

**Recycling Technical Assistance
Project # 517
Buffalo Township, Butler County, PA
Buffalo Township Composting**

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Prepared by:



Pittsburgh Office
64 S. 14th Street
Pittsburgh, PA 15203
www.prc.org
412-488-7490

Problem Statement

Buffalo Township received official notification of its status as a mandated municipality on April 5, 2012. Among the requirements of all mandated municipalities (PA Act 101) is the diversion of residential and commercial leaves and yard waste. The Township applied for and received Recycling Technical Assistance (RTA) for the Pennsylvania Resources Council (PRC) to summarize Act 101 requirements for yard waste, research options for yard waste diversion, and provide detailed recommendations moving forward.

Findings

Requirements of Act 101 and Deadline for Compliance

PA Act 101, enacted in 1988, Section 1501 (municipal implementation of recycling programs) states that “each municipality other than a county that has a population of more than 5,000 people... and which has a population density of more than 300 people per square mile, shall establish and implement a source-separation and collection program for recyclable materials in accordance with this section.”

Among the minimum required elements of this source-separation and collection program is Section 1501(c) 1 (ii): “Persons to separate leaf waste from other municipal waste generated at their homes, apartments and other residential establishments until collection unless those persons have otherwise provided for the composting of leaf waste.”

Appendix 1 lists the Act 101 requirements for leaf waste collection by mandated municipalities. These are:

- Require by ordinance that leaves, garden residues, shrubbery and tree trimmings are targeted for collection from residences and commercial, municipal and institutional establishments; and
 - Establish a scheduled day, at least once per month, when leaf waste is collected from residences; or
 - Establish a scheduled day, not less than twice per year and preferably in the spring and fall, when leaf waste is collected from residences, and facilitate a drop-off location or other collection alternative approved by the Pennsylvania Department of Environmental Protection (DEP) that allows persons in the municipality to deposit leaf waste for the purposes of composting or mulching at least once per month. The leaf waste drop-off location may be located in a neighboring municipality or at a private sector establishment provided that an agreement is in place to utilize that location and the municipality keeps residents and commercial, municipal and institutional establishments informed of the option at least once every six months.
- Ensure that commercial, institutional and municipal establishments generating leaf waste have collection service.

DEP gave the Township official notification of its new mandated status on April 5, 2012. Ordinarily, the Township would have one calendar year to bring its program into full compliance, i.e. April 5, 2013. “However,” wrote Guy McUmbert, of DEP, Northwest Regional Office, in an e-mail dated September 4, 2012, “the Department recognizes that this notification did not allow the township to do proper planning in anticipation of the June 2012 recycling equipment grants (section 902) round. In anticipation of another Section 902 round in 2013, the Department will therefore not

expect full Act 101 compliance until April 5, 2014. Regarding leaf collection, this will mean that a comprehensive program should be implemented by fall 2014.”

Burning, Trash or Composting?

At the initial meeting, one of the Board of Supervisors voiced the concern that there would be strong and vocal opposition to a prohibition on backyard burning. Backyard burning of leaves and other yard waste has been a part of life in Western Pennsylvania for a very long time. A great many households continue this tradition; many may say they gain real enjoyment from the practice, as well as appreciate how it may be more convenient than raking the material to the curb and perhaps stuffing it into bags.

Although it may have been an accepted practice, backyard burning is recognized to have serious health and environmental consequences. According to the US-EPA, backyard burning releases a range of toxic compounds into the air: nitrogen oxides; volatile organic compounds; carbon monoxide, particulate matter and dioxins. Together, these chemicals contribute to acid rain, smog, haze and ozone depletion; soil our homes and cars; increase the risk of heart disease, aggravate respiratory ailments such as asthma and emphysema, and cause rashes, nausea, or headaches. Dioxins in particular settle on crops and in our waterways where they eventually wind up in our food, with adverse effects upon reproduction and development, suppression of the immune system, disruption of hormonal systems, and cancer. (See <http://www.epa.gov/osw/nonhaz/municipal/backyard/health.htm> and <http://www.epa.gov/osw/nonhaz/municipal/backyard/env.htm>).

Placing yard waste in trash destined for landfills is not as destructive to health and the environment as backyard burning. However, not all local landfills are currently equipped to capture all methane, and yard waste in landfills produces significant amounts of this methane. Just as important, burning or landfilling yard waste both discard as worthless a valuable resource. Compost, which can be made from both leaves and other yard waste, is arguably the single most important material input in good farming, gardening, arboriculture and landscaping: improving soil and plant health and productivity, especially during wet or dry periods; and reducing expenses of irrigation, fertilizers and biocides.

While there is currently no statewide ban on backyard burning of yard waste, DEP requires such a ban by and in mandated municipalities.

Updating the Ordinance, Website and Mailings

Currently, the Township’s ordinances do not prohibit either the placement of yard waste in the trash or its burning. Appendix 2 contains effective passages regarding yard waste from ordinances and websites of mandated municipalities in the region.

The most recent Brighton Township ordinance (July 2012) addresses backyard burning in two paragraphs (both under 82-2B Prohibited Activities). In the first paragraph (D), it lists specifically prohibited materials. In the second, it addresses yard waste in particular in the following way (E): “The burning of dry grass and garden waste is specifically prohibited on all lots of ten (10) acres or less. The burning of leaves is prohibited, regardless of the size of the property.”

Millcreek and Fairview Townships (Erie County) make the connection between recycling and prohibited burning very clear on their websites: “Our hauler picks up 99% of all household waste, recycling, leaf and yard waste. The Millfair Compost and Recycling Center is open 6 days a week April 1st through the second week in December for all of your leaf waste (leaves, garden residue, shrubbery, tree trimmings and similar material, but NOT GRASS clippings). Therefore, there is no need to burn anything. Pennsylvania Law (Act 101) and Millcreek Ordinance (Nos, 2000-1 and 2000-14), available online, states it is illegal to burn ANYTHING that is able to be recycled or composted.”

Suggestions for Updating Township Ordinance #90 (Regulation of Yard Waste)

- Change definition to match DEP’s definition: include garden residue, shrubbery and tree trimmings and exclude grass clippings.
- Add provision that prohibits placing yard waste in trash
- Add provision that prohibits burning of yard waste
- Add provision summarizing acceptable options for yard waste:
 - Backyard composting
 - Convenient drop-off location(s), provided by the Township, regularly hauled to a composting site.
 - Curbside collections during autumn and spring, provided by the Township, a neighboring municipality or a commercial hauler, hauled to a composting site.

Suggestions for Updating Township Ordinance #30 (Burning)

- Add DEP definition of yard waste
- Add provision that prohibits burning of yard waste

Options for Yard Waste Collection

As noted previously, the minimum DEP requirements for a mandated municipality yard waste program are:

- Establish a scheduled day, at least once per month, when leaf waste is collected from residences; or
- Establish a scheduled day, not less than twice per year and preferably in the spring and fall, when leaf waste is collected from residences, and facilitate a drop-off location or other collection alternative approved by DEP that allows persons in the municipality to deposit leaf waste for the purposes of composting or mulching at least once per month.

Most municipalities have selected the latter option, i.e. a drop-off location open at least one day each month and curbside collections at least once in the fall and once in the spring.

The leaf waste drop-off location may be located in a neighboring municipality or at a private sector establishment provided that an agreement is in place to utilize that location and the municipality keeps residents and commercial, municipal and institutional establishments informed of the option at least once every six months.

Arrangements and Experiences of Other Municipalities in Butler County

Butler Township: The Township has been collecting residential leaves for approximately 20 years, most of the time using the services of a commercial hauler. Their current contract is with Vogel

based in Mars, PA. The current monthly fee of \$17.19 per household (billed every 3 months) includes unlimited weekly curbside waste and biweekly recycling collection as well as curbside yard waste collection four weeks in the fall and two weeks in the spring. The weeks of curbside yard waste collection, serviced by a separate truck, were selected by Vogel, but appear to cover the periods of greatest need: between late October and mid-November, and between late March and early April.

Vogel requires leaves be loaded in biodegradable bags and placed on the curb. The Township purchases 39 gallon compostable bags from The Dano Group in Stamford, CT <http://www.danoinc.com/> (The Dano Group offers the least expensive bag that is sufficiently sturdy). Bags cost 39 cents each. Until this year, the Township was subsidizing the bags, offering bags to residents at 25 cents each. This year the Township raised the price to cost, selling the bags at the Township office as well as on a special Saturday in early autumn. Vogel also accepts comparable biodegradable bags available from any of the big box stores. However, some residents continue to place leaves in plastic garbage bags. The hauler does not pick these bags up causing some residents complain, etc. Education is still required.

About seven years ago, the Township considered instituting a burning ban. Residents packed the room at a public meeting, according to the Township ‘everyone was up in arms’. Elected officials decided to not pursue a burning ban. The Township continues to permit the burning of leaves. Because of this, they have not received any DEP 904 Performance Grant income for the past four years (the Township also does not currently provide a monthly drop-off location).

Harrison Township (Natrona and Natrona Heights): The Public Works crew collects residential yard waste from curbside every two weeks throughout the year, on the same day as Morrow Refuse, Inc. collects trash and recyclables. The company requires material to be placed in brown paper bags; that are sold, at cost, at the Township building, but accepts any composting bag of similar type. Material is hauled to their composting site in Harrison Hills Park. A large tub grinder handles bags and screens it to a sand-like structure. The finished product is made available to all residents free of charge. PRC asked the Public Works Director (Randy Martinka) if they would consider either hauling residential yard waste routes in Buffalo Township and/or accepting and composting this material, if delivered, with potential monetary compensation, as well as potential DEP grants from this collaboration. Mr. Martinka spoke with one of their Supervisors and indicated that they were not interested at this point. Apparently, they already accept material from at least one other municipality (several others in the past) and their total Public Works staff of eight cannot handle the proper management of additional material.

Cranberry Township’s contract with Waste Management is the most inclusive in the region. Each household can obtain three different color coded containers. One of these, green, is a 96 gallon tote within which residents can place all materials considered ‘yard waste’ by DEP as well as grass clippings, which are not included in the DEP definition. Residents can also place this material in Kraft bags. The current pricing for the whole bundle of services—waste, recycling and yard waste, all weekly throughout the year— is just over \$16 per month per household. The Township sends out bills to households, together with water and sewer. Residents pay the Township, which in turn pays Waste Management. This fee includes administrative costs of the Township as well purchases of all of the totes.

Options for Buffalo Township

Currently, households in Buffalo Township subscribe independently to any of four commercial haulers for the collection of their solid waste and recyclables: Waste Management, Vogel, Morrow and Adamik. None of these offer leaf/yard waste collections as part of these independent household subscriptions. This means that assuring curbside collection of yard waste requires the Township do one of three things.

- a) Put out a request for bids for a Township-wide contract for residential yard waste collection to commercial haulers, as well as servicing a drop-off container as needed. A key question for the collection route (which again can be as few as one in the autumn and one in the spring) is whether any of these haulers would enter into such a contract without it being part of a municipal-wide contract for residential waste and recycling (see further discussion in RTA #519).
- b) Provide curbside yard waste collection services directly. While the Township does not own a truck that could perform these collections, it can apply for DEP 902 funding (e.g. in June 2013) to purchase such a truck for this use, apply for such funding with a neighboring municipality, or arrange to use a truck of a neighboring municipality for certain prescribed days per year. In discussions, Supervisors have made it clear that they prefer the option that requires least in the way of Township labor and expense, suggesting they would rather avoid this option. The Township has a full-time Public Works staff of only four. However, again bear in mind that curbside yard waste hauling could be as infrequent as two days per year. In this option, the Township would have to make arrangements with another municipality for the composting of the material.
- c) Make arrangements with a nearby municipality that does their own yard waste hauling and composting for curbside collection from Township residents, an arrangement that is likely to include payment of some kind.

Options b and c have an additional benefit: in either option, residents could collect free compost (and possibly mulch) for their own gardens, lawns and landscaping from the municipal composting site. For a great many mandated communities in the region, this free resource is the most widely appreciated benefit of the whole yard waste and recycling program. Once the word begins to get out, an increasing number of households take advantage of the resource and come to appreciate its many benefits.

Recommendations are listed in chronological order

1) Contact the four commercial haulers currently servicing Township residents with a request for bids to service residential yard waste across the Township. It should be determined if any haulers are willing to do this apart from a municipal-wide contract for waste and recycling services, and to learn pricing, if they are. Haulers would need to be provided with the current number of households in the Township, current street maps, the total number of collection weeks per year.

Haulers would also need to be provided with some estimated volume of residential yard waste to be collected. The reported annual yard waste per household collected in Butler Township in 2011 was 4.3 pounds; in Center Township it was 9.2 pounds; and in Cranberry Township it was 510 pounds. The average of the first two Townships is 6.7 pounds. Multiplying by 2,838 households yields an

estimated 10 tons of residential yard waste collectable in Buffalo Township each year. Using 350 pounds per cubic yard, this is roughly 56 cubic yards per year.

2) Contact neighboring municipalities that directly collect their own residential yard waste and/or compost this material, to assess the possibility of some mutually satisfactory arrangement for curbside collection, servicing of drop-off sites, composting of material, or all three. Harrison Township would certainly be one municipality to approach. If a municipality is open to this discussion, the Township should learn what they consider reasonable costs for hauling and/or composting and compare these fees to those of the commercial haulers.

3) Plan to publicize and host one or two public meetings to present yard waste issues to and discuss such issues with Township residents. Supervisors, regional DEP staff and the County Recycling Coordinator all agree that while this is likely to be somewhat controversial, it is better to address the public forthrightly with the relevant issues early on. The meetings should be announced with a carefully crafted letter mailed to all residents (a possible draft is included as Appendix 3), scheduled at a convenient time and place, and with adequate lead-time. Regular Supervisor meetings, to which the public is welcome, fall on the 2nd and 4th Wednesdays at 7:30 pm. These are usually held in a room that seats about 60. This room size is probably not adequate to host a meeting of the size that the Township would likely draw for this presentation and public discussion. A meeting in a high-school auditorium might serve better. At this meeting, the Township should present several options for yard waste diversion that have been investigated. The Township should also present opportunities for backyard composting of yard waste. It should be noted that the first required autumn for mandatory yard waste diversion is two years away (2014).

Appendix 1

PENNSYLVANIA'S ACT 101 LEAF WASTE COLLECTION REQUIREMENTS

Act 101, Section 1501(c)(1)(ii) and (iii), requires persons in mandated municipalities to separate leaf waste from other municipal waste generated at residential, commercial, municipal and institutional establishments. "Leaf waste" is defined in the Act and its regulations as "Leaves, garden residues, shrubbery and tree trimmings, and similar material, but not including grass clippings." Source separated leaf waste, as with other recyclable material, is to be collected at least once per month as set forth in Act 101 Section 1501(c)(2) and (3) and processed at Pa. DEP-approved composting facilities.

Act 101 mandated municipalities with programs that collect leaves only in the fall are not in compliance with the Act. Mandated municipalities desiring to establish leaf waste collection programs in compliance with Act 101 must, as a minimum:

1. Require by ordinance that leaf waste consisting of leaves, garden residues, shrubbery and tree trimmings, and other similar material are targeted for collection from residences and commercial, municipal and institutional establishments; and
2. Establish a scheduled day, at least once per month, when leaf waste is collected from residences; or
3. Establish a scheduled day, not less than twice per year and preferably in the spring and fall, when leaf waste is collected from residences, and facilitate a drop-off location or other collection alternative approved by Pa. DEP that allows persons in the municipality to deposit leaf waste for the purposes of composting or mulching at least once per month. The leaf waste drop-off location may be located in a neighboring municipality or at a private sector establishment provided that an agreement is in place to utilize that location and the municipality keeps residents and commercial, municipal and institutional establishments informed of the option at least once every six months.
4. Ensure that commercial, institutional and municipal establishments generating leaf waste have collection service.
5. Municipalities are encouraged to manage source separated Christmas trees as leaf waste for processing at Pa. DEP-approved composting facilities.

Appendix 2 Effective Yard waste Passages in Municipal Ordinances and Websites

From Harrison Township Ordinance

Chap 20: Solid Waste

Part 2. COLLECTION OF SOLID WASTE AND RECYCLABLES

§ 209. Prohibition of Leaf Waste.

[Ord. 1814, 8/1/1990, § 9]

From and after September 26, 1990, no person shall include leaf waste in the solid waste to be collected by the Township's designated collector.

From Harrison Township Website

Recycling of Leaves, Branches, Small Shrubs, Plants and Garden Residues

DO

Cut no larger than 4 inches in diameter.

Bundle with string or place in **brown recycling bags**.

DON'T

Place large branches, trunks or construction debris out for collection.

Lawn clippings are to be placed in regular trash bags, NOT the paper recycling bags. **Lawn clippings will be collected with your regular garbage collection by Vogel.**

From Butler City Ordinance

Burning Ordinance

307.2-2 Prohibited Open Burning

Burning of rubbish of any kind shall be prohibited except between the hours of 5:00 a.m. and 12:00 noon, Mondays through Saturdays and only in a receptacle that prevents burning particles from being blown about by the wind.

No person shall burn garbage of any kind anywhere in the City of Butler, except in an approved incinerator.

No person shall burn leaves, weeds, grass, vines or other vegetation anywhere in the City of Butler, except the burning of leaves shall be permitted on private property from 9:00 a.m. to 3:00 p.m. Mondays through Saturdays, during the months of October and November.

No person shall burn any materials causing heavy smoke or noxious odors anywhere in the City of Butler.

No person shall burn any scrap construction material or building debris of any kind anywhere in the City of Butler.

Recreational fires are permitted on private property only in an approved container, with a readily available water source nearby. Seasoned dry hardwood to be burned only and with a permit obtained from the Fire Bureau. Any complaints will be handled by the Fire Bureau to determine whether the fire is considered a nuisance and should be extinguished.

Fines for violations of the above will be \$300 dollars and will be issued by the Fire Chief/Fire Marshal.

From Ambridge Borough Ordinance:

Chapter 100. BURNING, OUTDOOR

§ 100-1. Purposes.

This chapter is enacted in the interest of public safety and public health and for the prevention of fires and fire hazards in the Borough and to eliminate nuisances caused by smoke and cinders to persons living within the limits of the Borough.

§ 100-3. Outdoor burning prohibited.

No person shall at any time burn outdoors within the limits of the Borough any refuse, papers, rubbish, garbage, leaves, brush, weeds, straw, litter and/or combustible or flammable waste of any kind.

From Brighton Township (BEAVER CO)

82-2B Prohibited Activities

D) In addition to the prohibition of burning recyclable materials in Subsection A above, the burning of garbage, vegetable waste, rubber, plastics, furniture, glass, metal, car products or any other material which will create nausea or noxious fumes, smoke, toxic chemicals, or excessive fly ash is specifically prohibited.

E) The burning of dry grass and garden waste is specifically prohibited on all lots of ten (10) acres or less.

The burning of leaves is prohibited, regardless of the size of the property.

[enacted July, 2012] [included in the FAQs on their website, under “does the Township have a burning ordinance?”]

From Millcreek Township Website [ERIE COUNTY]

Burning

Our hauler picks up 99% of all household waste, recycling, and leaf and yard waste. The Millfair Compost & Recycling Center is open 6 days a week April 1st through the second week in December for all your Leaf Waste*. Therefore, there is no need to burn anything. Pennsylvania Law (Act 101) and Millcreek Ordinance (Nos. 2000-1 & 2000-14), available online, states it is illegal to burn ANYTHING that is able to be recycled or composted.

These laws include the following:

- Cans, Bottles and Glass
- Newspapers and Magazines
- Corrugated Cardboard
- Mixed Paper and Mixed Cardboard
- Garbage
- Food Waste
- Leaf Waste* - includes leaves, garden residue, shrubbery, tree trimmings, and similar material, but NOT GRASS clippings.

Please don't burn, instead, please RECYCLE or COMPOST.

Millfair Compost and Recycling Center

Check out the Composting Workshop being held this September! [CLICK HERE...](#)

The Center, located at 2301 Millfair Road, is open six days a week April 1 through mid December, additional hours will be posted at the gate if needed. The Recycling Center is closed on Easter Sunday, Memorial Day, Independence Day and Labor Day.

Leaf waste will be accepted as well as shrubbery, brush, non-food garden residue and tree trimmings. These items will need to be emptied out of any containers or bags at the designated composting area.

Unacceptable Material: grass, ornamental grasses, sod, dirt, or anything that has a large root system attached, food garden residue along with bamboo and corn stalks.

Appendix 3

Sample Letter to Residents

Dear Resident of Buffalo Township,

In April 2012, the Township received a letter from Pennsylvania Department of Environmental Protection (DEP), notifying us that, as our population has passed 5000 and our average population density passed 300 per square mile, we are now a ‘mandated municipality’. This means that we are large enough to be required to recycle, by PA state law (Act 101 of 1988).

What does this mean?

Well, first of all it means we have grown, and we should all be proud of that!

Second, it means that we are now big enough that we all need to be more responsible for the impacts we have on our shared environment.

Third, it means that we are eligible for regular funding from the DEP 902 Performance Grants: the more tons we recycle, the more of this funding the Township can receive.

More specifically, the Township has had to update our Solid Waste Ordinance and our Recycling Ordinance to include new regulations: these are now updated; key passages are now posted on our website and summarized here.

What does this new status mean for residents of Buffalo Township?

All residents are now required by law to recycle at least three of the following materials, prohibited from throwing them into the trash: glass; aluminum, steel and bimetallic cans; high-grade office paper; newspaper; corrugated cardboard; and plastics. Many of our households already do this, but we estimate that only about one in five do so regularly. The following table lists the materials accepted for recycling by each of the four haulers that service households in the Township.

| Hauler | Acceptable Materials |
|------------------|---|
| Adamik | Glass; aluminum, tin, bimetal cans; plastics #1 and #2. |
| Morrow | Glass; aluminum, tin, bimetal cans; plastics #1 and #2. |
| Vogel | Glass; aluminum, tin, bimetal cans; newspaper & magazines; corrugated cardboard |
| Waste Management | Glass; aluminum, tin, bimetal cans; plastics; paper; newspaper; magazines; corrugated cardboard; cartons. |

Benefits of Recycling

A Greener, Cleaner Environment

Regular recycling of the above materials yields real environmental benefits, including:

Reduced energy use; reduced air pollution; reduced water use; reduced water pollution; reduced emissions of greenhouse gases (reduced global climate change).

Funding for the Township

Every additional ton recycled by Township residents and businesses per year increases the funding the Township can receive from DEP, via its Performance Grants. For instance, if we reach the average per household recycling level of mandated municipalities in Allegheny County, the Township could earn \$23,000 per year!

So, please, if you don't already recycle, please join your neighbors and start pitching in!

The second new requirement for Township residents concerns leaves and other yard waste (garden residue, shrubbery and tree trimmings, but not including grass clippings).

By April 2014, all residents will be prohibited from throwing this material in the trash and prohibited from burning this material. This is well over a year away.

Township Supervisors and staff recognize that for many of our households burning of yard waste is a pleasurable tradition. However, burning yard waste has serious negative impacts on our health, environment and quality of life. It releases a range of toxic compounds into the air: nitrogen oxides; volatile organic compounds; carbon monoxide, particulate matter and dioxins. Together, these chemicals contribute to acid rain, smog, haze and ozone depletion; soil our homes and cars; increase the risk of heart disease, aggravate respiratory ailments such as asthma and emphysema, and cause rashes, nausea, or headaches. Dioxins in particular settle on crops and in our waterways where they eventually wind up in our food and water, with adverse effects upon reproduction and development, the immune system, hormonal systems, and cancer.

We would like residents to come to a special public meeting with the Township Supervisors to learn more about the new yard waste regulations, and discuss several options moving forward, both for individual households and for the Township as a whole. Options include:

- Backyard composting (how to compost effectively)
- Convenient drop-off locations
- Curbside collections in autumn and spring by the Township; by a neighboring municipality, or by a commercial hauler.

The meeting will be held on _____ at _____, and will begin at ___pm.

We look forward to discussing these issues and options with you and your neighbors.

We look forward to working with all residents and businesses in Buffalo Township to meet these new challenges and opportunities for mutual benefit.

Sincerely,