



SOLID WASTE MANAGEMENT PLAN



SMITHVILLE
missouri

THRIVING AHEAD

2016 Steering Committee

Denise Asgian
Debra Dotson
Kathy French
Kitti Homan
Lee Hunold
Ron Mansfield

The Board of Aldermen and the Mayor of Smithville annually adopt their Strategic Plan. For many years, that plan has included *Strategic Goal 1: Continued citizen engagement in local government*. In order to meet this strategic goal the Mayor and Board requested the creation of a citizen's committee that would review and provide input in the creation of a Solid Waste Management Plan. This plan was required for cities many years ago by the State of Missouri, but no formal plan was ever created or adopted in Smithville. The purpose and timing of this committee's creation related directly to the anticipated completion of a five year contract for hauling services, set to end on December 31, 2016. In preparation of the bidding process, the Mayor established a Solid Waste Management Plan Committee and tasked that committee with creating a plan using the plan purposes identified in State law. Those nine purposes are the focus of this plan, and the intent is to allow the creation of a plan that will reduce municipal solid waste by not less than 40% of the total waste stream.

The reasons behind this waste reduction plan are varied. One aspect relates simply to the cost of creating, operating and maintaining landfills in today's climate. Landfills can take many years and many millions of dollars in not only the permitting process, but the initial construction costs. The permitting process has portions of its regulations designed to protect the environment, including the ground water used for public drinking water. In addition to these cost savings a waste reduction plan can limit the amount of littering in the community, which, in addition to protecting the environment, protects local property values.



If the following plan is implemented, it is this committee's belief that it will allow Smithville citizens to more actively reduce, reuse and recycle various products that will protect the environment, protect our property values and reduce the cost of solid waste disposal in the long term. In order to receive the benefits of reducing solid waste, it is important that the following items be implemented by the Board of Aldermen. In addition, by implementing this Plan, the Board will also help meet its own *Strategic Goal 5: Development of policies that govern activities of the City*. It is the recommendation of this citizen's committee that the Board of Aldermen adopt this Plan as their formal policy for reducing solid waste, and take actions to implement items identified in each of the following nine goals:

Goal 1: Identify all existing solid waste disposal systems (collection system, recycling boxes, etc.) and the location of each.

In order to encourage multiple waste reduction activities, it is important to identify each of the avenues available for residents and business owners to dispose of solid waste. By identifying these available options, the intent of this goal is to first

eliminate illegal disposal of any and all wastes; and, second to afford alternatives to traditional disposal into landfills. The following systems and options are available to residents and visitors:



City provided curbside residential solid waste is required for all residential users inside the City limits. Such services are billed in the comprehensive utility bills for all city utilities. Those required to have such service are required to dispose of

their residential solid waste by placing their trash in secure containers at the curb of their property. In addition, the City currently offers the opportunity for curbside recycling for an additional fee.

In addition to this curbside recycling option, the following locations also provide drop-off facilities for various recycling materials:

1. Multiple Recycling container types are available at several sites:
Smithville School District, 545 S. Commercial, Smithville
Price Chopper, 122 N. US 169 Hwy
Community of Christ Church, 19400 N. 169 Hwy
Metro North Shopping Center 169 Hwy and Barry Rd.
2. Clothing and household goods
Warrior Closet at Smithville Primary School, 600 Maple Ave.
Bridge Street Ministries, First Baptist Church 300 S. Bridge
ARC Thrift Store, 118 N. Bridge St.
*Planet Aid Boxes: Kum & Go, laundromat, Landmark Baptist Church,
Price Chopper, Shamrock Food Mart etc.
3. Glass Recycling
Price Chopper, 122 N. US 169 Hwy
4. Aluminum Cans
Discount Smokes and Liquors, 219 N. US 169, Smithville
5. Yard Waste/Organic materials
Missouri Organic Recycling, 11660 N. Main St., Kansas City
6. Household Hazardous Wastes
KCMO Hazardous Waste Center 4707 Deramus, Kansas City
Annual Drop events occur multiple times each year on a rotating basis in towns across the northland and includes Smithville
7. Building/construction materials, appliances, etc.
Habitat for Humanity Restores

4701 Deramus KCMO
8516 N. Oak Trfwy, KCMO

8. Electronics

As of February 1, 2016, ALL Best Buy store locations

Goal 2: Specify how the plan will achieve a reduction in solid waste placed in sanitary landfills through waste minimization, reduction and recycling;

The committee recognizes that the reduction of wastes and regular recycling is not a top priority for many citizens. It also recognizes that there is a long history of independence and individual choices in our community. Since recycling is fundamentally a cost saving mechanism to reduce the expense of landfills, it is important to place those cost savings in the hands of those citizens who choose to assist in the waste reduction and cost saving activities like recycling. In order to encourage waste reduction and recycling locally, as well as provide incentives for those who do recycle, it is important that curbside recycling be included in the base service provided to all residents. This recycling service should be the standard curbside pick-up but must not have any limits upon the amount of proper recyclables being placed curbside for pickup.

For those citizens who choose not to recycle or who desire to dispose of otherwise recyclable materials with solid waste that will be transported to a landfill, this option should be available. While this should be available for citizens who choose, it should not be included in the regular solid waste curbside service. It is imperative for the curbside service to include a limitation upon the total number of bags or amount of trash that will be included in the curbside base service. While this committee believes this limitation should be two bags (or an equivalent container size) of solid waste for curbside pickup, it recognizes the potential of exceeding this prescribed amount.

For those citizens who are unable or unwilling to reduce their solid waste to this prescribed limit, they should be provided an alternative option to purchase either tags or special bags for additional solid waste to be picked up curbside. It is important that



both the City and its solid waste hauling contractor be consistent in the application of these limits, and create a simple but effective method to put this into operation. It is also important that the cost of the additional bags or tags be priced to encourage recycling and in no event should they be less than \$2.00 per bag.

This two-pronged approach will encourage recycling activities with the financial incentive of not paying for additional bags to be removed from the curb by simply removing recyclable materials from the solid waste and placing them for separate

pickup, with NO limit on the amount of curbside recyclables. In addition to the direct billing system with bag limits, a comprehensive educational program will provide information to make reducing and recycling even more convenient.

Goal 3: Establish a timetable, with specific milestones, for the reduction of solid waste placed in a landfill through waste minimization, reduction and recycling;

The Committee further recognizes that not only does recycling reduce costs over time, but that doing so can most effectively occur with a plan to measure the success of the waste reduction and recycling plan. The ultimate goal of the City should be to meet the standards of state law by reducing the amount of the residential solid waste stream that is disposed in landfills by 40% within the next 5 years. This plan, therefore, recommends the creation of a comprehensive data collection system that not only identifies the amount of solid waste entering landfills from its curbside solid waste collection service, but the amount of additional wastes that are disposed of through recycling efforts. These amounts will show immediately not only the percent of the total waste generated by local residents, but also the percentage of those wastes that are diverted from landfills by recycling.

This data collection system should be the tool to measure the effectiveness of the waste reduction efforts, and be utilized to modify or amend the various programs throughout the next five years. Examples of modifications to the programs include reducing the number of included bags to be picked up curbside as solid waste, increasing the cost of purchasing additional bags for curbside solid waste, and even providing curbside receptacles for both solid waste and recyclables in different sizes that encourage more recycling than solid waste.

The baseline of current waste streams should be identified and quantified prior to January 1, 2017 when the next solid waste disposal contract begins. Based upon that quantification, it will determine the amount of the total percentage of waste reduction necessary to meet the 40% goal. For example, if it is determined that the current waste stream measurements show that 10% of all residential solid waste is



being recycled, then the goal of this plan is to obtain an additional 30% reduction by January 1, 2022. In order to reach the reduction by that date, each year should obtain not less than a 20% reduction in the plan standard. In the earlier example, if the waste goal is an additional 30%, then the total stream reduction would be 16% by 2018, 22% by 2019, 28% by 2020, 34% by 2021, and 40% by 2022.

It is also important to note that these waste reduction goals are minimum standards, based upon current state law. It is also noted that the Missouri Legislature

has been presented new bills that will place the reduction percentage to 75%! It is the intent of this plan that whatever the state standard may become, that the goals herein are intended to meet those standards. If the standards rise during the initial five year period this plan is operational, then these measurement goals should be recalculated based upon an additional five year implementation period and calculated similarly.

Goal 4: Establish an education program to inform the public about responsible waste management practices;

In addition to *Strategic Goal 1: Continued citizen engagement in local government*, the Board of Aldermen has *Strategic Plan Goal 6: Strengthening the City's position with other governments, entities and civic partners*. In order to help meet these goals, this Plan recommends the Board create, in conjunction with the School District, a citizen committee that includes not only regular users of the solid waste systems of the City, but also educators who can provide guidance in creating a comprehensive educational program. The program should not only be used to educate our children, the primary beneficiaries of solid waste reduction, but also our residents and Business owners and managers.

This program should incorporate provisions for regular recycling of cardboard, plastics, glass, etc. as well as household hazardous wastes, compostable wastes, and any other waste stream that is or may become subject to recycling or reuse opportunities. The program should also include specifics that identify which items are recyclable, what must be done in advance of recycling (removing tabs, lids, properly rinsing items, etc.) and otherwise identify what items can spoil a load of recycling materials if not properly handled.



This Education Committee should be created and operational quickly enough to allow this committee to begin work not less than simultaneously with the next vendor in the City's solid waste hauler contract. In addition to this citizen's committee, the Board of Aldermen should incorporate into its bidding documents additional contract provisions for educational services by the successful vendor to further encourage waste reduction, and a provision that the vendor will work with the committee to further the educational goals.

Goal 5: Establish procedures to minimize the introduction of small quantities of hazardous waste, including household hazardous waste, into the solid waste stream;

The most effective method to meet this goal is two-fold: the educational component above, as well as convenient, safe disposal opportunities. The Solid Waste Education Committee should incorporate various components related to household hazardous waste education in its overall program. The current framework utilized by

the City, the annual drop-off events sponsored by MARC in the northland, should be continued. It should also be a point of the City to work with MARC or other providers to have an annual event not just in the northland, but inside the city limits.

Goal 6: Delineate provisions for the separation of household waste and household hazardous waste, and recyclable materials at the source or prior to disposal;

It is the intent of this plan to eventually reach the point that all residents understand what wastes are recyclable, and what wastes are not otherwise allowed in the regular waste stream. In conjunction with the education plan and the expansion of various recycling services, the City should incorporate industry best practices into all future solid waste hauling contracts to clearly identify that removal of HHW and recyclable materials is in fact occurring. The successful bidder for these services should also be given more discretion on how it operates these services, and not be bound by arbitrary contractual provisions that add costs to such reduction and the enforcement of the reduction requirements of this plan.

Goal 7: Delineate provisions for the collection of recyclable materials or collection points for recyclable materials;

It is imperative to continue to reduce future expenses by not only continuing the reduction, reuse and recycling of materials that otherwise would be placed in a landfill. To assist in that endeavor, Smithville should not only continue its curbside recycling program, but expand that offering by including all residential homes. In addition to expanding curbside recycling, the City should create a separate page on its website, and create social media accounts for the purpose of notifying residents of the drop-off



locations available in and near Smithville. Lastly, the City should make it a priority to acquire land and/or prepare such land for the purpose of creating a recycling drop-off center in its next CIP project list. As a part of the recycling center, the City should also include a position in its budget to fund no less than a part-time staffing position at this center, and expand the operational hours, over time, to make such a center operational for not less than 40 hours per week.

Goal 8: Delineate provisions for the collection or disposal of compostable materials;

Removal of compostable materials can make up a significant percentage of solid waste if it is not removed from the waste stream. In addition to keeping it out of the waste stream and filling landfills, it also should be a priority to keep the illegal dumping of such materials which can harm our rivers and streams. The City should incorporate into all bids for solid waste collection in the future, provisions for the collection of compostable materials by subscription. In addition to the subscription service, the educational committee should identify not only proper drop-off locations for yard waste and other compostable matters, but to educate the public on the benefits of using mulching mowers for grass clippings, the proper methods to construct and use composting bins in their yards or gardens. In order to protect our sanitary sewer systems, any recycling center constructed by the City of Smithville should include an area or receptacle for the collection of cooking oils, fats and greases for the potential recycling of those products as well. As additional compostable products are capable of recycling or being removed from waste streams, those additional products or technologies should be considered for inclusion into the City's plans.

Goal 9: Delineate the methods and procedures that the City will implement to reduce, reuse and recycle as much of the waste generated by the operation of the city.

The City of Smithville currently has a program at its main offices for the recycling of all of its paper waste, as well as other recyclable materials generated as a result of its regular operations. In addition to the recycling, the City does, wherever possible, purchase post-consumer recycled papers and products. The purchasing of potentially recyclable materials is also consolidated into one purchasing agent. The purpose of the



sole source purchaser is to insure recycled materials are purchased where available, and to keep product inventory low so that it does not encourage wasteful use of any such products.

In addition to the office recycling efforts, there also should be a continually expanding program to keep and properly recycle or dispose of any and all oils, greases, chemicals or other by-products of their use. Efforts do, and should continue to include the use of mulching mowers where possible for parks and all other public work needs, as well as a concerted effort to not collect mowing clippings or limbs and branches that can be recycled in place, or if collected, disposed of at a composting facility just as residents are requested to do.

CONCLUSION

The Solid Waste Planning committee spent several months, with each member spending several hours of independent research in identifying issues and discovering information that allowed this Solid Waste Management Plan to be created. This work and research has led to some immutable facts: recycling saves money for not only those who recycle, but also for their neighbors; that landfills are exceedingly expensive to permit, construct and operate and these costs will only increase in the future; that landfill tipping fees are the most significant portion of solid waste disposal rates; that reducing solid waste into landfills not only save space in those landfills, but it extends the life of each landfill and help create lifestyle choices that will permanently reduce the amount of solid waste entering landfills.

This plan is designed to meet decades old state law requirements, but also provide a long-term plan for the City of Smithville to implement that will help to hold down rates in the future. The Committee's recommendations in this plan include expanding recycling in several different methods, providing incentives to expand this recycling, and establish a permanent education committee to provide regular educational opportunities on the methods and details of not only How to recycle, but what to recycle. If the Board of Aldermen choose to adopt and follow this plan, it can become an initial tool for preparing the request for proposals or bids from qualified vendors for its solid waste hauling contract. This committee not only recommends that this plan be adopted, but that the Board actively and regularly review this plan when making any decisions that can impact solid waste.

