, and any immediate equipment changes required as a follow up to the Solid Waste Task Force (SWTF) recommendation of providing roll-out carts for residential services, which can be utilized immediately with the current fleet of semi-automated trucks. At the February 28, 2012 meeting, the City Commission stated the provision of carts was a top priority because of worker safety.

The implementation plan for residential trash carts will be discussed in the fall of 2012.

(e) Routing and vehicle/driver performance monitoring technologies and new vehicle purchases for more automated collection.

Late in 2010, the City of Lawrence purchased GPS (global positioning system) units for Solid Waste Division trucks and in 2011 the central maintenance garage staff installed these units. Benefits of system: A monitoring software program for the GPS units allows staff to track the trucks daily and adjust routes to save time and fuel. It is also used as a training tool for drivers and a supervisory tool for performance management.

Solid Waste Division equipment purchases in 2011 focused on increased automation and increased collection efficiency. Equipment purchased included a fully automated bulk truck and a semi-automated side load truck.

(f) Recycling rate for 2010 calculated.

The City of Lawrence Public Works Department collects and reports data on the generation and disposal of waste in Lawrence to measure the success of waste reduction and recycling programs. Recycling is an important part of integrated solid waste management (ISWM). In the ISWM hierarchy, recycling (including composting) is the preferred waste management option, after source reduction, to reduce potential risks to human health and the environment, divert waste from landfills, conserve energy, and slow the depletion of nonrenewable natural resources.

In 2010, an estimated 88,484 tons of municipal solid waste (MSW) was generated by Lawrence households and businesses. Of this total, an estimated 54,549 tons were landfilled and 33,935 tons recovered (25,229 tons recycled and 8,706 tons composted). Materials recovered for recycling and composting were collected by the City's Solid Waste Division and the private sector. **The 2010 Lawrence MSW recycling rate was thirty-eight (38) percent.**

The City of Lawrence used the United States Environmental Protection Agency's Measuring Recycling: A Guide for State and Local Governments to estimate the 2010 MSW generated and recycled.

(g) Establishment of new glass recycling program.

In December 2011, the City of Lawrence and Ripple Glass signed a contract agreement for the establishment of a glass recycling program in Lawrence.

Four glass recycling drop-off collection bins were placed in the parking lots of: Dillons at 4701 West 6th Street, Hy-Vee at 3504 Clinton Parkway, Hy-Vee at 4000 West 6th Street, and On The Rocks at 1818 Massachusetts Street. In the bright purple glass recycling drop-off bins, residents and businesses may place glass food and beverage containers of any color. All brown, green, blue, and clear glass bottles and jars can be mixed together in the same collection bin. Labels on the glass containers do not have to be removed. Items not accepted for recycling in these collection bins include plate glass (windows), mirrors, Pyrex, CorningWare, ceramics, and dishes.

The City coordinates with Ripple Glass to transport the glass from Lawrence to the Ripple Glass' facility in Kansas City, Missouri. The glass is primarily recycled into fiberglass insulation. Amber colored glass is separated and recycled directly back into new bottle glass for Ripple Glass' partner, Boulevard Brewing Company.

(h) City of Lawrence/Douglas County Household Hazardous Waste Facility renewal of service contract with Clean Harbors Environmental Services.

In 2011, the City of Lawrence renewed the service contract with Clean Harbors Environmental Services issued for collection and disposal for both hazardous and non-hazardous waste accepted from households and qualified Small Quantity Generator businesses at the City of Lawrence/Douglas County Household Hazardous Waste Facility and for on-site/off-site technical assistance provided to City/County staff. The length of the contract period is one year from signature of contract (2010) with a yearly renewal option up to four additional years if agreed by both parties and provided funds are available.

(i) City of Lawrence/Douglas County Household Hazardous Waste Facility begins to accept Conditionally Exempt Small Quantity Generator and Kansas Small Quantity Generator Waste in 2011.

The Kansas hazardous waste regulations were revised in 2011 and the KDHE Bureau of Waste Management in accordance with the regulation revisions implemented a new policy that allows Household Hazardous Waste Facilities to accept conditionally exempt small quantity generator and Kansas small quantity generator waste. The City of Lawrence/Douglas County Household Hazardous Waste Facility is

currently meeting all requirements outlined within this policy and accepting waste from these generators.

(j) Electronic recycling events in Lawrence continue to be hosted.

The City of Lawrence Waste Reduction and Recycling Division continues to host two 4-hour Electronic Recycling Events per year. The participation at these events continues to be impressive even though new electronics recycling services have been implemented at several retail stores in Lawrence (i.e. Best Buy, Office Depot, and UNI Computers). Participant numbers and tons collected to date: Spring 2012 (645 vehicles, 27.57 tons), Fall 2011 (525 vehicles, 19.81 tons), Spring 2011 (638 vehicles, 22.78 tons), Fall 2010 (649 vehicles, 28.98 tons), Spring 2010 (583 vehicles, 28.16 tons), Fall 2009 (747 vehicles, 35.48 tons), Spring 2009 (455 vehicles, 22.87 tons), Fall 2008 (513 vehicles, 26.30 tons), Spring 2008 (676 vehicles, 30.03 tons). These events are not limited to Lawrence residents only.

(k) Increased outreach and education efforts.

In 2011, the City of Lawrence Waste Reduction and Recycling Division continued to increase education of solid waste minimization. Efforts included presentations to school classrooms, neighborhood associations, and other community organizations; informational displays at events including Earth Day and America Recycles Day; and printed material such as the City's newsletter, utility bill inserts, brochures, and paid advertising. Information could also be found on the www.LawrenceRecycles.org website and the city's Lawrence Recycles Facebook page www.facebook.com/LawrenceRecycles.

2. Jefferson County

(a) Jefferson County is seeing an increase in HHW collections. Cities in Jefferson County have been more active in clean-up activities. KDHE permit limits HHW facility to 2200 pounds per site. Phillips is Jefferson County's HHW contractor.

(b) Jefferson County acquired a baler for OCC and paper.

(c) Jefferson County holds one e-waste collection event each year in conjunction with the Rotary Club. They also allow e-waste drop-offs from 8:00-4:30 each workday. No collection amounts were available at the time of the annual review. Electronic wastes are taken to Asset Life Cycle in Topeka.

(d) Jefferson County continues to collect tires. They check in citizens who drop off tires, charge them a disposal fee, and issue them a receipt. Tire Cutters is Jefferson County's tire processor.

(e) Jefferson County still accepts white goods. Freon removal is done by an outside company. Lonnie's Recycling processes the metals.

3. University of Kansas

(a) KU is collecting cooking oil from all campus dining facilities, and processing for biodiesel. Biodiesel is used in tractors by the Facilities Services Department. Mechanics use it for cleaning parts. Any leftover oil is burned in oil burning furnaces.

(b) KU's e-waste program is run by the IT Department. Campus departments are charged \$5/CRT.

(c) "Biodegradable plastic" is being used in campus dining facilities (which lead to a brief discussion by the committee of how biodegradable plastics can be).

(d) KU's office furniture recycling is doing very well.

(e) The committee discussed Iowa State University's food composting facility, and whether such an operation is feasible for KU or Lawrence.

4. Hamm Landfill

(a) Hamm is still operating in the same major cell. The next cell construction will likely be in late 2013.

(b) Landfill inflows are flat. Waste rate per individual has lowered. This is attributed to waste diversion and the economy in the region. Two-thirds of waste volume is from outside the region.

(c) Estimated landfill capacity remains approximately 80 years.

(d) Hamm is making efforts to divert waste from the landfill

1. Recycling asphalt shingles for use in hot mix asphalt. Hamm gives roofers a reduced rate (\$3/ton) for clean asphalt shingles. Otherwise, the rate is \$47/ton
2. Analyzing creating a construction demolition recycling area
3. Analyzing creating a materials recycling facility (MRF) to serve the region.

(e) Hamm is working towards collecting and processing landfill gas. They see a potential power generation of 6 MW to 8 MW.

(f) Hamm received a KDHE permit in September 2011 for a tree & savannah cap system for the landfill. Hamm is developing an approximate 12-acre area, and will eventually develop approximately 500 acres, in savannah, native grasses and trees.

5. Other miscellaneous SWM issues

(a) Among the “Planned Changes/Additions to Solid Waste Management” in the current SWM Plan is creation of rural waste drop-off centers for bulky items. However, the committee discussed that independent carriers, e.g. Sean Ball and Honey Creek, are doing a good job collecting bulky items. Market forces may be taking care of the problem, as metals and copper currently have high value.

(b) Revisiting the partnership between the City of Lawrence and Douglas County for the operations of the City of Lawrence/Douglas County Household Hazardous Waste (HHW) Facility in light of plans to relocate Douglas County Public Works facilities to a new location in far eastern Lawrence. This relocation will likely occur no earlier than 2014.

SWM Plan status

The committee found that the SWM Plan is still valid. No significant updates to the Plan are required at this time.