

**A PROPOSED ORDINANCE ALLOWING FOR COMMUNITY AND
RESIDENTIAL COMPOSTING IN THE CITY OF HARRISBURG**

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I. Introduction

According to the Bureau of Land Recycling & Waste Management, the state of Pennsylvania produces roughly two million tons of leaves and other yard waste per year. This amounts to roughly 18 percent of the state's solid waste stream.¹ Moreover, over 400 municipalities across the State have some form of yard waste collection and composting program.² At its core, composting "is the highest form of recycling and the reuse of resources."³ Essentially, it is the accelerated and controlled version of the natural decay process of organic matter, such as leaves, vegetation and food scraps, into a soil like material called humus.⁴ As this paper argues, the proposed ordinance will provide the City of Harrisburg with an alternative waste management practice that yields significant economic, environmental, and social benefits.

Harrisburg is an Act 101 mandated municipality.⁵ Act 101, the Municipal Waste Planning, Recycling and Waste Reduction Act, requires residents to source separate leaf and yard waste from other recyclables and also requires mandated municipalities to collect said waste as part of their recycling program.⁶ Further, the Act requires mandated municipalities implement a public information and education program detailing any new developments and features of the recycling program.⁷ By amending the City's current recycling code, a composting ordinance not

¹ DEP. Guide to Municipal Yard Waste Composting, 2520-FS-DEP-2553 10/2000.

http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/compost_sum/MSW_Compost_Broch.pdf.

² Document 254-5403-100. January 6, 2009. Department of Environmental Protection, Bureau of Waste Management. Guidelines for Yard Waste Composting Facilities, <http://www.eLibrary.dep.state.pa.us/dsweb/Get/Document-72565/254-5403-100.pdf>.

³ Epstein, Eliot, The Science of Composting, p. xiii.

⁴ DEP Fact Sheet "Yard Waste & Composting."

<http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/facts/ydwaste.htm>

⁵ Act 101 requires recycling in municipalities with populations over 10,000. 53 Pa. Cons. Stat. Ann. §§ 4000.101, §§ 4000.1501-.1513. (West 2014)); in 2013, the City of Harrisburg had an estimated population of 49,188. <http://quickfacts.census.gov/qfd/states/42/4232800.html>.

⁶ *Id.* § 4000.1501(c)(1)(ii).

⁷ *Id.* § 4000.1501(d).

only furthers the goals of Act 101, but it also creates jobs, encourages civic involvement in sustainable practices, and produces a useful, marketable product.

First, this paper will introduce the problem that results from the current waste management system's lack of community and residential composting. Presently, the City lacks the proper framework to allow for a community composting facility or program. However, the current lack of residential and community composting presents ample opportunities for the City of Harrisburg. Specifically, a new composting framework for the City of Harrisburg has the potential to yield substantial economic, social, and environmental benefits. In addition to its well established environmental benefits, composting also allows for significant economic growth. There are significant opportunities to market the end compost product, create jobs, and save money by diverting compostable wet waste from incineration.

Next, this paper will delve into the applicable recycling code governing Harrisburg and explain why the law relating to composting needs be amended. This section will also reference what gives the City of Harrisburg the statutory authority to enact and enforce proposed ordinances. Then, this paper will evaluate the composting programs and ordinances that have been implemented by other municipalities in the Commonwealth and across the United States. The last section of the paper will discuss the major issues that confront the City in adopting the instant ordinance. Specifically, this paper will respond to key policy questions that are likely to arise. Financing and location are two major issues that need to be addressed. Finally, the text of the proposed ordinance can be found in the Appendix section. The proposed ordinance seeks to amend multiple sections of Chapter 9 of the Harrisburg City Code, which pertains to recycling. Because Chapter 9 already covers leaf and yard waste disposal, adding to this section is the most

feasible way for the City of Harrisburg to implement standards for community and backyard composting.

II. Problem Equals Opportunity

Currently, the City of Harrisburg does not operate a leaf and yard waste composting site. Moreover, the City lacks an educational program that teaches and encourages residents to compost in their backyards. Such a program would advise residents to separate yard waste and/or other compostable materials from their regular trash and recyclables, and would also teach residents how to maintain backyard composting piles.⁸ If the City maintains its hands-off approach to composting, it will continue to miss out on a tremendous opportunity for economic, environmental, and social improvement. Only by adopting a new composting ordinance that establishes a municipal composting facility and provides residents with the opportunity to safely maintain their own backyard compost piles, will Harrisburg begin to reap these types of benefits.

For instance, resident G is a Harrisburg resident. Resident G has several large trees that provide shade for his backyard. As a result, resident G accumulates a significant amount of leaf and yard waste in the fall season. Resident G knows that he is supposed to source separate his leaf waste from his trash and recyclables.⁹ He also know the City collects yard waste several months out of the year, but this year he happens to miss the designated dates for leaf and yard waste pickup because he was away on vacation. Without an alternative means to recycle his yard waste, resident G is left with little guidance as to how to get rid of his leaf and yard waste. Resident G considers himself to be environmentally friendly and would prefer to find a place to dispose of his waste without having to look to alternatives such as illegally dumping or burning

⁸ See Lancaster County's online educational website for composting found at http://www.lcswma.org/lcswma_recycling_compost.html and

⁹ §9-309.7 Codified Ordinances of the City of Harrisburg, requiring residents who gather leaves to source-separate.

it.¹⁰ A municipal composting program can solve this and many other problems that are likely to arise in the future if no action is taken. With the proposed leaf and yard waste facility in place, the resident in the aforementioned hypothetical would be provided with several options. First, that resident would be able to drop-off leaf and yard waste at the City composting facility, where it would be composted by City employees. Alternatively, if he were to maintain his own backyard composting pile, he can simply add his leaf and yard waste to the pile and effectively recycle it at home.

Another consequence of the City's current system is that compostable waste, especially food waste, can take up valuable space at waste disposal facilities such as incinerators. Compostable food wastes that can be diverted from incineration include fruit and vegetable scraps, coffee grounds, eggshells and nutshells.¹¹ The DEP has advised that this "massive, seasonal volume of yard wastes can put a strain on municipal garbage collection systems,"¹² and that that the high moisture content of yard waste "retards burning, which reduces the efficiency of waste-to-energy plants," such as incinerators."¹³ Leaf and yard waste amounts to roughly 18 percent of the state's solid waste stream.¹⁴ "Collection can require extra equipment that is not

¹⁰ The City already prohibits the burning of leaf and yard waste without a permit. See §9-309.9 of the Codified Ordinances of the City of Harrisburg, Ord. No. 18-2001.

¹¹ DEP Guide. How to Make Compost, <https://www.dep.state.pa.us/dep/DEPUTATE/AIRWASTE/WM/recycle/FACTS/COMPOST.HTM>

¹² DEP Fact Sheet "Yard Waste & Composting", (<http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/facts/ydwaste.htm>).

¹³ "Large incinerators built to handle peak seasonal rates of yard waste, may be oversized and less efficient at burning wastes the rest of the year."

¹⁴ DEP Guide to Municipal Yard Waste Composting 2520-FS-DEP-2553 10/2000. http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/compost_sum/MSW_Compost_Broch.pdf

needed year-round and can increase personnel expenses.”¹⁵ In the fall season alone, leaf and yard waste can account for as much as 60-80% of the waste stream.¹⁶

Additionally, the proposed composting ordinance can also serve as a nuisance control measure. Individuals who burn leaf and yard waste are contributing to air pollution and may be disrupting their neighbor’s health and well-being. Moreover, burning yard waste is also a fire hazard. The proposed ordinance would help prevent these problems from arising because it will require residents to separate their yard waste and either drop it off at the composting facility or place it on the curbside for collection.

Adopting the proposed composting ordinance will significantly improve the city’s environmental, economic, and social well being. In terms of environmental benefits, the principle point is that “yard wastes are recyclable.”¹⁷ Humus, the product of a successful composting process, can be used in a variety of different ways. It has been shown to decontaminate soil, serve as a landfill cover that can reduce methane emissions,¹⁸ and recently has been used by state departments as an erosion and sediment control mechanism along roadways.¹⁹ In addition, compost can be applied as mulch around trees, plants, and other shrubbery.²⁰ Composting has also been shown to divert both yard and food waste away from incinerators, which in turn

¹⁵ DEP Fact Sheet “Yard Waste & Composting.”

<http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/facts/ydwaste.htm>

¹⁶ Gershman, Brickner & Bratton, Inc., Municipal Yard Waste Composting, Reference Manual, Pennsylvania for Pennsylvania Department of Environmental Resources, Harrisburg, PA, October 1991, p. 1.

¹⁷ <http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/facts/ydwaste.htm>

¹⁸ <http://www.epa.gov/epawaste/nonhaz/municipal/pubs/ghg/f02022.pdf>.

¹⁹ <http://www.epa.gov/epawaste/conserves/composting/highway/highwy2.pdf>, p. 3, “The constituents of the humus act as a soil ‘glue,’ holding soil particles together, making them more resistant to erosion and improving the soil’s ability to hold moisture.” See also, PennDOT Publication 408 Section 400.

<ftp://ftp.dot.state.pa.us/public/PubsForms/Publications/PUB%208/Section800.pdf>.

²⁰ <http://www.portal.state.pa.us/portal/server.pt/community/composting/14063/home/589525>.

reduces greenhouse gas emissions.²¹ Thus, by reducing the amount of waste headed for the incinerator, the City will reduce its overall carbon footprint.

Likewise, the City can also expect to yield significant economic benefits from the successful operation of a compost facility. The need for individuals to operate the compost facility, maintain the compost properly, and transport materials to and from the compost site translates to jobs. Additionally, establishing a drop off program, where residents who either lack the space to compost in their backyard or just prefer not to compost, could significantly cut costs of yard waste collection for the city. Allowing for the composting of food scraps will also reduce the costs associated with burning wet waste in the incinerator. Furthermore, composting can create income by converting leaf, yard, and food waste into a marketable product that can be sold for urban and/or agricultural use in gardens, nurseries, cemeteries, golf courses, and recreational parks.²² Quality compost can be sold. It has value. Moreover, finished compost can replace other soil additives and conditioners that the City may already buy from outside sources. The Environmental Protection Agency recognizes that using “compost can reduce the need for water, fertilizers, and pesticides.”²³ Furthermore, “it serves as a marketable commodity and low-cost alternative to artificial soil amendments,” that the city’s various departments can use for City beautification projects.

As far as social benefits, an ordinance allowing for community and backyard composting would increase community involvement in sustainable practices and can be employed “as a tool

²¹ <http://epa.gov/composting/benefits.htm>

²² http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/compost_sum/MSW_Compost_Broch.pdf; U.S. Environmental Protection Agency, How to Establish Recycling and Composting Programs, <http://www.epa.gov/climatechange/wycd/waste/downloads/recycle.pdf>.

²³ <http://www.epa.gov/composting/benefits.htm>

for civic greening.”²⁴ For example, the proposed ordinance can promote community greening activities for City residents and non-profit groups. For example, the availability of compost would be beneficial to Harrisburg’s Green Urban Initiative (GUI) a group that practices urban gardening and other sustainable practices.²⁵ Non-profits such as GUI, who have successfully maintained vegetable and flower gardens in the city,²⁶ would contribute to the City composting facility by creating compost in the form of garden waste. Additionally, groups such as GUI, and residents in general, would likely benefit from being able to take finished compost from the City’s compost facility and apply it to their urban gardening projects. It is likely that as more local sustainability initiatives begin to crop up, the City may see a considerable increase in the demand for compost.

Lastly, because the location for the proposed Composting facility has yet to be determined, this presents a possible opportunity for the City to help decrease the amount of abandoned properties. Specifically, the construction of a composting facility can help deter urban blight by transforming some of the vacant lots into a community composting facility that is easily accessible to all city residents. The city has found that the existence of a large amount of vacant properties has adversely affected the economic conditions of the City.²⁷ Therefore, the possibility of building a composting facility on several vacant lots would be in accord with the purpose of the City Land Bank, because it will convert some of the abandoned properties into a useful composting facility.

²⁴ Thomas P. Redick, Kimberly Parker Beck, Compost Codes and Coexistence Issues with Urban Agriculture, ABA Agric. Mgmt. Committee Newsl., August 2012, at 7.

²⁵ Green Urban Initiative, <http://www.greenurban.org/gardens-galore/>

²⁶ *Id.*

²⁷ Harrisburg’s Land Bank Ordinance, Bill No.6 of 2014, Section 2-511.3.

IV. Why a New Ordinance is Needed

An amendment to the existing recycling code is necessary because the City has yet to adopt an ordinance specifically requiring or encouraging residential or community composting. Nonetheless, the proposed ordinance would address some of the same concerns and further many of the goals of the City's current recycling code.

Harrisburg's recycling code briefly addresses the processing of leaf and yard waste, but is otherwise silent on composting. Furthermore, the code lacks any provisions regarding other forms of compostable waste, such as food waste. Pursuant to Chapter 9 of the Harrisburg City Code,²⁸ the City is required to collect residential yard waste, such as leaves, trimmings, and grass clippings, along with other designated recyclables through a curbside collection program. According to § 9-309.1, the purpose of these recycling efforts is to "facilitate the implementation and operation of other forms of resource recovery called for by the county plan; conserve natural resources; and reduce the cost of municipal waste disposal generally."²⁹ Additionally, § 9-309.6 assigns the city with the responsibility of establishing a leaf and yard waste recycling facility. Said section states that "the City shall establish a leaf and yard waste recycling facility for the processing of leaves and yard waste, including tree trimmings, brush, garden residue and, if designated, grass clippings, the location and operation of which shall be publicly announced."³⁰ However, nothing in the current ordinance explains what methods will be used in operating such a facility. Thus, one major goal of the proposed ordinance is to specifically require the implementation of a leaf and yard waste composting facility that will be operated by the City in accordance with the appropriate DEP guidelines.

²⁸ §9-309, Recycling. Ord. No. 22-1992.

²⁹ §9-309.7 Codified Ordinances of the City of Harrisburg

³⁰ *Id.* at §9-309.6

Specifically, the proposed ordinance gives the City the authority to establish and enforce a municipal composting program. The ordinance will facilitate the operation a leaf and yard waste composting site where the City and its residents can drop off leaf and yard waste that will then be composted by the City. Additionally, the ordinance will provide requirements and guidelines for residents who want to practice backyard composting. Residents will be required to sweep leaves onto the street that will then be collected by City employees. Additional yard waste such as twigs, brush and vegetation can be placed in bundles or paper bags. Alternatively, the City may provide residents and businesses with durable plastic bins that are better suited for containing a combination of yard waste and food scraps. The ordinance will also ensure that the City's composting facility adheres to the DEP guidelines for municipal composting facilities. It will also require the circulation of public educational materials, in accordance with Act 101, to inform residents of the new law. And for residents who wish to practice backyard composting, the ordinance will contain detailed instructions and enforcement mechanisms regarding ingredients, size, and maintenance of backyard compost sites. Further, because composting will be added to the already existing recycling code, the same enforcement mechanisms can be used to ensure that residents comply with the new composting program.

A. Legal Authority for Ordinance

The city of Harrisburg is a Third-Class city and thus operates under the laws of the Third Class City Code. Additionally, the city government operates under the Optional Third-Class City Charter Law. Specifically, Chapter 83.53 P.S. § 41303 gives the City the authority to adopt and enforce local ordinances.

Furthermore, within the Optional Third-Class City Charter Law, Harrisburg operates under a “mayor-council plan A” form of government.³¹ Specifically, 53 P.S. § 41413 pertains to who has the legal authority to grant or adopt new ordinances. §41413(a) states: “Ordinances adopted by the council shall be submitted to the mayor and he shall, within ten days after receiving any ordinance, either approve the ordinance by affixing his signature thereto, or return it to the council...” Thus, ordinances need to first be approved by council before the mayor can approve or deny it. Section 41412 gives the mayor the responsibility to enforce any ordinance adopted by the city.³² Section 41407 gives the city council its legislative power, “the legislative power of the city shall be exercised by the city council, except as may be otherwise provided by general law.”³³

In addition, Act 101 grants municipalities, other than counties, with the power “to adopt resolutions, ordinances, regulations and standards for the recycling, transportation, storage and collection of municipal wastes or source-separated recyclable materials.”³⁴ The Act also gives the City the authority to “require by ordinance that all municipal waste generated within its jurisdiction shall be disposed of or processed at a designated permitted facility.” Accordingly, this provides the City with the authority to require that all waste that is capable of being composted, unless a resident is composting such waste at home, be processed at the designated composting facility.

C. DEP Regulations for Municipal Composting Facilities

Municipalities seeking to establish a composting facility need to comply with the applicable DEP guidelines. Specifically, before any operation begins, municipal composting

³¹ 53 P.S. § 4140 (West).

³² 53 P.S. § 41412 (West).

³³ 53 P.S. § 41407 (West).

³⁴ 53 P.S. § 4000.304 (West).

facilities need approval, in the form of a DEP permit. The DEP has published fairly extensive guidelines for each type of permit.³⁵ Among the topics covered in the permit guidelines are operational requirements, residue disposal, nuisance control, emergency response, air resources protection, and water quality protection.³⁶ Whether or not the City needs to apply for a permit depends on the size, in acres, of the composting facility. A 2010 census report estimated that land area in Harrisburg is approximately 8 square miles in size, with roughly 283 people per square mile.³⁷ If the composting facility is less than 5 acres, the facility is exempt from solid waste permitting requirements.³⁸ The applicable permit for a facility of this size is a permit-by-rule application, found at 25 Pa. Code Section 271.103 (h).³⁹ If it is greater than 5 acres but less than 15 acres, the applicable permit is a municipal waste general permit, GENERAL PERMIT WMGM030 (DEP). Additionally, Composting facilities larger than 15 acres, or not choosing to apply for a municipal waste general permit, must obtain a municipal solid waste permit from the state and comply with the Pennsylvania Code, Chapter 281.⁴⁰

V. How Composting has been Addressed in Other Jurisdictions

In order to evaluate the effectiveness of a composting program, various metrics have been employed by Pennsylvania municipalities. It should first be noted that most municipalities have utilized the DEP's technical assistance program to gather data and evaluate the success of their

³⁵ Document 254-5403-100. January 6, 2009. DEP Guidelines for Yard Waste Composting Facilities.

³⁶ *Id.*

³⁷ <http://quickfacts.census.gov/qfd/states/42/4232800.html>; To help visualize an acre, "one acre is 90.75 percent of a 100 yards long by 53.33 yards wide American football field (without the end zones)." "The full field, including the end zones, covers approximately 1.32 acres." <http://en.wikipedia.org/wiki/Acre>.

³⁸ Document 254-5403-100. January 6, 2009. DEP Guidelines for Yard Waste Composting Facilities.

³⁹ *Id.*

⁴⁰ MID-ATLANTIC STATES' COMPOSTING REGULATIONS

http://www.epa.gov/reg3wcmd/composting/sec_VI_mid_atlantic_composting_regulations.pdf

recycling and composting programs.⁴¹ Thus, it would be very beneficial for Harrisburg to take advantage of this program as the City undertakes to update and expand its recycling and composting ordinances. For example, a technical assistance report prepared for the City of Philadelphia evaluated the economic, environmental, and social impact of the City's composting facility. The report estimated that the City would have to pay over \$100,000 per year to transport and process leaves at an outside facility.⁴² Highlighting the need for a compost facility within its boundaries, the report also noted that transporting leaf and yard waste 20 miles to an outside facility would have significant adverse environmental impacts. Additionally, because the compost facility is located at one of the City's public parks, it avoids the difficulty in routing and scheduling for the transportation of leaf and yard waste to outside facilities.⁴³ As far as social benefits, the various entities that benefit from the Philadelphia compost program include the general public, community gardens, civic associations, and city departments.⁴⁴

Additionally, many of Harrisburg's neighboring counties have taken significant steps towards having a community that regularly composts. Twelve municipalities in Cumberland County operate yard waste composting sites that allow for the drop-off of leaves and brush, and the pickup of mulch and compost by residents.⁴⁵ While most of the municipalities offer free compost and mulch to residents, only one out of the twelve municipalities in the county offers the compost and mulch for sale.⁴⁶ Among those twelve municipalities is The Borough of Camp Hill. The Borough's Department of Public Works has maintained a community compost site

⁴¹ Information on how to apply for the DEP's free composting technical assistance can be found at: http://www.portal.state.pa.us/portal/server.pt/community/composting/14063/technical_assistance/589528

⁴² SWANA Recycling Technical Assistance Report for the City of Philadelphia, p. 1.

⁴³ *Id.* at 11.

⁴⁴ *Id.*

⁴⁵ Municipal Yard Waste Processing Sites, <http://www.ccpa.net/DocumentCenter/Home/View/3152>

⁴⁶ *Id.*

since 1996 and residents are allowed to pick up leaf compost and wood chips on site.⁴⁷ The compost site is only staffed during periods when yard waste grinding or compost maintenance is needed.⁴⁸ The compost facility also processes truckloads of leaves collected at the curbside from Camp Hill, Shiremanstown and Wormleysburg Boroughs.⁴⁹

In addition, several municipalities in other states have focused mainly on cost-effectiveness to measure of their success. For example, in Watervliet, Albany County, New York, the city completed a six-month pilot study where they collected source-separated organics from 50 residences.⁵⁰ The city collects food waste and subsequently composts it. The city approximated that if 75% of the residents participated in its compost program, it would save \$28,000.00 per year.⁵¹ Moreover, some municipalities only have the financial resources to collect compostable waste on a seasonal basis, such as leaves in the fall and brush in the spring. For example, the city of Waitsburg, Washington designates several dates in the spring and fall as free chipping events. These events are said to help “remove organic material from the municipal solid waste stream, offer an alternative to outdoor burning, and provide a source of wood chips for landscaping use.”⁵² Also using cost-effectiveness as its principle metric, a municipality in the Hudson Valley Region of New York pays half as much in collection and delivery fees to the county composting facility as they do for traditional waste disposal.⁵³ Based on the foregoing, it is clear that municipalities that compost properly have not only improved their economy, but

⁴⁷ SWANA Recycling Technical Assistance Study for the Camp Hill Borough Compost Facility, p. 4.

⁴⁸ *Id.* at 5.

⁴⁹ *Id.* at 6

⁵⁰ The Journal for Municipal Solid Waste Professionals. *Organics: Reduce, Redirect, Recycle*. Lori Lovely. July 9, 2014, p.3.

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.* at 4.

have also increased community involvement in more sustainable practices while reducing their carbon footprint at the same time.

VI. Key Policy Issues

The implementation of a municipal composting program presents some obvious issues, including but not limited to, cost, location, and incentives. The first glaring issue that must be addressed is cost. How much money will it cost to start a composting program? The cost of a community composting program depends on a multitude of factors, including “the technology utilized, the amount of material composted by the facility, and the number and wages of employees.”⁵⁴ Additionally, the amount of money needed depends on whether or not the City creates its own composting facility within the city boundaries. One alternative to having a City run composting site is to coordinate with a neighboring municipality or a county run composting facility and form an agreement that would allow for the drop off of City compostable waste onto their site, where they then compost and do what they want with the end product. The Borough of Camp Hill seems to benefit from such an agreement.⁵⁵

One way to resolve the issue of limited financial resources is for the City to apply for a DEP Act 101 grant. The first step would be to prepare a Section 901, 902, or 903 grant application. Under Section 901 grants, 80% reimbursement is available for preparation of waste management plans required by Act 101.⁵⁶ Alternatively, Section 902 grants reimburse counties and municipalities for up to 90% of eligible recycling program development and implementation expenses such as the necessary equipment needed to maintain a compost facility.⁵⁷ In 2014, over

⁵⁴ *Waste Prevention, Recycling, and Composting Options: Lessons from 30 U.S. Communities. Ch. 8 The Costs of Recycling and Composting*, Pg. 137

⁵⁵ SWANA recycling technical assistance study for the Camp Hill Borough Compost Facility, p. 6.

⁵⁶ 53 P.S. § 4000.901 (West).

⁵⁷ 53 P.S. § 4000.902 (West).

\$15 million in Section 902 grants were awarded to 104 municipalities within the Commonwealth.⁵⁸

Another issue that arises with regard to implementation is the location of the proposed composting facility. One solution is to transform one of the abandoned lots owned by the City into a leaf and yard waste composting facility. Pursuant to the legislative findings in § 2-511.3 of Bill No. 6 of 2014, the Land Bank Ordinance, tax-delinquent, abandoned properties “continuously impose significant costs on neighborhoods and communities throughout the City, by lowering property values, increasing fire and police protection costs, undermining public health and sanitation efforts, decreasing tax revenues and undermining community cohesion.”⁵⁹ This would transform an otherwise useless plot of land or block of abandoned properties into a composting facility that is accessible to all residents and employees of the City.

⁵⁸ <http://www.pabulletin.com/secure/data/vol44/44-20/1045.html>

⁵⁹ Harrisburg’s Land Bank ordinance, Bill No.6 of 2014, Section 2-511.3.

VII. Conclusion

Based on the foregoing, it is clear that an ordinance allowing for residential and community composting will provide a City like Harrisburg with significant economic, environmental, and social benefits. Because the City currently lacks the authoritative framework to implement and enforce a composting program, the opportunities that the proposed ordinance would create are readily observable. With a framework in place, there exists significant opportunities to market and sell a useful product, create jobs, and save money by diverting compostable waste from incineration. As long as the City can acquire the proper funding, composting should become an integral part of an updated waste management system. A composting ordinance can help Harrisburg create and maintain healthy environment for current and future generations, and will help the City move closer to becoming a statewide model for sustainability.

Appendix A:

BILL NO. _____ of 2014

Moved by: _____

An ordinance amending Chapter 9, Sections 301, 303, and 309 of the Codified Ordinances of the City of Harrisburg by creating the Harrisburg Composting Facility, as authorized by and consistent with the act of July 28, 1988 (P.L.556, No. 101), known as the Municipal Waste Planning, Recycling and Waste Reduction Act.

WHEREAS, the City finds that the reduction of the amount of solid waste and conservation of recyclable materials is an important public concern and is necessary to fulfill the requirements of the act of July 28, 1988 (P.L.556, No. 101), the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, and the county plan⁶⁰; and

WHEREAS, The Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, Act 101 encourages municipalities to establish leaf and yard waste composting programs⁶¹; and

WHEREAS, the establishment of a leaf and yard waste facility by the City for the processing of leaf and yard waste is already required by § 9-309.7 of the Harrisburg City Code; and⁶²

WHEREAS, encouraging residents to maintain private composting operations would divert waste from incinerators and reduce the costs of disposing such waste; and

⁶⁰ Section 9-309.1, Codified Ordinances of the City of Harrisburg.

⁶¹ <http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/coordinators/References/leaf.htm>

⁶² Section 9-309.6 of the Codified Ordinances of the City of Harrisburg states, “the City shall establish a leaf and yard waste recycling facility for the processing of leaves and yard waste...”

WHEREAS, this Ordinance requires diversion of compostable materials from incineration for beneficial use as a deterrent to unsafe and wasteful practices. In this way, the City will create and maintain a healthy, viable environment for current and future generations, and will become a model for sustainability.⁶³

WHEREAS, the City wishes to promote responsible composting as a means of diverting waste from incinerators and creating nutritive soil amendments.⁶⁴

WHEREAS, the City of Harrisburg wishes to facilitate and promote environmentally sustainable and progressive practices; and⁶⁵

WHEREAS, composting appropriate materials is a safe, efficient and ecologically advantageous alternative to the practice of disposing of all such materials in incinerators; and⁶⁶

WHEREAS, the following amendments to Chapter 9, Part 3 of the City's Codified are enacted for the aforementioned purposes.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF HARRISBURG, AND IT IS HEREBY ENACTED BY AUTHORITY OF THE SAME, as follows:

Additions indicated by underscoring, deletions indicated by [bracketing].

SECTION 1.

The definition of "leaf and yard waste facility" in Section 9-301.2 of the Codified Ordinances of the City of Harrisburg is hereby amended and the chapter is amended by adding definitions as follows:

⁶³ Id.

⁶⁴ 1B Matthews Municipal Ordinances § 36A: 83.10 (2d ed.)

⁶⁵ Bill No. 6217, Ordinance No. 6102 Clayton, Missouri

⁶⁶ Id.

“Compost.” The humus-like product of the process of composting organic waste, which may be used as a soil conditioner, erosion deterrent, or other recognized use.⁶⁷

“Compostable.” Material that can be broken down into, or otherwise become part of, compost in a safe and timely manner as accepted in Harrisburg’s compost and recyclables collection program.⁶⁸

“Composting.” A controlled biological treatment process by which microorganisms decompose the organic fraction of waste, producing compost.⁶⁹

“Composting material.” Waste undergoing composting.⁷⁰

“Composting operation.” All composting activities conducted on a site, including composting material, stored leaf and yard waste, and end product compost located on an site at any one time.⁷¹

“Food waste.” The source-separated organic portion of the waste resulting from the handling processing preparation cooking and consumption of food and the wastes from the handling processing storage and sale of produce.⁷²

“In-vessel.” Composting which is conducted entirely within a fully enclosed container, with no opening having a dimension greater than ¼ inch in any direction.⁷³

“Leaf and yard waste.” Grass, shrubbery cuttings, leaves, tree limbs, and other materials accumulated as a result of the care of lawns, shrubbery, vines and trees, and includes any discarded fruits, vegetables, and other vegetative material generated in the care of a garden.⁷⁴

⁶⁷ 1B Matthews Municipal Ordinances § 36A:83.10 (2d ed.); <http://epa.gov/composting/benefits.htm>

⁶⁸ 1B Matthews Municipal Ordinances § 36A:83.10 (2d ed.)

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Id.*

⁷³ 1B Matthews Municipal Ordinances § 36A:83.10 (2d ed.)

“Leaf and yard waste composting facility.” A dropoff point and/or facility designated by the Director DPW [where leaves, tree trimmings, brush and garden residue, and, if designated, grass clippings, can be delivered to the City for processing] that is in compliance with the applicable DEP guidelines and is used to compost leaf and yard waste and, if designated, food waste. The term includes land affected during the lifetime of the operation, including areas where composting actually occurs, support facilities, borrow areas, offices, equipment sheds, air and water pollution control and treatment systems, access roads, associated on-site or contiguous collection and transportation activities, and other activities in which the natural surface has been disturbed as a result of or incidental to operation of the facility.⁷⁵

SECTION 2.

Section 9-303.3 of the Codified Ordinances of the City of Harrisburg Entitled “Precollection procedures” is hereby amended by adding a subsection as follows:

(F) Compostable materials shall be placed in a designated compost bag, bundle, or container, in accordance with this chapter.

SECTION 3.

Section 9-309.2 of the Codified Ordinances of the City of Harrisburg Entitled “Responsible Agent” is hereby by adding a subsection as follows:

(7) Provide public information and educational material in the form of a website, newsletter, public notice or other medium to inform residents of the composting programs features and to

⁷⁴ *Id.*

⁷⁵ 25 Pa. Code Section 271.1; Document 254-5403-100. January 6, 2009. DEP Guidelines for Yard Waste Composting Facilities, p. i.

provide residents who wish to practice backyard composting with the proper instructions and guidelines.⁷⁶

SECTION 4.

Section 9-303.4 of the Codified Ordinances of the City of Harrisburg Entitled “Municipal waste containers” is hereby amended as follows:

Municipal waste containers shall be made of metal, heavy-duty plastic or other material approved by the DPW, equipped with suitable handles and tight-fitting covers, securely fastened and watertight, and of a size and weight which can be handled conveniently by one person; provided, however, [that leaf and yard waste, not tree trimmings] that any remaining leaf, yard, or other compostable waste that does not fit in the designated compost bin, and not tree trimmings, may be placed in heavy-duty plastic bags for collection, and municipal waste may be placed in heavy-duty plastic bags prior to such waste being placed in approved containers.

SECTION 5.

Section 9-309.3 of the Codified Ordinances of the City of Harrisburg entitled “Establishment of curbside program” is hereby amended as follows:

The Director DPW shall designate a schedule and plan for curbside collection of recyclable materials, including compostable materials.

SECTION 6.

Section 9-309.6 of the Codified Ordinances of the City of Harrisburg Entitled “Preparation of designated recyclables” is hereby amended by adding a subsection as follows:

⁷⁶ Pursuant to 25 Pa. Code § 272.423, municipalities are required to establish “a comprehensive and sustained public information and education program concerning recycling program features and requirements.” 25 Pa. Code § 272.423(a).

E. Leaf and yard waste, and other compostable waste, shall be placed in the designated composting container, paper bag, or bundle, as provided by the DPW.

SECTION 7.

Section 9-309.7 of the Codified Ordinances of the City of Harrisburg Entitled “Leaf and yard waste facility” is hereby amended by adding subsections as follows:

A. The City shall establish a leaf and yard waste recycling facility for the processing and composting of leaf and yard waste, including tree trimmings, brush, garden residue, food waste, and, if designated, grass clippings, the location and operation of which shall be publicly announced.

B. The City shall allow for the drop-off of designated compostable materials at the Leaf and yard waste composting facility by City residents, the hours and operation of which shall be publicly announced. The appropriate authority shall choose a location for the Leaf and yard waste composting facility within 90 days of the effective date of this code.

The City shall operate the Leaf and yard waste composting facility in accordance with DEP guidelines, permits, and requirements.

SECTION 8.

Section 9-309.9(C)(4) of the Codified Ordinances of the City of Harrisburg is hereby amended as follows:

C. Designated recyclables for the mandatory commercial, municipal and institutional recycling program shall consist of the following materials:

(4) Leaf waste, yard waste, landscape waste, and other compostable waste.

SECTION 9.

Section 9-309 of the Codified Ordinances of the City of Harrisburg entitled “Recycling” is hereby amended by adding a section 9-309.15 entitled “Backyard Composting,” requiring compliance with the requirements stated here as well as other requirements set forth by the DPW:

A. All compost piles shall be maintained using approved composting procedures to comply with the following requirements⁷⁷:

(1) Compost piles shall be maintained so as to prevent the harborage of rodents and pests. The presence of rodents in or near a compost pile shall be cause for the City to issue a complaint.⁷⁸

(2) All compost piles shall be maintained so as to prevent unpleasant, rotten egg-like, putrefactive, sweet, sour or pungent odors.⁷⁹

(3) Unless written permission has been granted by the adjoining property owner, no compost pile shall be located less than 3 feet from the rear or side property line or within 20 feet of any home, patio, pool or similar structure on the adjacent property. All compost piles shall be at least three 3 feet behind the front building setback line.⁸⁰

(4) No compost pile shall be located where it will impede the natural free flow of storm water drainage.⁸¹

⁷⁷ Bill No. 6217, Ordinance No. 6102 Clayton, Missouri. Section 235.320. (The City of Clayton, Missouri adopted Ordinance No. 6102 on April 13, 2010. This ordinance was passed in an effort to update the City’s regulations for backyard composting operations.)

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

(5) Any vegetables, fruit and their remains, egg shells, fruit peels and rinds and hair must be composted in such a way that these materials are buried in the center of the pile at all times and so that none of these materials are exposed or visible.⁸²

B.

(1) A compost pile may not contain any of the following:

- (a) Animal carcasses, fish, fowl, meat or other animal products;
- (b) Manure;
- (c) Used litter box remains;
- (d) Milk, cheese, sour cream or other dairy products;
- (e) Lard, oils, or oil-based foods;
- (f) Mayonnaise;
- (g) Salad dressing;
- (h) Whole grains (rice, wheat, barley, etc.);
- (i) Items not normally composted; and
- (j) Items not biodegradable.⁸³

(2) A composting pile may contain any of the following:

- (a) Yard waste, including leaves, sod, and grass clippings;
- (b) Untreated wood, wood chips, and sawdust;
- (c) Paper;
- (d) Straw;
- (e) Vegetables, fruits and their remains, including peels and rinds;
- (f) Empty egg shells;

⁸² *Id.*

⁸³ *Id.*

- (g) Coffee grounds and tea leaves;
- (h) Evergreen needles;
- (i) Hair;
- (j) Drier lint;
- (k) Vacuum cleaner dust;
- (l) Organic garden waste; and
- (m) Commercial compost additives.⁸⁴

C. Compost piles established in accordance with this section are for private use only. There may not be commercial provision of material to be composted or commercial use of the product of composting.⁸⁵

SECTION 10. DELEGATION

The Director of the DPW is authorized and directed to take such actions as are necessary to effectuate this ordinance.⁸⁶

SECTION 11. SEVERABILITY

If any provision, sentence, clause, section or part of this ordinance or the application thereof to any person or circumstance is for any reason found to be unconstitutional, illegal or invalid by a court of competent jurisdiction, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provision, sentences, clauses, section or parts of these ordinances. It is hereby declared as the intent of the Council of the City of Harrisburg that these ordinances

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ Harrisburg's Residency Repealed Ordinance, Section 3.

would have been adopted had such unconstitutional, illegal or invalid provision, sentence, clause, section or part not been included herein.⁸⁷

SECTION 12. REPEALER

All ordinances or parts of ordinances in conflict herewith be and the same are hereby repealed.⁸⁸

SECTION 13. EFFECTIVE DATE

This ordinance shall take effect in accordance with the law.⁸⁹

Seconded by: _____

⁸⁷ Harrisburg's Land Bank Ordinance, Bill No.6 of 2014, Section 3.

⁸⁸ Harrisburg's Residency Repealed Ordinance, Section 3.

⁸⁹ *Id.*